THE

Medical Press & Circular

Being the Incorporation of the Journals hitherto known as "The Medical Press" and "The Medical Circular."

A Weekly Journal

OF

MEDICINE AND MEDICAL AFFAIRS.

FROM JUNE TO DECEMBER,

1870.

OFFICES—LONDON: 20 KING WILLIAM STREET, STRAND.
DUBLIN: 6 D'OLIER STREET.
EDINBURGH: SOUTH BRIDGE.
1870.

CONTENTS.

VOLUME X. JULY TO DECEMBER, 1870.

HOSPITAL REPORTS.

LEADING ARTICLES.

LECTURES.

LITERATURE.

NOTES ON CURRENT TOPICS.

O

OBITUARY.

ORIGINAL COMMUNICATIONS.

P

TRANSACTIONS OF SOCIETIES.

END OF THE TENTH VOLUME.

Printed for the Proprietor by M'Gowan & Co., and published every Wednesday Morning, by Albert Alfred Tindall. London: 20 King William street, Strand. Dublin: 6 D'Olier street. Edinburgh: Maclachlan and Stewart, South Bridge.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JULY 6, 1870.

CONTENTS.

WITH TITLE PAGE AND INDEX.

Original Communications.

THE LAWS OF PIGMENTATION AND THEIR BEARING ON MEDICAL SCIENCE.

By A. Bleloch, M.A. Glasg., Sc. D. Edin.

Cutaneous discolorations in so far as they are not the result of bile pigment misdirected to the dermal surface with the current of blood, or partake of the nature of blood extravasation in the cutaneous tissue, are closely allied with all natural pigmentation. The natural pigments are all carbonaceous. An exception has been supposed to exist in the green of feathers and the red of beetroot. Be this as it may, all other natural pigments are carbonaceous, and they are produced in each separate plant and animal according to its climate, type of life, and means of nutrition. That the exhibition of colour in plants and in animals is regulated by a fixed law, does not admit of dispute. Climate, type of life, and means of nutrition form, as it were, the sphere in which this law of pigmentation operates. In tropical countries where there is abundance of moisture, a very high temperature, and intense light, we have also a luxuriant vegetation and a very rich inflorescence. The plants fix their carbon in greater quantity, and hence their blossoms are more brilliant, and their foliage more ample. The plumage of birds is more brilliant in warm climates because the atmosphere is much rarer, and the natural temperature of the animal does not require any great consumption of carbon by the lungs. As we travel towards the pole, pigmentation in plants and in animals decreases. The inflorescence of our native plants is very tame when compared with the tropical beauties; and in still colder countries the difference is more marked. In the animal kingdom, except where the type of life and the means of nutrition prevent a diminution of pigmentation, the phenomena of colour are the same. In our own country the ptarmigan and the mountain hare become white during the winter, because they breathe more oxygen and have not such an abundant supply of food during the cold months. They use all their carbon for purposes of temperature. So also the common squirrel, which is brown in the more temperate countries of Europe, is snow white in the dreary forests of Siberia. The Polar bear is white, not because nature intended him to be white in particular, but because her carbon in his case is otherwise employed. So with the other Polar land animals. The temperature of the water, however, is much higher than that of the land, and hence the animals living in the Polar seas exhibit colour. Pigmentation observes this law in man himself. The skin of all the races of men possesses a pigment-secreting function. This function is active or the reverse according to their climate, their habits, and their means of nutrition. Two causes operate in particular to effect the pigmentation of the negro. He lives for the most part on vegetable food, and he inhabits a country whose climate is very moist and very warm. He has an abundant supply of carbon, and a deficiency of oxygen to carry it off by means of respiration. Hence the pigment-secreting function of his skin is called into special activity. He excretes carbon by his skin. When the brownish-red negro of the north of Africa migrates to the marshy districts further south, in course of time he becomes jet black, thus proving the doctrine advanced. It is also confirmed by the Esquimaux, a coloured race. In their habits the Esquimaux approach the Negro. During nine months of the year they are crowded together in small huts badly ventilated, and they live almost entirely on carbonaceous food.

From the foregoing brief review of natural pigmentation, we conclude that the production of colour is effected in the same manner in both animal and vegetable organisms. In physiology we expect to find the phenomena of colour the same in both kingdoms. Whatever pigmentation is natural in the animal is produced after the same fashion as in the vegetable. In physiology, nature has but one law of pigmentation. In animal pathology connected with discoloration we may expect to find a retrogression to the vegetative type. In the vegetable kingdom the production of chlorophyll is, as it were a chief function. It is paramount in vegetative physiology; In the higher animal kingdom it is reduced to a minimum because the economy of the living being no longer requires

and no longer admits of, this arrangement. The exception in the case of the coloured races of man is more apparent than real. The excessive pigmentation of the negro is produced by an augmentation in the activity of a natural function. This exaltation of function arose, as must be supposed, in the school of adversity; it originated in a pathological condition induced by a course of endemic disease during which the negro became acclimated. The consequence was not merely a discoloration of the skin, but a depreciation of the entire organism. The heredity includes more than a coating of carbon. There can be little doubt that the coloration of the negro is closely allied physiologically with the lower ethnic skeleton, that in fact the excessive excretion of carbon by the skin indicates a retrogression in the whole economy. As a strumous European, in so far as his skeleton is concerned, resembles a healthy negro, so the normal coloration of the negro would indicate a very cachectic European. In accommodating the negro to a lower physiological type, nature has made a great conquest. She proceeds on the same plan to combat all disease. The human body is a very elaborate organism. Specialisation of function is carried to a very high pitch; but the general structure is so wisely arranged that one organ can assist another in an emergency. When disease of one organ threatens the general well being, one or more come to the rescue, and, though not always successful, they seldom fail to render valuable assistance. The evil day is put off. For the time being, nature carries on her operations according to a lower type of life. She stoops to conquer. This is the indication in all cutaneous discolorations.

There are three points of view from which the pathological production of pigment may be regarded. It may be the result of the imperfect oxidation of carbon, so that it is not eliminated as carbonic acid, lactic acid, and such like. It may be the result of imperfect elimination of carbon proper, when that is a normal excretion, as in the hairs and epidermic scales. It may be the production of carbon from highly carbonaceous food. When the blood corpuscles become impaired as oxygen carriers through a deficiency in the hæmaglobin, the normal excretion of carbon waste will not be effected by the usual channels. We are thus enabled to understand the pigmentation which takes place in cases of Leucocytosis, in the anæmia of chlorosis, in Bright's disease, and in all cachectic states in which the hæmaglobin is defective in oxygenating power. In addition to defect in hæmaglobin as such, impaired action of the lungs from whatever cause leads to imperfect elimination of carbon as carbonic acid. There are also conditions of the liver and kidneys which result in the imperfect elimination of the colouring matter of the bile and urine. The excretion of carbon is, in these instances, thrown upon the skin and mucous membranes, and even glandular structures and morbid growths take on a carbon secreting action.

Pigmentation in connection with the function of generation is interesting and important. The menstrual fluid is highly carbonaceous. It is most likely of the nature of a carbon excretion. The elimination of carbonic acid by the lungs during the menstrual period has been shown to be less in quantity, and the condition of pregnancy is characterised by the production of pigment. The blood during the period of gestation approaches the condition in which we find it when cachectic cutaneous discoloration exists—there is an excess of white corpuscles. Besides, it has been shown that supra-renal melasma has relations with the sexual hair and cutaneous glands. The supra-renal capsules, the ovaria in the female, and the testes in the male are closely associated by means of their nervous supply. Pigmentation in animals, as in plants, is intimately connected with seed production. In order to the formation of the embryo plant and its proper nourishment, a large quantity of starch and sugar is necessary. In plants the storing up of this material is indicated by a superabundant production of chlorophyll. In the animal kingdom there is a provision of like nature for the embryo animal, and there is a corresponding deposition of pigment in the dermal surface. As in the vegetable kingdom chlorophyll is more largely produced during the season of vernation and inflorescence, because special provision is being made by nature for the production of seed; so in the higher animal kingdom she has not wholly left the vegetative type, but maintains a community of operation in both kingdoms, as far as the embryo plant and animal agree in their mode of development and nutrition. During the pregnancy of the human female we have a peculiar areola round the nipple, the colour of which increases in intensity as the period of gestation advances. Analogy would refer this to the fact that nature has to provide nutrition for the fœtal life. Starchy substance, or glycogen, is found to be present in the placenta, and that it is there for the service of the fœtus does not admit of doubt. The areola round the nipple is the complement of the physiological process by which this substance is formed, just as the luxuriant green of Spring and the splendid inflorescence of Summer indicate the provision which nature is making for the embryonic plants about to be evolved. During pregnancy we have a condition of the blood resembling Leucocythemia, but this must not be considered a pathological state. It is simply the way in which nature brings to perfection her arrangements for the growth of the new animal. In some plants the whole force of life is expended in the elaboration of the seed. To accomplish this the human female recedes one step towards the type of vegetable life. The blood becomes a less efficient oxygen carrier, while more than the usual amount of starchy material is manufactured; and as the condition of blood necessary to, or induced by, this formation does not admit of carbon in the normal quantity being excreted by the lungs in the shape of carbonic acid, nature deposits it as chlorophyll in the animal as in the plant. The natural pigmentation of the human body will be the index of the normal condition of the glycogenic function, just as the extraordinary pigmentation during pregnancy is the index of its additional activity for the service of the fœtus in utero; while all cachectic cutaneous discolorations will indicate a retrogression to the vegetative type beyond that which is required in the healthy condition of the economy. Examples of these discolorations are presented to us in the syphilitic cachexia, in the cancerous cachexia, and in the cachexia of Addison's disease.

The nervous system has to do with pigmentation. The symmetrical deposit of pigment and the occurrence of Leucopathia without any known local disease of the skin indicate this. Wherever a nervous system obtains, it modifies all physiological changes. The numerous organs which in the animal economy operate to produce the general effect of healthy nutrition and growth, are directed, in their several capacities, by appropriate nerves. Each organ moves on harmoniously with the others, while a state of health continues, because nothing can be done without the sanction of some nerve centre. Animal pigmentation is, therefore, under nervous control. As the result of investigation, it has been determined that the changes of colour observed in the skin of the frog and the chameleon, under varying conditions, are due to the influence of the nerves distributed to the pigment cells. In the course of these observations it has also been determined that the cerebro-spinal axis is chiefly concerned in regulating the functions of the pigment cells. Pigmentation, however, whether governed by a nervous system, as in the animal kingdom, or produced without such regulations, as in the vegetable kingdom, observes the same economical law, and is equally the index of glycogenic change.

When a man builds a house he procures artificial colours and paints his saloons and apartments. Nature does nothing of this sort. The production of colour in the physiology of living beings is not a result of design in the sense of being aimed at, but takes place when the economics of the organism so require. Even when the coloration is not produced by carbon in any form, as by the grooved structure in the wings of certain lepidoptera, it is not contemplated

for its own sake. The light falling on the scales of many fishes produces beautiful coloration, but this is not a design in the structure of the fishes. The grooved surface on the wings of the lepidoptera subserves the purposes of flight. The organ is so constructed that it may be at once light and efficient. The scales of the fish are formed according to the principles which govern the economy of the animal. They are made with groovings and polishings, and are set at angles such as shall most efficiently aid the animal in its progress through the water, and protect it from external injury. The coloration in both cases is present apart from any design as to colour in the construction of the animals. The beauty is the result of perfection in mechanism, the complement of adaptation to the conditions of life. The principle is the same in natural as in physical science. All carbonaceous pigmentation is economical whether it be in physiology or pathology.

From all these considerations it follows that in observing clinically cutaneous discolorations, we must note them in relation with the general physiological laws in accordance with which they arise. Race, sex, and age must all be taken into account. In order that our observations may lead us to a scientific treatment of disease, we must be able to connect the discolorations with the pathological conditions of which they are the complement. In order to this we must settle it in our minds that in producing pigmentation, nature has but one object in view—namely, to maintain the living organism. This is her aim whether it be in exhibiting the chlorophyll of the plant, or the coloration of the palate of the well-bred dog, or the discoloration of the palate of the cachectic human being. To cure diseases attended with cutaneous discolorations, is to assist nature to carry on her operations according to the normal type of life which she has set up for the particular organism.

ON THE PROSPECTS OF THE SEWAGE QUESTION.

By Henry Letheby, M.B., &c.,

Professor of Chemistry at the London Hospital Medical College, Medical Officer of Health to the City of London, &c.

(Continued from Page 509.)

In a former communication to you I spoke of the investigations of Dr. Angus Smith on the polluted water of the Clyde, which were to the same effect. Engineers also, who have been largely concerned in such inquiries, have always spoken of the remarkable self-purifying power of water. Mr. Hawksley, whose experience of this matter renders him a very high authority on the subject, said, in answer to a question from the Rivers Commission, as to the quantity of water, compared with the volume of sewage discharged into it, as necessary for the purpose of breaking up the sewage into inoffensive compounds, that generally 20 to 1 was sufficient; but if the water flows rapidly, and is very much disturbed, so as to be continually receiving fresh oxygen, a smaller quantity—even 12 to 1—will effect the process; and if it proceeds very tardily it may take a little more, but 20 to 1 is abundant. "I could," he adds, "give you very remarkable instances of it. Take Sheffield. Nothing can be fouler probably than the state of the water at Sheffield, whereas if you go down to Doncaster (about 20 miles below Sheffield), the water is supplied by the water-works, and is actually drunk in the town." Again, says Mr. Hawksley, "Take the river Irwell, (the very river which Dr. Frankland has been examining). After leaving Manchester it receives the Irk, the Matlock, and all the refuse of the manufacturing population for a great many miles; when it travels down only eight or nine miles to Warrington it is perfectly changed; it ceases, or nearly ceases, in that short distance, to be an offensive river." "At Leicester, likewise," to use his words, "the water was as black as ink—nothing would live in it, and the smell was abominable; but by the time it had got to Loughborough (which is about twelve miles below Leicester) it was entirely restored to its pristine condition. You could stand on the bridge there and see the fish swimming amongst the beautiful reedy and other plants growing in the water, just as in the purest stream. You could see every pebble at the bottom. That is an instance of oxidation." You may remember the instance which I gave you last year of the river Trent, which receives the sewage and manufacturing refuse of some of the largest, busiest, and dirtiest towns in the kingdom, with an aggregate population of more than a million and a half of persons, and yet when it arrives at Nottingham it is not only clear, pellucid, and inoffensive, with abundance of fish and aquatic plants, but is actually used for the domestic supply of the town. But why need I multiply such instances, or dwell upon such self-evident empirical facts, when they are within the common knowledge and experience of everybody; for even Dr. Frankland is ready to admit, in the case of the London water supply, that "by gradual oxidation, partly in the pores of the soil, partly in the Thames and its tributaries, and partly in the reservoirs, filters, and conduits of the company, this sewage contamination had been converted into comparatively innocuous organic compounds before its delivery to consumers."

"I believe," said Dr. Frankland, in his evidence before the Royal Commission on Water Supply, "that the noxious part in sewage is that which is held in mechanical suspension, not that in solution;" and no doubt the sedimentary matters of sewage are capable of producing an offensive condition of the rivers, for when they are discharged into a sluggish stream they quickly subside, and form accumulations of persistently putrefying mud. This is the chief cause of complaint wherever sewage enters a river.

At the time of the inquiry into the state of the Thames in 1858, it was admitted on all hands that the filthy mud-banks of the river were the great source of annoyance; and Dr. Hofmann and Mr. Witt, in their report of the matter to the Government referees, declared emphatically that the formation of this mud deposit in the bed of the river appeared to them to be by far the most serious evil which results from the discharge of London sewage into the river, and they strongly urged this point upon public attention. Dr. Odling, in his report to me on this subject, for the information of the referees appointed by the Metropolitan Board of Works, said that "any means which would prevent the deposition of organic mud in the bed, but more particularly on the exposed banks, of the river, would effect an amply sufficient purification of it." The same was my own opinion, for in reporting to the referees I stated that the mischief produced by the discharge of sewage into the river "was not occasioned, as I once supposed, by the soluble matters of the sewage, but by the mud or insoluble constituents which settle and putrefy upon the banks of the river." These constituents being in a solid form, and not easily accessible to atmospheric oxygen, continue to putrefy for a considerable time. In my laboratory operations I have found that they will keep up a persistent decomposition, with a constant evolution of offensive gases, for many months, the air being excluded from them. I am therefore of opinion that the chief point to be aimed at in the purification of sewage is the rapid and effectual separation of its suspended matters, leaving the soluble matter to mix freely with proper proportions of running water, in which it will be quickly appropriated by infusorial life, or be destroyed by atmospheric oxidation; and this leads me to consider the means whereby this may be effected.

One method of accomplishing it is to keep the solid matters out of the sewage, as is practised with more or less success in Manchester, Salford, and chief towns of Lancashire. In Salford, according to the report of the medical officer of health, Dr. Syson, the most satisfactory results have been obtained with a modification of N. Goux's plan, whereby the soil is received at once into tubs lined with some refuse absorbent; and the advantages of the plan, according to Dr. Syson, are that the manure becomes of

great commercial value; that the excrement of the whole town can be readily removed at least once a week; and that in case of fever or contagious diseases the whole of the excrements can be readily and economically disinfected; besides which the plan is simple and economical. Earth-closets are not so manageable, as they require about 3½ times their weight of earth to the excreta, and the difficulties of carrying the material to and from the closets are not manageable on a large scale, although I have seen them in satisfactory operation in factories, as they may be in military camps, where the organization of labour is easy. Instead of earth, Mr. Stanford recommends charred seaweed, which is not only an excellent deodorizer, but does the work of three times its weight of earth. In Edinburgh in olden times there were no closets in the poorer houses, but there were numerous public privies, which still exist. These are provided with from 8 to 40 compartments, beneath which there is placed by the scavengers, every morning, a tin can, like the modern milk can on the railways, and the can of the previous day, with its contents, is taken away. The soil is mixed with ashes and road sweepings, and sells for about £7,000 a-year, which is half the entire charge of the scavenging of the older part of Edinburgh. Nearly everywhere on the Continent some such method is adopted for the collection of the refuse and excreta, and they are profitably utilized. How far an improvement of this condition of things, instead of the present water-closet system, may have met the requirements of hygiène and the demands of agriculture, is an important question. The Pollution Commissioners, however, condemn this plan *in toto*; and so far are their views disturbed by the medium of their predjudices, that they cannot perceive any difference in the quality of the sewage of a place retaining its solid matters, and of another which lets them flow into the public sewers. Liverpool, for example, which collects and disposes annually of about 139,000 tons of privy soil; Manchester, 74,000 tons; Salford, 46,000 tons; Oldham, 50,000 tons; Preston, 30,000 tons; and Bolton, 22,500 tons, furnish in each case as much sewage, and of the same composition, as the towns which discharge everything into the sewers. The inconsistency of the thing is so striking that it creates most serious doubts of the accuracy of the analyses and of the reliability of the determinations of organic carbon and organic nitrogen.

And now let us turn to the pet scheme of the Pollution Commissioners—the disposal of sewage in all places and under all places and under all circumstances by irrigation. Fortunately for us, the thing has been tried, and is now being done in many places, so that we can test it by its practical results, and examine it by the light of something more than that of abstract speculative chemistry.

To begin with its absolutely required conditions. You must have a soil that is sufficiently porous to allow the sewage to filter through it, and this soil must be well drained to carry off the subsoil water. The situation of the farm must be convenient as regards the flow of sewage to it by gravitation, and the discharge of water from it by drainage. It must not be within reach of danger from atmospheric miasms, or the pollution of wells by the subsoil drainage. It must have a ready market for the disposal of its only merchantable produce, green Italian rye-grass; and lastly, there must be an area of not less than two acres for every hundred people, one of these acres being actually in use while the other is resting to recover itself.

These conditions cannot always be secured, but, even if they could, let us see if the objections to the process, on sanitary grounds, are not conclusively against it.

1. In the first place, the land irrigated with sewage is always a fœtid, swampy morass of the most offensive description. Nowhere, of all the places which I have visited, is there an exception to this condition of things. At the Craigintinny meadows, near Edinburgh, which I have often seen, the stink from them is hardly endurable—to use the words of Dr. Ligertwood, who was stationed at the neighbouring barracks, "the stench is sometimes quite sickening." At Norwood and at Beddington it is a subject of serious complaint by those who reside in the neighbourhood of the farms. I have myself experienced it on several occasions, and have been surprised at the statements of Dr. Carpenter, of Croydon, whose pet thing it is, that nobody complains of it. Mr. Creasy, the surgeon at the Female Orphan Asylum, at Beddington, tells a different story, for he says it so damages the value of the neighbouring property that the villas near the farm do not let so well as others, nor at so high a rent.

At Aldershot, which is frequently referred to as a well and successfully managed sewage farm, I ascertained, on a recent visit with Mr. Hawksley, Mr. Eggar, and Professor Ansted, from the occupants of the few cottages which skirt the farm, that the stench is frequently unbearable and most sickening. At Banbury there is but one house upon the estate; it is a public-house called the Bowling Green, and the landlady described to us, in very graphic terms, the nuisance she was obliged to submit to.

2. But these miasms are not alone offensive, they are also dangerous to the public health; in fact, the early proceedings of those who have brought about this condition of things were devoted almost entirely to the proof of their morbific action, and it was this apparently clear proof which was made the lever of their parliamentary movements, and was the main cause of our present difficulties. Now, however, they will tell you that the emanations from acres of land sodden with putrefying sewage are neither offensive to the senses nor injurious to the health. I put it to you, gentlemen, as a simple matter of common medical experience, whether you are of such an opinion; for, if so, where is the necessity for all our elaborate and expensive machinery for getting rid of these matters from our houses, and for preventing the escape of such offensive emanations? Why feel, in fact, the least concern for an untrapped drain or an overflowing cesspool? One of the highest medical authorities on the subject of fevers, Dr. Murchison, has traced a particular fever to this particular source, and has devoted a large portion of his classical work to the proof of sewer gases being the primary cause of what he has termed *pythogenic* or enteric fever. It is true that he has some doubts, like Dr. Christison, of the effects of the diluted gases; but time will prove whether these doubts are well founded. Already enough has been seen to show that they are not so harmless as many suppose. Mr. Creasy, to whom before I have alluded as practising at Beddington, said very recently, before a committee of the House of Commons: "I know the sewage farm belonging to the Croydon Board of Works, at Beddington, and have had experience in my professional capacity of what condition of health is around those flats, for I have known the district ever since it was a sewage farm. The first case of typhoid fever occurred in the place in 1867, and from that time to this there has been typhoid fever in every cottage on the estate; and I find around it that almost every disease assumes a particular type, accompanied with what we call a sewage tongue."

In the Spring of last year I was inquiring into the condition of a stream called the Hebble Brook, which receives the sewage of Halifax, and I was informed that at a place near the outfall of the brook into the Calder, some of the sewage was distributed upon the land, and that it caused such a serious outbreak of typhoid fever in the neighbouring model village, belonging to Mr. Acroyd, that it was found absolutely necessary to discontinue it.

Again, in the Autumn of 1863, I had an opportunity of witnessing, on a very large scale, the morbific effects of sewer gases in the town of Shaftesbury, and the adjacent village of Enmore Green. The town had been recently drained by a gentleman of no great practical acquaintance with the subject, and he carried the sewage into the ponds and ditches around the town. It was an experiment of a very instructive kind, for soon the people were attacked with enteric fever, and in less than a year one-eighth of the whole population was down with the disease; for out of

about 3,500 persons, 448 were attacked. I am afraid, therefore, that these miasms, even when diluted with air, are capable of producing serious mischief, and that such facts are more more conclusive than the statistics of Dr. Carpenter, which seem to show that the people of Beddington and Norwood have actually been better in health since the sewage was brought to them than before.

3. I would remind you that the efficacy of sewage irrigation is entirely dependent on the percolation of sewage matter, and the distribution of it through the subsoil water. It cannot but be, therefore, that this water is polluted to such an extent as to endanger the neighbouring wells. Many instances of this have already come under my notice; and it would seem, from the remarks of Dr. Carpenter, that Dr. Frankland had himself stated that the chalk well at Croydon, from which the public supply is obtained, is actually polluted with the soakage of foul matters from the irrigated grounds at Beddington. The morbific effects of such water are but too frequently observed, as the annual reports of the medical officer of the Privy Council abundantly testify; and then, again, if the doctrines of Professor von Pettenkofer, of Munich, be correct, as they certainly seem to be, that fluctuation in the level of ground water charged with sewage is the most active agent of fever and cholera, the consequences of irrigation may be most serious.

4. And now there is another very important objection to the system—the danger of propagating parasitic diseases. Sewage contains myriads of ova of intestinal entozoa—every segment of a tape-worm discharged from the human body is crowded with them; and, if distributed with sewage upon the land, will become attached to the grass and other green fodder which is produced thereon. This is eaten by cattle, whose bodies quickly become infected with the parasite in its larval condition, and thus the measly meat becomes the agent of disease in our own bodies. At present, the distribution of these ova, and their access to the bodies of herbivorous animals, is entirely a matter of accident; but make it a matter of certainty, as most assuredly you will by distributing sewage upon the fodder-producing land, and the consequences must be serious. Dr. Cobbold, who is our highest authority on this subject, has published an essay to warn the public against the danger of this method of disposing of town sewage; and he has hinted at the probable introduction into this country of a terrible helminthic malady (*Bilharzia*), which is now common in Egypt, in Africa, and the Mauritius, and which would assuredly be propagated throughout the land by this dangerous scheme of irrigation. "Have the kindness," he says, "to observe that every colonist returning from the Cape is liable to bring this parasitic treasure with him as a 'guest' indeed, dwelling in his blood, and feeding on his life stream. In the advanced stages of the malady, the afflicted individual must frequently evacuate the eggs and their contained embryonic larvæ, which are thus conveyed into the ordinary receptacles of such voidings. There let them remain, or convey them into a cesspool, and no harm follows. If deemed preferable, you may transport them, along with myriads of other human parasite eggs and larvæ, into a common sewer, and thence into the sea; still, entozoologically speaking, no harm follows. Here, however, let me invite you to pause; for if, without due consideration, you adopt any one of the gigantic schemes now in vogue, you will scatter these eggs far and wide; you will spread them over thousands of acres of ground; you will place larvæ in those conditions which are known to be eminently favourable for the development of their next stage of growth; you will bring the latter in contact with land and water snails, into whose bodies they will speedily penetrate; and, in short, you will place them in situations where their yet higher graduations of non-sexual growth and propagation will be arrived at. After all these changes, there is every reason to believe that they will experience no greater difficulty in gaining access to our bodies here in England than obtains in the case of those same parasites attacking our fellow creatures, whose residence is found in Egypt, in Natal, in the Mauritius, or at the Cape. In the natural history point of view, it would not be an altogether singular result if, 20 years hence, this parasitic malady should be as prevalent in this country as it is now known to be in particular sections of the African continent. Foreseeing the possibility, not to say probability, of this contingency, am I not right," he says, "after years of long study, to raise my voice in the hope of preventing such a disaster?"

Nor is it unlikely that the Trichina may be distributed in the same manner, for it swarms in the intestines of those who have just become infected with it, and may be discharged into sewage, and scattered upon the land, and eaten by creatures whose flesh will give it back to us again. No one, indeed, but the helminthologist can say what particular parasite may not be distributed and propagated by this dangerous agricultural process. "May we not indeed," as Dr. Cobbold observes, "but too reasonably conjecture that the wholesale distribution of tape-worm eggs by the utilization of sewage on a stupendous scale, will tend to spread abroad a class of diseases, some of which are severely formidable? So convinced am I," he says, "of the truth embodied in an affirmative reply to this latter query—so certain am I that parasites are propagated in this particular way—so surely do I foresee unpleasant results, if no steps be taken to counteract the evil, that I feel myself bound to speak out boldly, and to produce no uncertain sound in the matter which most closely concerns humanity." The whole question, in fact, is of vast hygienic importance.

But, fifthly, let us see if the process, in a sanitary point of view, is so successful as to render the sewage innocuous before its admission into a running stream. Go to a sewage farm after you have given due notice of your intended visit, and you will be taken to places where the subsoil water is running from the land apparently pure and drinkable; and no doubt with proper management, under proper conditions of thorough and effective filtration, such a result may be achieved; but the real question is how far this is really and practically accomplished, for it involves such a nice adjustment of all the appliances, such a continuous distribution of the sewage over successive areas of land, and such constant supervision, that it is rarely effected. To judge of the results, therefore, you must visit these places, as I have done, without previous notice, and you must examine the whole district, for it is not uncommon to find byways for the disposal of the sewage which the land will not take. Not long ago, as I have said, I visited Aldershot, with Mr. Hawksley, Mr. Eggar, and Professor Ansted. This you know is a pet place with the advocates of the system, but at the time of our visit we found that nearly all the sewage was passing along the carriers to the outfalls, and going bodily into the river. I took samples of the sewage as it entered the farm from the two camps, and as it flowed from the farm to the river. The original sewage contained 54 grs. of soluble matter per gallon, and 44 grs. of insoluble, each of which contained about 30 grs. of organic matter. As it left the filter tank it contained the same amount of soluble matter, and 35 grs. of suspended, of which about 26 grs. were organic. As it ran along the carriers to the lower part of the farm, it retained its black offensive character, and this was very marked upon that portion of the land where a little of it was disturbed. At one of the outfalls into the Blackwater river it contained 52 grs. of soluble matter per gallon, of which 28 grs. were organic, and 3·84 grs. of suspended matter. At three other outfalls from the farm the soluble matters amounted respectively to 52 grs., 58 grs., and 54 grs. per gallon, of which 24 grs., 20 grs., and 22 grs. were organic; the suspended matters being 26 grs., 6 grs., and 5 grs. per gallon respectively, of which 12 grs., 2 grs., and 3 grs. were organic. At the several points of discharge into the river the sewage was black and fœtid, and there were large accumulations of sewage mud in a high state of decomposition. I took a sample of the river water before it received the outfall sewage and after; the

former contained 19 grs. of soluble matter per gallon, and the latter 24 grs., of which the organic amounted to 3½ grs. and 5 grs., the ammonia in the two cases being 0·264 of a grain, and 1·545 gr., showing an enormous pollution of the river by the so-called defœcated sewage. Everywhere upon the land where the sewage had been distributed there were masses of fœcal matter, waiting for the first heavy shower of rain to wash them away into the nearest outfall, and the neighbouring ditches were in a most offensive condition, and we were told by the occupants of the houses adjoining the farm that in times of flood the whole roadway was covered with sewage matters. Considering the praise which has been bestowed on the alleged success of this farm, I was not prepared to witness such a frightful condition of things.

At the Craigintinny meadows, near Edinburgh, it is notorious that the outfall water from the farm is shockingly offensive, but as it runs into the sea it is not complained of as a nuisance. A like condition of things, but not to such an extent, I have seen at Norwood, at Rugby, at Warwick, and at Banbury—in fact, at the last-named place the ditches around the farm were full of sewage, and the water was running from the outfall in a very offensive state, showing that the process, although susceptible of good results, is rarely so in practice, unless it receives an amount of attention that makes it a serious business. Besides which there are times when no attention will prevent the discharge of foul sewage from the land, as when the soil is heavy, and a flood of rain sweeps over it, and when vegetation is dormant. In winter time it will freeze upon the land and kill the grass, and, as it thaws, run off to the nearest stream. At Warwick we saw acres of ground thus despoiled, where the defœcation of sewage was entirely a matter of surface filtration. All authorities, indeed, agree that the success of this process is dependent upon a combination of circumstances which are not always attainable, and upon the strictest care and supervision. Even then, according to Dr. Frankland, although it may purify sewage to a great extent, it does not sufficiently purify it to render it admissible into potable water without danger; "the risk arising not only from the considerable amount of animal organic matters which the effluent water still retains in solution, but also from the absence of any guarantee for the removal of the germs or other noxious suspended matters which are frequently present in sewage."

(To be continued.)

DOCTORS AND TEETOTALLERS.

By a Physician.

The subject of alcohol is one of the most stirring of the present time in the domain of hygiene. Is there anything like orthodoxy to appeal to in this, as there is in some other medical questions? Are the members of the medical profession by any means so unanimous in their condemnation or in their approval of the habits of modern society in partaking of alcoholic drinks as they are on the question of vaccination as a preventive of small-pox? The answer, we maintain, must be in the negative. There is nothing like unanimity on this point amongst us. Such being the case, it behoves each of us to argue the question by the lights that are in us, without in any way appealing to authority. Well, as far as we ourselves can see, there can be no doubt that the teetotal party can make out an admirable case when they assert that a very large proportion of the disease and crime among us is traceable directly to the use of spirituous liquors in some form or other. Specialists, who devote their attention to diseases of the kidney, the eye, or the brain, will at once probably corroborate our assertion, that hosts of cases of disease in these organs are traceable to alcohol. The pallid and dull skin of the habitual drinker is well known to the hospital physician; the bronchitis and emphysema of old drinkers is one of his most common experiences. Gout, and dropsy, and disease of the heart are the usual terminations of the lives of swillers in our large cities. What is there to be said on the other side? The doctors who advise us to use beer and wine daily at our chief meals say that we are living in "an artificial state of society," and hence require stimulation to get through the wear and tear of existence without breaking down. This looks well in theory, but does not hold true in nature; at any rate, in all cases. Those persons—and they are not a few—who have witnessed the practice of hydropathic institutions, know well that many persons who are accustomed to habitually partaking of a certain number of glasses of wine or pints of beer daily find the simple fare and unexciting beverage there obligatory more conducive, in most cases, to health than their ordinary more exciting *régime*. And persons who train for prize-fights or for boat-racing are obliged, if they would quickly get rid of the softness of their tissues and attain to good wind, almost entirely to abandon all their beer and wine for a time. If such persons often become ill and die young, it is that they are often very idle and intemperate when not in training. Boerhaave said truly that water-drinkers live longer, have a better appetite, and preserve their sight longer than those who drink beer,—he might have added, or smoked tobacco, as he was, we think, a Dutchman. Our conviction is that alcohol is a medicine, just like opium, and should only be used for some temporary purpose, and steadfastly avoided by all persons as a daily part of diet. It is true that many persons can use opium daily, and seem to live pretty healthily notwithstanding; but the vast majority who do it are deeply injured and depraved by opium-eating or smoking: and, in the same way, the ingestion of alcoholic beverages cannot be defended, in our humble opinion, by any physician who has the facts in his recollection which we have alluded to above. There could not be many changes in civilized society to promise a greater improvement in human affairs than the abandonment of drinking of alcoholic liquors; and for more reasons than one. Our concern, of course, is not with the moral aspects of the question, except in so far as the use of alcohol takes away from the amount of money which its habitual consumer, if poor, is able to expend on nutritious food; the economical argument is not fit for our pages; but we have no hesitation in saying that the habits of gin and beer drinking in London and elsewhere produce a callousness to questions of human suffering and disease which would be certainly lessened if drinking were nearly abandoned. Brains sodden with gin and beer are less able to take interest in the great questions of the hour, the removal of pauperism and ignorance, than those left clear by the use of simple beverages such as the aromatic infusion. We are not in the least anxious, by these remarks of ours, to seem to dogmatise on what is evidently a difficult question. Doubtless, numerous persons, especially among the well-fed classes, are but slightly injured by the moderate amount of wine and beer they consume, whilst they are rendered gayer, and have more pleasures of a physical kind, from the moderate consumption of alcoholics. But, taking all things together, we are strongly of opinion that it would be much better for one and all of us to resort to aromatic infusions, such as tea and coffee, instead of using alcoholic beverages. Human life would be simpler, less costly, and more impressionable; besides which, hosts of cases of dropsy, of palsy, of atrophy, and degeneration would cease to sadden the physician's eye. Temperance in all things is good; abstinence from alcohol is one of the virtues which should be inculcated upon the young.

It is announced that a competitive examination for the admission of assistant-surgeons into the Royal Navy, to fill at least twenty-five vacancies, will take place at the London University on the 8th August, 1870, and following days, at ten o'clock.

Hospital Reports.

ROYAL FREE HOSPITAL.

At a recent visit to this hospital we found that an enormous improvement had taken place in the aspect of the wards. The magical effects have been brought about by the assistance of a nursing sisterhood, named the British Nurses Association, which is under the superintendence of Miss Coles. In company with the surgeon, Mr. John D. Hill, we were shown by that lady the admirable arrangements for the accommodation of the nurses, consisting of a dormitory and a parlour, as clean and wholesome as any one could desire. We predict that this will raise the subscription of that admirable hospital to a degree before unknown. With surgical skill, such as that of a De Meric, a Grant, or a Hill, we see no reason why this hospital should not take its place among the best schools of surgery in the metropolis. Its beds are always full of severe and most interesting cases.

ARMY HOSPITALS.

We begin, according to promise, our usual extracts from the new Army Reports.

Case of Resection for Disunited Fracture treated with Carbolic Acid.

By Assistant Surgeon W. Collis, R.H.A.

R. T., aged 22, belonging to F Battery C Brigade Royal Horse Artillery, sustained a compound comminuted fracture of the lower portion of middle third of the right tibia, by means of a kick from a horse which he was grooming.

He was taken to hospital, when the injury presented the following appearances :—

A contused wound extended an inch longitudinally along the bone, and about one inch and a half across it; the upper portion of the bone was riding to the extent of two inches over the lower, being also impacted into it to a considerable extent, whilst its spiculated extremity was forcibly pressed outwards, extending the sound skin. On passing the finger into the wound, three fragments of bone about one inch in size could be felt. The fibula was also obliquely fractured, but not comminuted; little or no bleeding took place, and the patient suffered but slightly from the shock. The fragments, being quite detached, were removed, a slight enlargement of the wound being found requisite. The patient was placed under chloroform, and extension and counter-extension used, when, after considerable difficulty, the fragments were placed in good position; the wound was then dressed with carbolic acid (one part of the acid to sixty of sweet oil) and closed up, several layers of lint saturated in the lotion, oiled silk and sheet lead being used for that purpose. The ordinary tibial splints having been applied and a bandage used, the thigh was flexed on the abdomen, and the leg on the thigh. A mild laxative with an anodyne was then given.

When seen next morning the patient was found to have passed a good night, no constitutional disturbances having taken place.

The case went on favourably, not a bad symptom appearing. On the tenth day the dressings were removed for the first time, when the wound was found entirely healed up, no suppuration whatever having taken place. The injury was then converted into a simple comminuted fracture.

Having left Benares for six months' leave to the hills at this stage, I am personally not aware of the history of the case during those months; however, a few days after my return, he was again brought under my notice.

I now found that the man whom I had left in an excellent condition was in a very debilitated state of health, in consequence of mental anxiety and extreme pain at the seat of fracture. Upon examination the fracture presented the following appearances:—The upper fragment of tibia overlapped the lower to the extent of about one and a quarter inch, and pressed strongly on the integuments. Complete union had not taken place between the fragments, motion being readily obtained by fixing the upper part of the leg and moving the lower. With regard to the exact state of the fibula some doubts existed, but it seemed almost certain that union had taken place. No deposit surrounding the seat of fracture could be determined.

The man being again admitted into hospital was given good nourishing food, rum being given as a stimulant. Under this treatment his general health very much improved; but all action had evidently ceased at the seat of injury, and the limb remained, not only perfectly useless, but a source of intense pain and an incumbrance to the patient.

The question of either amputation, resection, or some other procedure, had now to be thought of. I did not find much difficulty in deciding against amputation for the following reasons :—

1st. From the man's position in life, he would be left destitute and unable to get his living.

2nd. Knowing the constitution of the patient, it seemed likely that other and milder means would obviate the adoption of this ulterior one, and at the same time secure to the man a good and useful limb,—besides, as is common with natives, he objected most strongly to have amputation performed.

With reference to the other measures usually adopted in the treatment of disunited fractures, viz., setons, rubbing the ends of the bone together, ivory pegs, &c., the very unfavourable position of the fragments rendered them inapplicable to the present case. Resection of the ends of the bones, being thus the only course left open for adoption, was resolved on.

The patient having been placed under the influence of chloroform, I made a longitudinal incision over the seat of fracture along the spine of the tibia, to the extent of about four inches. I also made a cut at right angles to this directly over the protuberance caused by the riding of the fragments: this cut was about two inches and a half in length. The flaps having been dissected back the bone was exposed, and presented the following appearance :—

No surrounding callus existed, although there was some filling up of the interstices caused by the qualities of the fragments. Between the ends of these a considerable amount of callus had been thrown out; this was hard and very firm, but allowed an amount of semi-rotatory motion between the ends of the bones; of these the upper overlapped the lower to the extent of an inch and three-quarters. The extremities of the fragments had become smooth and rounded, and all reparatory action had evidently ceased. The oblique fracture of the fibula was found to be completely united, though an amount of longitudinal displacement existed; the shortening from this cause was, however, not considerable. No callus existed about the seat of this fracture.

The necessary operation was simple. I removed the overriding ends of the tibial fragments, with the included callus, to the extent of about three-quarters of an inch. The space thus formed between the ends of the fragments corresponded to the amount of shortening which had taken place in the fibula. The patient lost but very little blood, neither the anterior nor posterior tibial vessels having been met with.

Ligatures had to be applied to some small vessels—simple torsion was found sufficient for some superficial ones. The wound was allowed to remain for an hour exposed to the air as some oozing had taken place. At the end of this time, the bones having been placed in good position and a few sutures introduced to keep the edges of the wound together, it was thoroughly saturated with carbolic acid lotion of the strength formerly used. Pledgets of lint, saturated with the lotion, were placed on the wound, these again with gutta-percha tissue, the whole being made air-tight by means of oil-silk cloth. The ordinary leg splints having been applied and a flannel

bandage having been wrapped round the limb, the whole was kept in position by a bandage applied from the foot to the knee-joint. The thigh was now flexed on the abdomen and the leg on the thigh. Thirty drops of tr. opii was now given him; this quieted him considerably, but did not induce sleep. About 10 P.M. (14 hours after the operation) a similar dose was given, which had the desired effect, and the patient enjoyed a good night's rest.

14th Dec.—Patient very comfortable; complains of but little pain; pulse 104; temperature in axilla 100°; tongue slightly whitish, skin moist: ordered beef tea and dholl (a kind of Indian pulse); a dose of oil was also given.

From this date, up to the 21st of December, nine days after the operation, the condition of the patient continued most satisfactory, the pulse having fallen from 104 to 92, and the temperature of the body from 100° to 99°.

The appetite continued good, and the bowels were opened daily. On this date he complained of some uneasiness about the wound. The dressings having been removed, the longitudinal incision was found completely healed, with the exception of where the sutures interfered. The transverse cut was also nearly healed up, while the space between the ends of the bones was filled up with plastic material.

The ligatures being loose were removed: a very slight trace of pus was found present, resulting evidently from irritation caused by the sutures. The wound was dressed in a similar manner as after the operation.

30th Dec.—On the dressings being removed for the second time, the wound was found to be completely healed up; callus was forming between the ends of the bones most favourably. The general health of the patient is excellent. Wound dressed as before.

29th Jan., 1869.—Patient going on most favourably; callus continues to be thrown out; removed the splints and put on a starch bandage. Patient allowed to go about with the help of crutches.

Literature.

LECTURES ON SOME SUBJECTS CONNECTED WITH PRACTICAL PATHOLOGY AND SURGERY.*

Mr. Henry Lee is known to the Profession for more than one of his writings. As a writer on syphilis he stands among the best men in this country; and, indeed, so pre-eminent is he in this department of pathology, that we are hardly able to realise the fact that he is in addition to this an able general surgeon and scientific pathologist to boot. There are nineteen lectures contained in the volume before us. The first upon purulent infection; the three following on phlebitis; the fifth on varicose veins, and the sixth and seventh on varicocele and varicose veins; the eighth and ninth lectures treat of the repair of arteries, and on mortification, and other affections following disease of the arteries; lecture ten is on the diseases of the rectum; and lecture eleven on piles. The diseases of the rectum occupy most of the remaining part of the work; but in chapter eighteen he treats of long continued pains in bone, and in lecture nineteen on the excision of joints.

Several diseases, says Mr. Lee, have been grouped together under the name pyæmia. Some of them are different in origin, and probably not altogether allied in their pathology. But they all have a common tendency, sooner or later, to produce abscesses in different parts of the body. Up to the time of Virchow, the generality of surgeons admitted that the symptoms of purulent infection were due to the introduction of pus into the blood. When symptoms of pyæmia have actually occurred, but little is to be hoped from therapeutics. Three distinct affections have been described under the general name of phlebitis—viz., a primary inflammation of one of the larger veins of the body; the secondary affections, which occur in veins situated at a distance from the original lesion; and the general infection of the system resulting from the admixture of diseased secretions with the blood. Phlebitis has an undoubted existence. When some external injury has been applied to a varicose vein, and pain, heat, tenderness, and swelling follow, the symptoms leave little doubt of the presence of inflammation, and a coagulation of the blood at that part is the effect; but then the inflammation appears to have been propagated from without inwards. The coagulation caused by the phlebitis seems to be occasioned by some morbid impression made upon the blood through the lining membrane. Although it is undoubted that the internal coat is not liable to be inflamed in the same way as serous membranes are, there is no reason why it should not be affected with a perverse nutrition allied to a state of inflammation. In phlegmasia alba dolens, for example, the obstruction to the circulation generally results from the influence of the blood, of materials absorbed through the uterine veins. At one extremity the venous clot is multiple, adherent, and composed of root-like processes, extending into the tributary branches; the opposite extremity lying free in a large vein, and terminating by a large rounded end. The marks of phlebitis are rarely present. If the clot be of a simple kind, it will generally liquefy, and become so thoroughly disintegrated as to disappear, without leaving any trace of its existence, and without having induced any constitutional symptoms; but it sometimes happens that portions of the coagulum are detached and arrested in the heart or large pulmonary trunks, producing fatal forms of cardiac or pulmonary emboli. If several small portions are detached, or the *débris* of the clot carried away by the current of the blood, the particles become arrested in the smaller pulmonary vessels, and give rise to obstructions, local œdema, or a form of pneumonia of a less dangerous and active form than where the pulmonary emboli are formed of decomposing or putrefactive matter.

When a patient in other respects influenced by predisposing causes has been exposed to the influence of some mineral poison, or when a woman who has been recently delivered has been exposed to the erysipelatous or scarlatina poison, there is probably systemic poisoning from the first, out of which these secondary affections may or may not arise. We do not yet know on what the fluidity of the blood depends, and we cannot say why, at one time, the impression made on it by an animal poison should cause its coagulation, and at other times fail to do so. But Mr. Lee thinks that we are warranted in concluding that the liability to, or the actual occurrence of, coagula in these disorders, results from one of these conditions:—viz.: 1. Some injury or morbid alteration of the coats of a vessel. 2. The introduction of some diseased product or foreign material into the circulation. And, lastly, from the impression made upon the blood by the action of an animal poison. When secondary affections result from the two first of these, they will show themselves in the capillaries of the organ nearest in the course of the circulation to the place of the primary affection, or to that where the materials gained their entrance. When secondary affections are the result of the last, however, they may appear anywhere. The whole of this work is well worth reading, both because it is full of matter and because it is so readable. We can confidently recommend any of our surgical brethren to place it on the shelves of their libraries.

* Lectures on Some Subjects Connected with Practical Pathology and Surgery. By Henry Lee, F.R.C.S. Churchill, London. Pp. 309.

As an election for Dublin may be shortly expected, Sir Dominic Corrigan has announced himself as a candidate, and, as the list of voters has been greatly modified since the last contest, he may probably go in without opposition. Our Profession will then have an able exponent of its views; and, if he had already possessed a seat, it is questionable whether so inefficient and hurtful a measure as the Government Medical Bill would have been introduced.

Registered for Transmission Abroad.

The Medical Press and Circular *is published simultaneously in London, Edinburgh, and Dublin, every Wednesday morning. Price 5d. Stamped 6d.*

By Post to Annual Subscribers, £1 2 6
,, *If paid in advance* 1 1 8

*** Post Office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London.
Moffat & Co., 6, D'Olier-street, Dublin.
Maclachlan & Stewart, South Bridge, Edinburgh.
Sole Agents for the United States,
Messrs. Kelly and Piet, Baltimore.
Annual Subscription, *post free,* Ten Dollars.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JULY 6, 1870.

THE MEDICAL REFORM CRISIS.

The Government Bill has passed the House of Lords. Clause 18 has been restored, and some amendments withdrawn. That is the news of the week, and although Clause 18 gives the Bill some slight value, it is by no means such a measure as will give satisfaction, or last a long time. It must, therefore, be attacked in the Commons. What does it effect? It sets up three portals into the Profession, one for each of the three kingdoms, as if medicine were a different science in London, Dublin, and Edinburgh. The Profession cries out for a single portal. Let the three United Kingdoms be seen to be really united so far as medical licensing is concerned. A single imperial diploma, giving the right to practise every branch of the art of healing wherever the Queen's authority prevails, would be the best protection for the public, give the most satisfaction to the Profession, and interfere least with the examining bodies.

The Universities and Corporations might then make what rules and regulations they pleased. They would only be forbidden to grant their honours to unlicensed persons. Justice would thus be done. Those Universities and corporations whose diplomas were of real value would have plenty of applicants for them; and if a few were really useless, they would quietly die out, or amalgamate. This is the great reform that all earnest men have for years demanded, and the Government Bill gives us only a feeble attempt at compromise—a wretched three-portal system, possessing the elements of competition downwards, and sowing the seeds of jealousy between the three "United" Kingdoms. What is to keep three examining boards to the same level? If that were possible, what is to convince students or others that the level is the same? What is to prevent the licentiate of the Irish Board from sneering at his neighbour as the possessor of a "Scotch diploma," or the two trying to persuade the public that the English licentiate is more easily passed than the others? If we are to have a change, let us have a measure that shall effectually settle all such differences. Give us a single State licence. Let that be the sole entrance into the Profession, and we will decide for ourselves what other diplomas we will take as honours.

There is a worse feature still in the Bill. It is going to effect by legislation what has been nearly accomplished by the voluntary combination of the bodies. The Scotch amalgamated boards are doing as well as the Bill will compel them. The Irish and English are on the point of agreement to an amalgamated scheme when the Government steps in to order what is being really done. If legislation is to give us no more than the corporations are ready to offer, then let legislation leave us to arrange our matters with the corporations. Those which combine in a reasonable way will be supported by the masses of the Profession, and the obstinate ones will be left out in the cold, and soon must die of inanition.

Again, there is the vital defect of the Bill—the absence of any clause securing the representation of medical practitioners in the General Medical Council which is supported by money extracted from their pockets.

Nothing is more monstrous than that a dozen or a score of men should depute one of themselves to represent thousands of their brethren; yet this is the condition of things. At the Meeting of Fellows and Members of the College of Surgeons of England, as will be seen from our report, this subject continually recurred. The President himself spoke of it in a manner that will enhance his popularity. He may be looked upon as pledged to advocate the extension of the College franchise in this matter. Mr. Busk, indeed, spoke contemptuously of the agitation, and thereby sealed his fate for any future election—for one so completely out of tune with the progress of medical reform can have no right to assist in governing.

Mr. Christopher Heath put his finger on the blot in this matter when he said that after the President's speech it was known that the Council of the College, *without any need for hurry,* were about to hold a special meeting to depute one of their number to elect a representative for five years. He condemned this as a monstrous usurpation. We, knowing that there are members of that Council who hold our views, add our utter condemnation of the indecent haste thus displayed in the very act of usurpation: Why could it not be delayed?

Dr. Prosser James, who has done much work on this question, was present, and proposed an amendment which was evidently well received, but which he withdrew at the suggestion of those who supported it, in order that, if the Bill is to be imposed on the Profession against its will, there might at least appear unanimity as to the fact that Clause 18 is the only one of any value. In withdrawing it Dr. James appealed to the President to call together the Members and Fellows to discuss this question, and the appeal produced strong marks of approval. In fact Mr. Cock can hardly recede. He has entered on a course that will make his Presidency memorable—let him respond to that appeal and he will have the support of the whole mass of the Profession. And why could not the selection of a representative have been postponed till after such a meeting? It would be an honour to represent 17,000 Members and Fellows. It is a disgrace to usurp the rights of these, and the man who, being sent to the

General Council by the College Council, pretends to speak in the name of the whole body of Fellows and Members, lays himself open to the charge of being a rank impostor.

Mr. Christopher Heath spoke as a genuine reformer. A Fellow himself, he included Members as well as his own class, and thus adopted to the full extent the views so long advocated by Dr. Prosser James. These views have now also been adopted by the *Lancet;* several Councillors have given in their adhesion to them; and we hope they may be introduced into the Bill by the House of Commons.

POOR-LAW MEDICAL RELIEF.

A FEW months ago we had the painful duty of recording the death of a woman at Chesterfield during parturition, when several practitioners, called upon to attend her, refused, so that the unfortunate parturient, unassisted and neglected, was permitted to perish. We expressed our regret then that the relieving officer of the district did not supply an order for the parish doctor, as want of means to defray the midwifery fee must have been the cause of so many different medical gentlemen refusing. This week a provincial correspondent tells us of a somewhat similar case which occurred in his practice a few days ago, the facts of which are as follow:—A woman was seized with labour; her husband, an industrious man, owed a large bill to the parish doctor for attendance upon his family, which he was unable to settle. The doctor refused to attend unless the midwifery fee either was paid in advance or an order obtained from the relieving officer. This the latter refused, and the man was without money, so that before assistance could be obtained from another place the patient was well-nigh worn out. This brings us at once to the subject matter of a letter on this question lately addressed to us by Dr. Waring-Curran, wherein the writer forcibly calls for the abolition of the extra fee system as pertaining to Poor-law medical officers, for in the case of our correspondent, just cited, there would have been no difficulty in granting an order were it not that the relieving officer felt he was incurring a debt of ten shillings, which his masters—the gentlemen of the Board of Guardians—might seriously object to. Again, the difficulty about granting the order might have been overcome if *the loan system* advocated in our pages and elsewhere by Dr. Waring-Curran were adopted, whereby, in all cases in which doubt exists in the mind of the relieving officer respecting the circumstances of the applicant, the order could be given *on loan*, and on a future day the amount of fee and other expenses be recovered back again. Were this general, as Dr. Waring-Curran tells us, many would prepare to have the fee at such a time ready, since they could not "sponge" upon the parish authorities without being held liable in a court of law to refund the debt.

We have little doubt the *loan* system would work well. We know in those workhouses wherein tramps seek and obtain a night's lodging, with a breakfast the ensuing morning, and they are compelled to do a certain amount of work in return for it, that the vagrants, knowing the system, avoid the institution; so do we believe it would be with the pauper and the *loan* system. At all events, no woman, for the want of proper professional help in the hour of parturition, should be allowed to die. The parish doctor is very often imposed upon, and his post is one of great difficulty, which we see no way of remedying other than the constitution of a *special* Poor-law service, the abolition of the extra fee system—which we repeatedly find endangers human life in the time of suffering, because of a few paltry shillings being the question at stake—and the organisation of a *loan* system of relief. No doubt the latter would materially add to the responsibility and importance of the relieving officer's duties. "But let him," as Dr. Curran elsewhere suggested, "be paid extra for the work done according to the amount he annually saves the parish by the working of such a system."

Notes on Current Topics.

Dr. Henry Bennett on Midwives.

WE are quite of the opinion of Dr. Bennett, that the introduction of skilled women into the practice of midwifery would prove an immense boon to the more scientific practice of the healing art. The immense majority of cases of labour are weary affairs to the educated practitioner, and he feels almost in despair when he sees the weary hours glide away whilst attending on a straightforward case of labour at the waste of time it entails on him. Everyone who reads statistics knows that, probably on this very account, the most cases of death in labour occur in those countries where midwives do not usually attend labour cases. The practitioner, longing to be released from his weary watch, is tempted to have recourse to forceps to shorten the labour, and this is a very serious drawback to the utility of male accoucheurs. Let women, then, be admitted freely into the medical Profession, whether as physicians or midwives, and we are confident that the Profession will by no means lose in public estimation by the change.

Vaccination versus Variola.

THE Medical Department of the Privy Council appear at last to be doing their duty. As mentioned in our last, they have severely rebuked the Guardians of the Oldham Union for neglecting to comply with the Vaccination Act. Of course, they were awakened to a sense of duty by a severe epidemic of small-pox prevalent there. Recently, in the MEDICAL PRESS, we have directed, in very sharp language, the attention of the Privy Council to the fact of many Boards of Guardians ignoring the last Act and refusing to contract with their medical officers under it. Will every parish wait until small-pox invades them, and will the Privy Council rest with folded arms until death stares them in the face before the law is universally carried into force? Surely there must be lethargy and carelessness somewhere. If Boards of Guardians won't obey the law, why not make them, and hold them equally responsible with the parent who refuses or neglects to have his offspring vaccinated? When disease becomes epidemic, it is not the time to manifest the power of official life. If legislators consider certain codes of law necessary to be enacted, and create and pay certain functionaries for carrying them into effect, we hold that the latter are as much to blame as the miserly Board of Guardians, who dread a little extra expense being incurred, and that both are worse than the ignorant and negligent parent, who knows no better than to refuse having his child preserved against the ravages of so dire a disease as variola.

House Painting.

At this season of the year the physician not unfrequently has his attention directed to cases of insidious colic, which, upon enquiry, can be traced to living in a house recently painted, or occupying for sleeping a chamber whose wood-work is being improved by the hands of the painter. A word of warning is not, we conceive, out of place. Where white lead is being used, the greatest possible care should be exercised; upon some its trying and deleterious influence is resisted, whilst upon others of more delicate constitution, or possessed of an idiosyncrasy to the effects of lead, very grave consequences result, which provoke much suffering to the incautious and difficulty to the physician in eradicating the poison out of the system. There are some kinds of white lead paint used which dry very slowly, and when it does dry, rubs off in a white powder-like form if the temperature of the apartment be higher than ordinary. This is a very serious matter indeed to those occupying a house where such paint is employed. Lately we have visited several patients suffering from lead colic entirely dependent upon living in houses recently painted. We recommend, where it is possible, that the house should be vacated to the painter, and that all smell of paint should have gone off before re-inhabiting it; and when this is not feasible, we advise our patients, as preventative measures, to ventilate sufficiently, and use vinegar freely with their meat, and partake of salad prepared with vinegar. When the colic manifests itself, then, of course, we must adopt the usual remedies. But, as prevention is better than cure, we have no hesitation in remarking that many of the cases to which we were called might never have occurred had a little judicious care been exercised in guarding against the evils of freshly-laid-on white lead.

Hold! St. Pancras.

The "worm" is again busy amongst the Guardians of St. Pancras parish. This time the raid is upon the district medical officers—and why not? for, according to Guardian Salter's public statement, "the hall may be (at any time) filled by gentlemen," each of whom suffers a thirst insatiable for a *chance* to tilt from the parochial hobby-horse a professional brother, in order that he may bestride him.

At the present time, the parish of St. Pancras is divided into six medical districts. It is one of the largest parishes in the kingdom, its area being about twenty-one miles, and its population 250,000 souls; it is, in part, poor as Poplar or Bethnal Green, populous as St. Luke's, Whitechapel, or St. Giles's. The medical officer of each district receives an annual stipend of £150, together with a small fee for difficult obstetric cases, paid nurses being supplied by the Guardians to meet the requirements of the poor in ordinary cases of travail.

Now, "in the interests of the poor," the preposterous—if not really insane—proposition has been submitted to the Guardians, of reducing by one-third the district medical staff; that is, to place on the shoulders of four medical gentlemen duties heretofore more than ample for the correlative strength and endurance of six, aided too, in most cases, by energetic and fully qualified assistants. Let us hope the Guardians of St. Pancras parish will take a bird's-eye view of the parochial map ere this false step be made, for if the attempt be persisted in to lop off medical districts and to place this stupendous field of pauperism—which St. Pancras parish undoubtedly is—*without* the pale of medical aid, it shall be reprobated, as it so thoroughly deserves; for to all good men, and decidedly to us, as representing a large section of our medical brethren, the prolongation—even by a single hour—of the life of the most abject member of the great human family is more sacred, and far dearer, and more vitally important, than a knowledge of the triumph of cheese-paring economy, and of pompous parish *quidnuncs*.

Contagious Diseases Acts.

A large and enthusiastic meeting in favour of the repeal of these Acts was held on Wednesday last, 28th June, at the Beaumont Institution, Mile-end road. Sir George Grey, on taking the chair, said that it was time that something was done to alter the condition of our standing army, for whose sake such unconstitutional Acts had been framed. He mentioned that there were large numbers of troops in this country at present—some 95,000 men being within the precincts of the British Islands—almost all of whom were kept in a state of enforced celibacy. This should be altered as soon as possible, and there was no reason why soldiers' colonies might not be settled in some of our large open spaces, where soldiers might be allowed to marry like any of the rest of the male citizens of this country. Mr. E. Beales dwelt on the disgraceful injustice of Acts which permitted a woman, by the fiat of a policeman, to be put in prison, without trial, for a month, and allowed a medical man to imprison a girl for nine months, for the sake of the health of a celibate army. Dr. C. Drysdale objected to the civilian women of this country being placed yet more in the power of men than they are at present, for the sake of a celibate army. As to the idiotic idea of extending such Acts to the whole of this country, men who did so were utterly careless of the teaching of all countries where such Acts were enforced. In Paris, the amount of venereal contagion in all classes was larger than in any of our cities, the prostitutes were ruined for life, and the whole theory of honest love and affection between the sexes was destroyed by the police mouchards of Paris and elsewhere. He trusted that, instead of such Acts being carried here, the Acts of Paris might be repealed. Mrs. Law addressed the meeting, and Mr. Baxter Langley added some words. The meeting almost unanimously and enthusiastically voted for the repeal of the Acts.

We presume we have now heard the last of that execrable impostor, the *soi-disant* Dr. Newton, miracle worker from America. Like the Zouave Jacob, and others of similar notoriety, "every dog has his day"—so with this latest importation of impudence and falsehood, the populace will suffer him no longer, and at his last performance, at a Baptist chapel in Paddington, he was most unceremoniously mobbed, and it was only by his acrobatic accomplishments that he was enabled to escape the fury of the mob by scaling a garden wall—*for him a miracle*—as it saved him the chastisement, if not the Lynching, he so richly deserved. The Baptist minister, also, who pretended to be a believer, and who had lent his chapel to the fellow, did not altogether escape with that delicate treatment he might have desired. Give such men enough rope and they will soon hang themselves—particularly if the public are allowed to be the judges.

Hospital for Scrofulous Children.

The Department of Public Health of France has founded near Calais a sea-side hospital for the treatment of scrofulous children from Paris. In consequence of the success of the experiments undertaken in 1861, with an hospital of 100 beds, the department has provided accommodation somewhat in proportion to the wants of the Parisian population, and has caused an hospital of 500 beds to be erected. The Empress inaugurated it in last July. Desiring, however, to secure the benefit of sea-side treatment, not only for the destitute, but for the children of persons whose means would not allow them to incur the expense of a residence at the sea, the management has opened the small hospital to children whose expenses of maintenance (1f. 80c. per day) are paid.

Votes in Support of Homœopathy in America.

The *Albany Evening Journal* reports that one of the last acts of the American Legislature, at its recent session, was the passage of a law appropriating 150,000 dols. for a State Lunatic Asylum. The institution is to be known as the State Homœopathic Asylum for the Insane, and is to be conducted upon the homœopathic system of therapeutics.

Another law was also passed authorising the New York Sinking Fund Commissioners to lease, for four hundred years, suitable grounds in the city of New York for the Hahnemann Hospital. The terms of the lease provide for a nominal rental of twelve dollars per year (one dollar per lot), so long as the building is used solely for the purposes indicated in the Act. An appropriation of 20,000 dols. was made towards a building fund.

We find that the 200,000 dols. voted this year to homœopathic organisations is nearly one-third the total amount appropriated.

This is the first apportionment to State institutions under homœopathic auspices.

The annual meeting of the Lancashire and Cheshire Branch of the British Medical Association was held at Preston last week, when about eighty gentlemen were present. The following resolution, on the proposition of Mr. A. B. Steele, seconded by Dr. E. Waters, was carried: "That this meeting is of opinion that the powers given to the Privy Council by the amended Medical Act are excessive, and ought to be limited to the placing of a veto on the General Medical Council;" and it was also decided that a memorial embodying the resolution be forwarded to the Lord President of the Council and to the Houses of Parliament, signed by the President and Honorary Secretary.

It is announced that the office of editor of the *British Medical Journal* is about to become vacant by the resignation of Mr. Jonathan Hutchinson.

SCOTLAND.

GLASGOW.

Anderson's University.—The annual meeting of the trustees was held on Thursday. The number of students attending during the past session was 2,541. It was agreed to advertise for a successor to the late Dr. Penny in the chair of chemistry, and that, in electing, power should be reserved to the trustees to create any other chair or chairs in connection with the University. A motion was proposed and lost by a large majority, to remove the restriction which, by the will of the founder, limits the appointment of professors to the term of one year. The various professors were unanimously re-elected for a term of one year.

EDINBURGH.

The University Athletic Sports.—The fifth annual exhibition took place in Greenhill Park on Thursday last, and attracted a large number of spectators, the park presenting a most brilliant appearance. The prizes, which were distributed by Professor Turnor, were unusually numerous and valuable.

Dr. James Rutherford, of the Burgh Lunatic Asylum, Birmingham, has been elected medical superintendent of the Lochgilphead Asylum, in room of Dr. Sibbald, appointed Deputy Commissioner in Lunacy for Scotland.

Funeral of Professor Syme.—On Thursday afternoon, the body of Professor Syme was interred within the family vault of St. John's Episcopal Church. Although strictly private, it was striking to observe the spontaneous marks of respect which the occasion called forth. In the streets through which the procession passed the shops were closed, and the sorrow we heard expressed by all classes of persons indicated to us the deep love and respect in which the memory of that great man is held. The service in St. John's was conducted by the Venerable Dean Ramsay and the Rev. D. Sandford.

THE MEETING AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND ON THE MEDICAL BILL.

The Meeting of Fellows and Members mentioned in our last was held on the 28th ult.; the President, Mr. Edward Cock, in the chair.

In opening the proceedings, the President stated that he was himself responsible for convening the meeting, but he was sanctioned in the course he had taken by the two Vice-presidents of the College. It appeared to them to be so important that the opinion of the Fellows and Members of the College should be sent at once to the House of Lords that they did not wait to consult the Council. The Bill was no longer that which they had previously discussed, for the 18th Clause, enacting that the only portal to the Profession should be through the examination of a viz., the establishment of one uniform system of qualification and examination for admission to the Medical Profession, or, in other words, the establishment of the one portal system, is entirely abandoned.

That by the Bill as it at present stands the Medical Authorities will be enabled to confer as heretofore their several Degrees and Diplomas which—notwithstanding the provisions of the Penal Clause (Clause 21) of the Bill and notwithstanding that the possessors of such Degrees and Diplomas will not acquire any claim to registration under the Medical Act — will undeniably be qualifications to practise.

That the Bill in its present form is calculated to keep alive that competition amongst the Medical Authorities which it was one of its principal objects to abolish; for the General Medical Council, instead of being called upon only to supervise the examinations of the three Examining Boards to be established by the Bill, will have the impossible task of striving to secure uniformity in the examina-

conjoint board, and that no honours or degrees should be conferred until that portal was passed, had been abrogated. They considered that that abrogation really emasculated the Bill, and they therefore thought it right to summon the Fellows and Members of the College, in order that the subject might be fully considered.

Mr. Busk proposed—"That this meeting fully agrees with the opinion expressed in the resolution of the Council of the College on the 9th instant — namely, that the original Clause 18 of the Medical Act (1858) Amendment Bill should be reinserted in the Bill, and that a petition in the name of the Fellows and Members of this College, as represented by this meeting, be drawn up and presented to the House of Lords, praying that, for the reasons stated therein, the original Clause 18 may be restored to the Bill." The abrogation of Clause 18, instead of rendering the admission into the Profession more simple and uniform than at present, would, he believed, have the opposite effect; instead of nineteen portals to the Profession, there would in future be twenty-two. The alteration was said to be a concession to the Universities, but it was a well-known fact that scarcely any practitioner of medicine gained admission through the portals of the Universities. As far as England was concerned, the Profession at large consisted of members of the Colleges of Surgeons and Physicians and of the Apothecaries' Company. There were two other points in the Bill which required even more serious attention, but they could not then be discussed. One of these was the disproportionate representation of the medical corporations in the General Medical Council.

Mr. Partridge, in seconding the resolution, expressed his general concurrence in the remarks of Mr. Busk.

Mr. Gamgee, of Birmingham, thanked the President for convening the meeting. There could be no doubt, he said, that, in the opinion of the majority of the Profession, Clause 18 was the most important feature of the Bill. With regard to the question of representation in the Medical Council, the vast bulk of the Profession was undeniably not represented at all. He deeply regretted that this question could not be taken up.

Mr. Adams also suggested that the authorities of the College should prepare a Bill, and submit it to the Legislature for adoption.

Mr. Heckstall Smith said that nothing had given him so much surprise as the omission of Clause 18, which was the very essence of the Bill. He trusted that the Council of the College would give their strongest support to the restoration of Clause 18, and thus put a crown to their exertions of late years. Much as the members had had reason to complain of them in times past, there could be no doubt that they had of late been marching with the times.

Mr. Rogers Harrison congratulated the authorities of the College on the step they had taken in summoning the meeting, and expressed his concurrence with the resolution.

Mr. Christopher Heath said he was glad to hear Mr. Busk express an opinion that the corporations were inadequately represented on the Medical Council. It appeared to him somewhat strange that a member of the Council should express that opinion, when on the following Tuesday the Council would proceed to elect a representative of the College for the next five years. He protested that the election would be a usurpation of the rights and privileges of the Fellows and Members.

Mr. Gant said that the resolution, if it passed in the form proposed, might lead to the supposition that, on the restoration of Clause 18, the Fellows and Members of the College woud be perfectly satisfied with the Bill. He suggested a rider to the resolution, stating that no Bill would satisfy the just claims of the Fellows and Members of the College which did not distinctly provide for their direct representation in the Medical Council.

The President ruled that the regulations did not admit of a rider being added,

Mr. J. F. Clarke said that Clause 18 was the fundamental point of the Bill, and its omission was most disastrous. If the Bill passed without it the result would be like playing a game with loaded dice.

Mr. Busk differed from Mr. Heath in his view of the matter respecting the General Medical Council, and condemned the scheme for electing representatives in the Council from the general body of the Profession as utterly preposterous. He went on to say, amidst loud cries of dissent, that an immense deal of mischief had been done by the apparent antagonism of a certain part of the Profession towards the Council and the College.

Mr. Cooper expressed his hearty concurrence in the resolution proposed by Mr. Busk.

Dr. Prosser James thanked the President for summoning Members as well as Fellows to the meeting, but declared that the restoration of Clause 18 would not make the Bill worth passing. As the President had ruled that no rider could be added to the resolution, and as there was evidently a strong feeling on the point, he would move an amendment to the resolution of Mr. Busk in order to test the matter:—"That, while returning thanks to the President for petitioning the House for the restoration of Clause 18, this meeting is of opinion that even the restoration of the clause would not satisfy the Profession, and that no Bill would be of any use which does not provide for the representation of the Profession in the General Medical Council, and for one single examination entrance into the Profession."

Mr. Gant seconded the amendment, but subsequently stated that, desiring to have an unanimous expression of opinion with reference to Clause 18, he would recommend the withdrawal of the amendment.

Dr. Prosser James, in consenting to withdraw the amendment, said he hoped the President would fully consider the other questions, and, acting in the same manner as on this occasion, summon another meeting to discuss the whole subject of medical reform in that College.

A petition to the House of Lords, praying for the restoration of Clause 18, and specifying the reasons for such restoration, was then read and agreed to.

RESOLUTIONS—

That this Meeting fully agrees with the opinion expressed in the Resolution of the Council of the College of the 9th instant—viz., that the original Clause 18 of the Medical Act (1858) Amendment Bill should be reinserted in that Bill;

And that a Petition, in the name of the Fellows and Members of this College, as represented by this Meeting, and to the following effect, be drawn up and presented to the House of Lords, praying that, for the reasons stated therein, the original Clause 18 may be restored to the Bill, viz.:—

Unto the Right Honourable the Lords Spiritual and Temporal of the United Kingdom of Great Britain and Ireland in Parliament Assembled:

THE PETITION OF THE FELLOWS AND MEMBERS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND,

Humbly sheweth—

That whereas in a Bill introduced into your Honourable House, entitled "An Act to amend the Law relating to the Qualification of Practitioners in Medicine and Surgery, and otherwise to amend the Medical Act, 1858," it was originally proposed, by Clause 18 thereof, that the Medical Authorities described in Schedule 2 to the Bill should not in future confer any of the Qualifications mentioned in Schedule A to the Medical Act of 1858 except to persons who had obtained the Licence to practise under the provisions of the Bill, and whereas in the Bill as "Amended on Report" such Clause 18 has been struck out, your Petitioners beg to express their regret at the omission of the said Clause 18, and pray that, for the following reasons, the same may be restored to the Bill, viz.:—

That, by its omission, the main principle of the Bill,

tions of the nineteen Medical Authorities as well as in those of the three Boards.

That if the omission of the Clause be, as it is understood to be, a concession to certain Universities on the ground that some few persons seek to obtain the Degrees in Medicine of those Universities without any intention of practising the Profession of Medicine, and that it would be unfair to such persons to require them to pass the examinations of the conjoint Boards, such concession is totally uncalled for, inasmuch as it would be in effect making the interests of the Profession and the public at large, which can only be thoroughly secured by the adoption of the one portal system, subservient to the interests of a few individuals.

That a Degree in Medicine is, or should be, a test of the qualification of its possessor to practise medicine, whatever may be his ulterior motives in taking it, and that it cannot be considered any hardship upon the few individuals in question to require them to pass the examinations of the conjoint Boards.

That, moreover, it is competent for those persons who are desirous of devoting themselves to Science and to Literature, to obtain from the Universities Degrees, other than Medical, in evidence of their scientific acquirements and learning.

That, for the foregoing reasons, your Petitioners humbly pray that your Honourable House will consent to the restoration of the original Clause 18 to the Bill, or that your Lordships will refuse to give your sanction to the Bill; and your Petitioners, as in duty bound, will ever pray.

Signed on behalf of the Fellows and Members of the Royal College of Surgeons of England, assembled in the Hall of the College, this 28th day of June, 1870.

EDWARD COCK, President.

Mr. Spencer Wells proposed, and Mr. Gamgee seconded, a vote of thanks to the President, which was carried unanimously.

Correspondence.

MERCURY AND IODIDE OF POTASSIUM IN SYPHILIS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In an interesting report of the Manchester Lock Hospital, by Dr. Charles Fryer, contained in your issue of the 22nd June, that gentleman relates the case of a man who had, during a history of syphilis of fourteen years' duration, taken much mercury, and had lost the whole of the soft and much of the hard palate. This patient was treated by chlorate of potash, oleum morrhuæ and good diet, without benefit; but was quickly cured by doses of iodide of potassium. Although deeply convinced of the injurious effects of mercurial treatment in this deplorable disease, I wish to express my opinion, firstly, that syphilis of itself is quite capable of destroying the soft and hard palate and the nasal bones, although it is, I conceive, far more likely to do so if mercury is poured in, as some rash elderly practitioners still seem to do. Younger men, I think, now know better things. I am, however, anxious to add that, in the case alluded to, as in all cases of those terrible sore throats with which we are so familiar in hospitals in London, the exhibition of large doses of iodide of potassium, fifteen grains thrice daily, has, in all cases I have yet seen, effected a speedy cure, where the fauces have been affected or the delicate nasal bones, or the patient was not dying.

Dr. M'Call Anderson seems to think (in a communication to one of your respected contemporaries) that, "if there is any tendency to syphilitic disease of the nostrils or neighbouring parts, iodide of potassium should be withheld, or given with great caution, for, if it produces coryza, it is very apt to aggravate the morbid condition of the parts." I cannot at all coincide with this opinion, as I have found that, in ozæna, the only mode of attacking the fœtor and specific inflammation is the exhibition of large doses of the iodide.

Dr. Anderson is much in favour of mercury—1, in infantile syphilis; but the cases given a few years ago by Allingham and R. W. Dunn, of such infants treated without mercury, showed a much better result than the mercurial treatment did; and Boeck, of Norway, in his "Recherches sur la Syphilis," gives many cases which were treated by this drug, and a great proportion of which died. 2, Mr. Gascoyen's cases of *syphilitic iritis*, treated without the use of calomel, added but to the testimony of Boeck, Taylor of Boston, and many others, that mercury was of no use in this affection. With regard to syphilitic skin affections and cachexia, the use of iodide of potassium in ten-grain doses is, in my humble opinion, far preferable to any other remedy. In short, before iodide of potassium was used, syphilis was confessed by all to be, in many instances, quite untractable; since the days of large doses of the drug it can be almost always kept in check, although, unfortunately, not cured.

I remain, Sir, yours faithfully,

CHARLES DRYSDALE, M.D.,
M.R.C.P.L., F.R.C.S.E.

99 Southampton row, W.C., London.

TREATMENT OF CARDIAC DROPSY BY STRYCHNINE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Recent experiments by a French savant have shown that merely ligaturing the main vein of a limb will not produce œdema, but if the principal *nerve* be cut after deligation of the vein, œdema at once supervenes. Now patients often suffer for a long time from heart-disease, attended with venous obstruction, without anasarca occurring. The experiment alluded to suggests the idea that, in such cases, a lack of innervation allows the dropsy to manifest itself, and that good therapeutical results might be obtained, either by exhibiting strychnine or phosphorus, the employment of galvanism, &c.; or, on the other hand, of ergot and belladonna, if the arrest of nervous influence be supposed to be due to congestion of the spinal cord. Of course I should not recommend any one to neglect the ordinary remedies found useful in cardiac dropsy; but they too often fail, or are inapplicable to the individual case. I ought not perhaps to take up your space with a mere theory unsupported by experiment, but the only case of anasarca I have met with since I read of the Frenchman's experiments, is one of *renal* dropsy with dilatation of the ventricle, which I am treating simply by jalap and vapour baths. There being a retained secretion in the blood and altered density of that fluid in renal disease interfering with endosmose I did not think it a case so likely to benefit by neurotonics as one of pure cardiac dropsy; but the latter disease is only too common, and some of your readers may be tempted to try one or other of the remedies I suggest, and record their experiences.

FRANCIS M. LUTHER, M.D.

Cappoquin, June 23, 1870.

ALLEGED RAPE BY A SURGEON.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I think I have seldom witnessed a thing more painful than a trial at the Old Bailey this week of a young surgeon on the charge of alleged rape of an aggravated form on a hysterical emotional girl, his character and practice ruined, the life or happiness of himself, wife, and family, cast on the hazard of a die, whether he should be found guilty or not, and sentenced to seven years' transportation, his actual crime having been simply and in reality that of using the ordinary vaginal speculum, as it was supposed, under some noxious drug (chloroform, of course), the poor young woman from emotion having fainted during the common use of the common speculum, and mistaking it for the alleged crime. I admired the charge of the judge very much, who saved him from the half-expressed mockings of barristers and doctors. The case is a frightful lesson for medical men, with the present popular notions that exist about the rapid action of chloroform, the whole of this supposed occurrence having taken up only about ten

or twelve minutes, and the police authorities supposing innocently enough that chloroform smelled out of a common Preston salts bottle renders the person insensible with the quickness of lightning!—the surgeon's assistant swearing positively it was a Preston salts bottle, with smelling salts in it, nothing more, the actual bottle given to the police, and yet a jury were divided equally, it was said, and took two hours to consider their verdict, after seven hours' trial. Added to all this, the fact that the father of the young woman was in the outside surgery waiting for the opinion of the surgeon till he had examined the girl, one room twelve feet square, the other about twenty feet. I believe there was no chloroform used at all; but there, standing alongside the Chelsea murderer in the dock, with a mocking crowded court, full of the unpleasant trial of the men in women's petticoats—deserted, I may say, by the Profession, stood this unhappy young man to take his trial.

I am, &c.,

Sackville street, June 10. CHAS. KIDD, M.D.

EDINBURGH UNIVERSITY.

By telegram we learn that Dr. Alexander Simpson, nephew of the late Sir J. Y. Simpson, has been elected to the vacant Chair of Midwifery by a majority of one. The other candidates were Dr. Matthews Duncan and Dr. Keiller.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

DR. M'SWINEY'S APEEAL.

THE Right Hon. the Lord Chancellor, the Lord Chief Justice of the Queen's Bench, the Chief Justice of Common Pleas, and the Lord Chief Baron, visitors of the King and Queen's College of Physicians, sat in the Court of Chancery, to deliver judgment on the appeal made by Dr. M'Swiney from a decision of a board of the institution. It will be recollected that the appeal arose from Dr. M'Swiney's rejection, when he became a candidate for the Fellowship of the College, on a vote by ballot. The system of vote by ballot had long been in use in the College, and the rule under which the election in question was conducted was a by-law passed by the board in 1862, providing that one black bean in five should exclude the candidate. According to this by-law, Dr. M'Swiney failed in his candidature, though a majority of the voters were in his favour. The petition to the visitors prayed that the by-law of 1862 might be declared illegal, and inconsistent with the College charter.

The LORD CHANCELLOR first delivered judgment, holding that the by-law of 1862 was illegal, and inconsistent with the charter, and that the petitioner ought to be indemnified as to his costs out of the funds of the College. His lordship said that, if the election had been by open vote, Dr. M'Swiney would have been duly elected; but, as the mode of election was illegal, there should be a new one.

The LORD CHIEF JUSTICE next delivered judgment. In doing so, he concurred with the Lord Chancellor. Having referred to the various authorities which had been quoted by counsel, he referred to the judgments of Lord Eldon and Lord Mansfield on similar cases. Lord Mansfield, when he gave judgment on the subject, said—"There can be little doubt (this is certainly my opinion) that the College are obliged, in conformity, with the trust and confidence placed in them by the Crown and the public, to admit all that are fit, and to reject all that are unfit." Lord Mansfield also said that the duty of determining as to the fitness of candidates belonged to the College of Physicians, and would not be taken from them by the Court; but that "their conduct in the exercise of this trust, thus committed to them, ought to be fair, candid, and unprejudiced, not arbitrary, capricious, or biased, much less warped by resentment or personal dislike." He (the Lord Chief Justice) would wish to ask this question—During the recent elections for Fellowships in our national University, where the fortunes for life of the gentlemen who became candidates were at stake, what would be said of the learned and esteemed man at the head of that University, or the distinguished men who assisted him, if, instead of giving their voice to the man who, by his learning and study, was qualified for the position, he should be elected or rejected by caprice, or without just cause? It was curious to observe, in the papers of the College, an entry of a resolution proposed on the 8th of November, 1853, by Dr. Frances, and seconded by Dr. Smith—"That all elections shall be decided by open voting, or by voting papers subscribed with the name of the voter." On a division, there appeared upon the minutes—Ayes, 3; Noes, 4; and the motion was negatived. There were 15 present at this meeting, so that there must have been 8 who expressed no opinion as to whether elections should be by ballot or not. He found that, on the 2nd of October, 1869, notice was given by Dr. Evory Kennedy that he would move that the opinion of the law officers of the Crown should be taken as to whether the by-law of 1862 should be rescinded. The motion was brought forward and summarily negatived. It was subsequently proposed by Dr. Lyons, and seconded by Dr. Evory Kennedy, that the opinion of the law officers should be taken on the charter and Acts of Parliament, with reference to the system of election by ballot. This motion also was negatived; though, in his opinion, no more reasonable proposal could be made. Then they had the evidence of Sir Dominic Corrigan that, at a meeting held on the 7th of April 1868, twenty-seven members being present, Dr. Haughton expressed his opinion that "the by-law was illegal." The election at which the petitioner was rejected was on the 18th October, 1869; therefore, the college had abundant notice that the validity of the by-law was a point which would be disputed. Notwithstanding, they refused to be advised with respect to it. He had no doubt that they thought they were acting under the charter; but they were the authors of the by-law, which was illegal, and he thought they should, in fairness, pay the costs of the petition.

The LORD CHANCELLOR said it was to be understood that the costs were to be "indemnified" out of the funds of the College. The Court of Appeal itself was, indeed, under great obligations to the gentlemen who acted as a committee on both sides, who had taken great trouble, and had given the court great assistance in the matter.

Chief-Justice MONAHAN said no person could for one moment suppose that it was consistent with the charter to allow a minority of four to govern the decision of a majority of three times four. So far as he was individually concerned, he was not of opinion that election by ballot was in all cases invalid or void. He had examined the charter of the College of Physicians in London, which was altogether silent as to how elections were to take place. But in the particular charter now before them, having regard to the 13th and 15th sections, which directed the election to be conducted in the College Hall, by "voice," and that, in the event of an equality of voices, the President or Vice-President was to have a casting voice, he conceived that the spirit of the instrument was utterly inconsistent with voting by ballot, because it would take away the power of voting by ballot from the president, who must, in the event of an equality of votes, give his vote publicly for the person whom he supposed to have been elected. Therefore, he had no difficulty in concurring with the judgment which had been arrived at by the Lord Chancellor and the Lord Chief Justice. It appeared that, if they had come to the conclusion that vote by ballot was legal, they must also have declared Dr. M'Swiney duly elected; but, as the mode of election was illegal, he could not be declared a Fellow without a new election.

The LORD CHIEF BARON also concurred in the judgment already delivered.

The Government Medical Bill.—This measure passed the third reading in the House of Lords on Monday night. An amendment by the Earl of Lichfield for the insertion in the Bill of a new clause providing that the General Council should always contain four representatives elected by registered members of the Profession in Scotland, and two other representatives elected by those in Ireland, was negatived.

NOTICES TO CORRESPONDENTS.

To Members of the Irish Medical Association.—The postal regulation, which forbids us to issue more than one supplement to the Medical Press and Circular, compels us to forego the publication of the *Journal of the Irish Medical Association* (weekly supplement to the Medical Press) this week, in favour of our half-yearly index. The matter for it is in type, and it will appear as usual next week.

"DOCTORS AND WATER DRINKERS," AND *WATER THINKERS.*

To the Editor of "The Medical Press and Circular."

Sir,—Knowing that your valuable journal is the only one our Profession possesses conducted on independent principles, and unassociated with any clique, will you allow me, with your well-known kindness, space to make a few remarks on a subject which needs nipping in the bud.

I am a member of a certain association that publishes weekly a scientific journal connected with it. Now I notice this day a letter which I think should never have been published on the subject of "Doctors and Water Drinkers," by an unprofessional gentleman, distinguished in Dublin for being a vegetarian, a teetotaller, and a lecturer at piety teagatherings, who, forsooth, reads us a lecture on the treatment of disease! I object myself, and so do the Profession as a body, being dictated to by people who know nothing about the intricacies of what they write—superficial observers and shallow-minded thinkers. To be told by a non-medical man in the columns of a medical journal "That medicine is not an exact science, *it does not prescribe any sure and universal remedies*," and a lot of other bosh—a direct insult to the man of science—is unpardonable.

Surely when we are being dictated to, and taught practical lessons in the science and art of medicine by outsiders, and medical journalists are found ready to open their columns to a page of utter nonsense, which every practical man knows it to be, it is not to be wondered at that we feel humiliated and disgusted at times. To argue the question of total abstinence with a teetotaller is beneath me, for I know, and so do all, that, in the treatment of disease, alcohol is indispensable. At the present moment I don't know whether to feel more angry at the self-sufficiency of those who have no right to dictate to our Profession, or with the managers of a journal who print so much rubbish.

Your obedient servant,
A Member of the British Medical Association.

June 25th, 1870.

BRITISH MEDICAL ASSOCIATION.

To the Editor of "The Medical Press and Circular."

Sir,—Again I find we require a new editor for the journal of the Association. Indeed, I always felt Mr. J. Hutchinson could not conveniently spare the time for office work, owing to the varied and important duties he has to perform as a leading London surgeon. Will you allow me, in your independent and impartial columns, to inquire why it is the great body of members of the Association have no voice in its working, and that the choice of an editor is confined to the hands of a few? No doubt since Mr. Ernest Hart has returned to town, he will re-apply for the appointment; but I do very seriously object that the great body of members who are the mainspring of the Association have no influence or power in the management of it, or in the appointment of its officers.

Your obedient servant,
July 2nd, 1870. A Member of the Association.

MEDICAL CERTIFICATES FOR HOSPITALS.—VENTNOR.

To the Editor of "The Medical Press and Circular."

Sir,—Your *judicious* philippic on the very *injudicious* (to put it mildly) style of the Ventnor Cottage Hospital Certificate, deserves the thanks of the Profession. Recently, a form of certificate, precisely similar to that copied by you, was submitted to me by a *patient*, in order that I might fill in and sign it. I did neither. The medical committee of this Ventnor *Squat* Hospital are much to blame. The medical committees of many kindred institutions are much to blame also. This Ventnor Certificate exposure, let us hope, may cause them to re-consider the objectionable forms of certificates now in general circulation. The wording of most of these forms of certificates is for many reasons, absurd and vicious.

Yours truly, Anti-Humbug.

Marriages.

Bond—Hayes.—On the 28th ult., at Christ Church, London, Thomas Bond, F.R.C.S., to Rosa Sophia, third daughter of the late Mr. Justice Hayes.

Tayler—Hicks.—On the 25th ult., at St. John's Church, Lewisham, Francis Thomas Tayler, B.A., M.B., eldest son of Caleb Tayler, M.D., to Mary Ann, eldest daughter of Edward Samuel Hicks, Esq., of Rupert Villa, Lewisham.

Deaths.

Clark.—On the 29th ult., Sir James Clark, Bart., M.D., F.R.S., Physician to Her Majesty the Queen, aged 82.

Donnall.—On the 10th ult., at Westow road, Bath, Orlando S. Donnall, M.R.C.S.E., Deputy Inspector-General of Hospitals.

Fox.—On the 28th ult., at Brislington, Charles J. Fox, M.D., of Torquay, aged 64.

Lawrie.—On the 19th of April, at Ballarat, Australia, J. T. Brudenell Lawrie, M.D., aged 28.

Speer.—On July 1st, at 20 Falkland street, Liverpool, in her 27th year, Jane Kenyon, the beloved wife of Dr. J. Speer.

APOTHECARIES' HALL, BLACKFRIARS.

THE next EXAMINATION in ARTS will be held at the Hall on FRIDAY and SATURDAY, SEPT. 23rd and 24th, 1870.

A Syllabus of the Subjects for Examination may be had on application.

An Examination in Arts will again be held in the month of January, 1871.

R. H. ROBERTSON, Secretary to the Board.

IRISH MEDICAL ASSOCIATION.

AT the Annual Meeting of the Association held on the 6th June, the following Office-Bearers were elected for the year 1870.

PRESIDENT—Thomas Darby, Esq., M.D., Bray.

VICE-PRESIDENTS.

Dr. Beatty, Dublin.

Dr. Benson, Dublin.	Dr. Macnamara, Dublin.
Dr. Harvey, Cork.	Dr. Martin, Portlaw.
Dr. Hynes, Galway.	Dr. Walsh, A. J., Dublin.

CHAIRMAN OF THE COUNCIL.

William Jameson, Esq., M.S., F.R.C.S.I., Dublin.

COUNCIL.

Dr. Brassington, Rathmines.	Dr. Ledwith, Kingstown.
Dr. Chaplin, Kildare.	Dr. Mapother, Dublin.
Dr. Chapman, Donnybrook.	Dr. Maunsell, Dublin.
Dr. Churchill, Dublin.	Dr. Minchin, Dublin.
Dr. Darley, Coolock.	Dr. Morgan, Dublin.
Dr. Davys, Swords.	Dr. Morrogh, Dublin.
Dr. Faussett, Clontarf.	Dr. Porter, Dublin.
Dr. Hasler, Killiney.	Dr. Seward, Templeogue.
Dr. Jacob, A. H., Dublin.	Dr. Smith, Donoughmore.
Dr. Tuffnell, Dublin.	Dr. Wharton, Dublin.
Dr. Labatt, Dublin.	

Together with the Presidents, Vice-Presidents, and Secretaries of the Provincial Associations.

SECRETARY AND TREASURER.

E. J. Quinan, Esq., M.D., 29 Lower Leeson Street.

COLLECTOR.

Mr. John Maclean, Royal College of Surgeons.

N.B.—The Council meets upon the Second Thursday in each Month at 4 o'clock.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JULY 13, 1870.

CONTENTS.

Original Communications.

ON THE PROSPECTS OF THE SEWAGE QUESTION.

By Henry Letheby, M.B., &c.,

Professor of Chemistry at the London Hospital Medical College, Medical Officer of Health to the City of London, &c.

(Continued from Page 3.)

The other means of dealing with sewage, so as to separate the suspended matters, and to remove a certain portion of those which are dissolved, is to submit it to chemical treatment. Already there are sufficient facts to enable us to review this part of the subject.

At Leicester, at Hertford, and formerly at Tottenham, the sewage was defecated with lime, the lime being used to the extent of from 5 to 20 grs. per gallon of sewage. The treatment is effected by adding the lime to the sewage, and then briskly agitating it; after which it flows into subsiding tanks, where the sedimentary matters deposit, and the clear supernatant water runs off by a weir placed a little below the surface. At Hertford the supernatant water is filtered before it is discharged into the outfall, and in summer time a little chloride of lime, amounting to about half a grain per gallon of sewage, is also employed, as it is found to deodorize the sewage, to check secondary putrefaction, and to prevent the growth of the sewer fungus in the outfall channel. In the year 1858, when I first examined this process at Leicester and Tottenham, for Messrs. Bidder, Hawksley, and Bazalgette, the referees appointed by the Metropolitan Board of Works to consider the question of the main drainage of the metropolis, I found that with 12 grs. of lime per gallon of sewage the whole, or nearly the whole, of the suspended matters were removed, and that the soluble organic matter fell from 13½ grs. per gallon to 10½ grs. When 20 grs. of lime were used, the soluble organic matter fell to about 9 grs. On the occasion of a more recent visit to Leicester, with Dr. Frankland and Dr. Odling, at the instance of the Thames Conservancy Board, we found that the soluble matters of the sewage were reduced from 63 grs. per gallon to 48 grs. —the organic matter falling from 15 grs. to 5 grs. At Hertford, where the original sewage is remarkably weak on account of subsoil water, I have ascertained from many experiments that the organic matter in solution is reduced from about 3 grs. per gallon to 1·6 gr. All these results accord well with laboratory experiments, and they show, as I stated in my original report to the referees alluded to, that, "judging from the experiments which I have made, and the observations of practice on a large scale, it is ascertained that about 12 grs. of lime to a gallon of sewage will effect the speedy separation of all the suspended matters, and also about one-fourth of the dissolved organic matter, leaving a clear liquor which has lost a great part of its offensive odour; and when the clear liquor is mixed with from five to seven times its bulk of water, and is exposed to the air, it is no longer offensive."

'At Leicester, where the lime process has been adopted, the river Soar, into which the sewage flows, has undergone a remarkable improvement. Before the works were established the river was most offensive, the fish were killed, the vegetation of the river was destroyed, and those who inhaled the effluvia from it were constantly ill. At the Belgrave mill, which is just below the point where the sewage enters the river, the foulness of the stream was such that in summer time the water of the mill-dam appeared to boil with putrefaction; the stench from it was intolerable, and so large was the quantity of sulphuretted hydrogen evolved, that the silver in the men's pockets turned black in a few hours. At that time the men were constantly affected with diarrhœa, they lost their strength, and their appetites always failed them; one man only out of thirty men in eighteen years had been able to stand it, and he it was who gave me an account of the matter. Now, however, and for the last three years since the lime process has been adopted, the river presents an entirely different appearance—aquatic plants have begun to flourish, the fish have ventured to return, the black mud has ceased to accumulate, and the mill-dam is no longer offensive. All along the stream the people speak of the change with satisfaction, and it would appear that the process fulfils

the requirement of the local Act, which demands that the water discharged from the local works shall not occasion a nuisance, or be injurious to the health of those who live or are employed on the banks of the stream."

Crude sulphate of alumina is another precipitating agent. It is practised at Stroud in Gloucestershire, and is known as Bird's process. The crude sulphate is made by adding about 20 lbs. of sulphuric acid to a hundredweight of powdered clay, and allowing it to stand for some time. This material is mixed with sewage in the proportion of one hundredweight to from 20,000 to 30,000 gallons of sewage, and the sedimentary matters are collected in a properly constructed tank. Sulphate of alumina is decomposed by the ammonia of the sewage, and the alumina flocculates and precipitates the suspended matters, leaving a clear supernatant liquid, from which a good deal of dissolved organic matter has been removed.

To ensure the precipitation of the alumina, Dr. Anderson, of Coventry, recommends the addition of lime. Crude sulphate is made by adding one part of sulphuric acid to two of clay, and then two parts of water. After standing for some time in a warm place the combination of the acid with the alumina is effected, and he uses about one pound of this material to every 100 gallons of sewage. The mixture is well agitated, and then a quarter of a pound of lime in a creamy condition is added. Again it is agitated, and the flocculent alumina, together with the suspended matters, rapidly falls. The sediment is collected in subsiding tanks, which are worked alternately, and the clear liquor is run off from it. As in the last case the suspended matters are entirely removed, with a considerable amount of the dissolved organic matter.

Chloride of iron, with lime, is also a powerful defæcator. It was formerly used at Northampton, and is still to some extent with lime—the lime being first added to the sewage in the proportion of about a bushel to 8,590 gallons of sewage, and the chloride of lime to the extent of about half a gallon. The chloride is made at the works, and contains about 9,500 grs. of the mixed chlorides of iron per gallon. In this case also the precipitation of the sewage is very complete. At present, however, the local authorities are using sulphate of iron and alumina instead of the chloride. The compound is made by mixing 3 cwts. of crude sulphuric acid with 2 tons of a ferruginous earth obtained in the neighbourhood. After standing for a few days the mixture is ready for use, and it is added to the sewage in the above proportion to a million gallons of sewage.

At Leamington, where there is an injunction against the discharge of unpurified sewage into the river Leam, the authorities have resorted to the use of the "A. B C." process of Mr. Sillar, which is worked by the Native Guano Company at its own cost. The sewage flows to the works by gravitation, and there it is mixed with the A. B. C. material (consisting of alum, clay, sulphate of magnesia, bone ashes, wood charcoal, and a little blood diffused through water). The material is added to the sewage in the proportion of 1 gallon to 200 gallons of sewage, and the whole of it well agitated. It then flows through subsiding tanks, where the precipitated matters subside, and the clear water flows off from a weir into an outfall channel with a filter. The tanks are worked continuously for about a week, when the precipitated matter is removed to a centrifugal machine, and drained to the consistence of putty. This is further dried by exposure to the air, and its ammonia is fixed by means of a little sulphuric acid, which also breaks up the organic matter. In this state it is riddled, and sold freely at a good profit for manure.

Samples of the Leamington sewage were taken for examination by the Royal Pollution Commissioners on the 11th of December last, and duplicates of them were furnished to me on the following day for analysis. I ascertained that the original sewage contained 66 grs. of solid matter in solution per gallon, of which 14·91 grs. were organic, while the effluent water before filtration contained 67 grs. of soluble matter per gallon, of which 11·21 grs. were organic; and the filtered water contained 61 grs. per gallon, of which 6·3 grs. were organic sewage, the suspended matters in the original sewage amounted to 3·16 grs. per gallon, while in the effluent sewage before filtration it was 7·61 grs., and in the filtered sewage, 3·12 grs. The Royal Commissioners, in describing their results, do not mention the filtered water, but in other respects their results accord pretty closely to mine.

Lastly, there is a process of the late Mr. Blyth, which is very deserving of attention. Mr. Blyth was the chemist of the old Board of Health, and he had great opportunities of studying this matter. His plan is first to add a soluble phosphate of lime and sulphate of magnesia to the sewage. After agitation, the mixture is neutralized by means of a little slaked lime, and the precipitated magnesian phosphate carries down with it the whole of the sedimentary matter, and a portion of the soluble ammonia. A million tons of sewage require about 1 ton 3 cwts. of Blyth's compound and 4 cwts. of lime to neutralize, and the resulting dry precipitate weighs about 3 tons 8 cwts., and contains about 58 per cent. of organic matter (yielding 4·5 ammonia), and 8·66 of phosphate of lime.

All these processes are manifestly capable of separating from sewage all the sedimentary matter, and also of removing considerable portions of dissolved organic matter; but to be effective there should not only be good agitation of the sewage after the addition of the precipitating agent, but there should also be sufficient tank-room for the deposition of the sewage for not less than four hours; and there should also be a means of filtering the defæcated sewage before it is discharged into the river or other watercourse.

After witnessing the action of lime as a defæcator, at Leicester and Hertford, Dr. Odling, Dr. Frankland, and myself reported to the Thames Conservancy that the following were the conditions necessary to its success:—

1. The proportion of lime should not be less than one ton to a million gallons of sewage, and that there should also be used 56 lbs. of choride of lime.

2. That the mixture of the sewage with the lime and chloride of lime should be very complete, and that the mixture should be agitated, so as to aggregate the suspended matters, and thus assist in the subsequent precipitation of suspended matter.

3. That the sewage when thus treated with lime should flow along two subsiding tanks in series; the first should be capable of holding at least one hour's flow, and the second of holding not less than four hours' flow. The tanks should be four feet in depth, and the overflow of the defæcated sewage should be by a weir only half an inch below the surface.

4. That there should be a double set of tanks for alternate working.

5. That the defæcated water should flow through a shallow open conduit of not less than a quarter of a mile in length before being received into a stream of freely running water, of not less than eight or ten times the volume of the defæcated sewage.

In this way, or by any similar process of defæcation, the sewage of towns may be easily and safely dealt with, so as, on the one hand, to ensure its purification before it is discharged into a running stream, and, on the other, to avoid the many dangers of irrigation.

I refrain from entering on the subject of the pecuniary aspects of this question, for they are nowhere encouraging notwithstanding that the most sanguine opinions have been expressed of the commercial and agricultural value of sewage. Irrigation, like precipitation, except in the case of the Leamington process, is everywhere unprofitable, when it is conducted in such a manner as to prevent the pollution of the neighbouring streams; and I warn you against the glowing accounts which are given of the profitable returns of certain sewage farms, for, if the cost of outlay is considered and balanced with the average returns, it will always be found to be a losing affair. The most sanguine enthusiasts of the system have generally abandoned it after a trial of its merits. Little or nothing, in

fact, can be profitably grown upon the sodden land but Italian rye-grass, and when this is abundant and must be cut, or it will rot upon the ground, it must be sold for what it will fetch. In the summer of 1866, when I was in Edinburgh, I saw acres upon acres of rye-grass rotting upon the far-famed Craigintinny meadows; and when I asked the cause of it I was told by the manager that the cattle plague had ruined his customers, and there was nobody to buy it and nothing to eat it, and there it must rot. Besides which there are considerable doubts as to the value of it as fodder. Mr. Campbell, of Rugby, who ought to be a high authority on the subject, for it was a pet of his, honestly declares that his experience does not show a profit in the use of such fodder, and he gives a good example of it. Twelve Ayrshire cows, which calved about the same time, in May, 1869, yielded, at the end of twelve weeks, an average quantity of 9½ quarts of milk per day per cow. Their daily consumption of rye-grass was 1½ cwt per cow. If they had been milked for nine months the average daily yield of milk would have been only from 5 to 6 quarts per cow. The cost of the grass at 10s. a ton, was 9d. per cow per day, and the other expenses of the dairy raised it to 1s. 3½d. per cow. The milk, at 8d. per gallon, was worth only 1s. 7d.; and when the cost of sending it to market was taken into account, together with the wear and tear of utensils, he vainly asked for profit.

But all this is, as I have said, no part of my present inquiry, for my business is solely with the sanitary part of the question; and I would ask you whether, having regard for the public health, there are not serious dangers in the rash recommendations of the Royal Pollution Commissioners to scatter the sewage of every city and town in the kingdom broadcast upon the land? Medical authorities of some sanitary experience are alone able to engage in such important pathological considerations, and it must strike every one who is interested in the subject that a Royal Commission without any pretence of medical knowledge is singularly incompetent to deal with such a matter. What importance the public or Parliament may attach to their recommendations I am unable to learn, except from former experience, but it is clearly our duty as public health officers to examine the subject from a medical point of view, and I doubt not what will be the conclusion.

ON THE INCUBATION PERIOD OF TRUE SYPHILIS.

By Henry MacCormac, M.D., Belfast.

A very safe rule to adopt with regard to the statements of venereal patients, is to maintain a prudent scepticism as to everything they may allege concerning their ailments. Their well-known want of veracity and the inherent difficulties of the subject involve in much obscurity the investigation of venereal diseases. Every well-authenticated fact which can be deprived of the many elements of doubt which enshroud these cases, becomes of importance; and I therefore venture to place on record two cases confirmatory of a certain doctrinal point—the period of incubation of true syphilis. By this I mean the interval of time which elapses between the impure connection, the source of the disease, and the first manifestation of a local lesion. The doctrine of a period of incubation in syphilis was first propounded by Alphonse Cazenave, in 1843, and is, as yet, by no means generally admitted by medical men, although the opinion is now adopted by most eminent syphilographers. In the two cases, whose particulars I wish to relate, I believe I may rely with perfect certainty that a truthful tale has been told by each individual, and that the facts are precisely as they have been related to me.

Case I.—A policeman, æt. 21, previously to this illness in the enjoyment of perfect health, was admitted to hospital under my care suffering from syphilitic roseola, and two well-marked indurations in the furrow at the base of the glans penis. The patient states that between the 1st and 15th October, 1869, he had connection several times with the same woman, and only with her. Before that period, for at least one month, he had had venereal intercourse with no one, and since the 15th October until I saw him he had not had connection at all.

Until the 1st December—rather more than six weeks after the last connection—he did not observe anything wrong. He stated, however, that he felt cold rife, and that he did not consider himself to be in such good health as usual. At this date he first noticed what he termed "two little broken places," one on each side of the base of the glans penis (fissures, in fact). These gradually increased in size, and on applying to a quack doctor—a week after their first appearance—induration was remarked around each ulcer. This induration gradually increased, and the two masses fused together across the dorsum of the glans. The patient states they were as large as small beans.

On January 11th, or six weeks after the first appearance of the sores, he noticed a series of red spots over the whole of the body. After four days these began to fade, leaving stains behind. He had also severe lumbago and sore throat. The cervical and inguinal glands were hard and enlarged, and he had rheumatic and osteocopic pains. The sores furnished little or no discharge, gave the patient no pain, and healed in a month after their first appearance. By the 1st of January they had soundly healed. On the present day—February 28th—the characteristic induration, although diminished in size, persists in a very distinct manner. The treatment employed was the use of the Turkish bath, and five grains of iodide of potassium thrice daily. No further manifestations of syphilis have shown themselves. I endeavoured to trace the source of this man's infection, and succeeded in discovering her. She had only come to Belfast within a limited period. I discovered that she had been a patient in the union workhouse, and Mr. Johnston, the surgeon to the infirmary, remembers the woman, and that he put her on mercurial treatment. She gave birth to a dead child prematurely while in the hospital, and left as soon as she was convalescent. It is clear, then, she was suffering under syphilis before going to the workhouse. I sent my patient after her to persuade her to submit to an examination to ascertain her present state, but without success. In hospital at present there is a patient under the care of my colleague, Dr. Murney, who says he was infected by the same woman, and I am told of two others in the same plight. I think this surely is a case for the application of a Contagious Diseases Act.

Case II. is that of a young medical man, a friend of my own. He was especially healthy, and, at the time of the suspicious connection, twenty years of age.

On June 18th, 1868, he had intercourse with a woman, whom he afterwards discovered had been under treatment in a Dublin hospital, with secondary syphilitic eruption, a short time previous to his meeting her. For a year before this he had been preparing for his examinations, and had not indulged in any illicit intercourse for several months antecedent to June 18th, a date he is able to fix precisely as being the day on which he passed. Subsequent to this he went with his friends to the sea-side, where he shot and fished, and otherwise amused himself, but had no venereal intercourse since that which he had with this woman on the 18th. He experienced nothing whatever for four weeks. When bathing on the morning of July 15th he noticed that the inner surface of the prepuce was excoriated, and on each side he afterwards noticed a small fissure, which subsequently developed into a large superficial sore. He imagined that the excoriation was produced by the sea-water, and applied strong astringents, which only further irritated the part. These sores appeared in the third week in July, or, as nearly as possible, twenty-eight days after the connection. A week after their first appearance the sores began to indurate (he was accustomed to bathe every morning and is sure he noticed the first indication), and the glands in

the groin and neck became indurated also. There was very little pain or irritation in the ulcers. On the 16th August, or four weeks after the appearance of the sores, a well-marked eruption of syphilitic roseola appeared, which lasted only two days, and at this date the sores had healed. Other syphilitic symptoms subsequently made their appearance, but all of a very mild type. He consulted me from time to time and I counselled mild measures; but he took the treatment very much into his own hands. I recommended to him the bichloride of mercury in doses of 1-16 grain for a limited time. He, however, soon changed to the protiodide of mercury, which he took in three-grain doses, and altogether continued to mercurialise himself without salivation for a period of seven months, one month longer than Ricord's classical period. He could not, however, take iodide of potassium, as it produced intense coryzæ, or he might have dosed himself with it three or four months.

Now, in these two cases, the date of infection, and the date of what Lancereaux calls the period of local eruption, are pretty clearly defined. In the first case for forty-two days after the last intercourse there was nothing to indicate that syphilitic inoculation had taken place; in the second case the period was somewhat shorter, being twenty-eight days. In both cases the source of contagion was presumably a secondary syphilitic lesion. This source of contamination was until lately most persistently denied, but it has been established upon an experimental basis beyond question of doubt. It would appear, from the inoculations that have been practised upon healthy persons, that the period of incubation is longer in accordance as the source of infection is further removed from the initial stage of chancre. In Rollet's case, where the matter of an infecting chancre was inoculated on a patient having two soft sores, the latent period reached eighteen days only. When the source of contamination was taken from a secondary healthy lesion, the period of incubation was extended to thirty-five days, or even much longer. According to Sigmund, however, this incubation period does not exceed the fifth week in the great majority of cases, and very frequently it does not pass the fourth, which may be taken as the average.

Diday asserts—and these two cases would tend to strengthen his view—that syphilis communicated from a secondary lesion is milder than that arising from a chancre, and it would then follow that the longer the period of the incubation the milder the subsequent attack of syphilis would be.

Dr. M'Donnell in the Medical Press, Feb. 9, records five most interesting and crucial cases, from which sources of error have been carefully eliminated, and in these the period of latency is about the average recorded by other observers – namely, 28 days; the periods in each case are, 27, 28, 33, 41, and 34 days, respectively. Dr. M'Donnell justly remarks how seldom cases occur which will bear the test of scientific accuracy. I believe these two cases are worthy of being placed along-side of his, and that they will help to establish on a clinical basis what has almost been proved experimentally—the incubation period of syphilis.

The conclusions to be drawn from the observations of this period of latency are very important from a practical point of view. They show that true chancre is not the point of origin of syphilis, but merely the initial symptom of the constitutional infection, and that all attempts to eradicate the disease by excision of the chancre, or its cauterisation, at however early a period these may be performed, are simply useless, or worse than useless. True syphilis would thus seem to possess its period of incubation, and its period of invasion, antecedent to the outbreak of the general manifestations of the disease, but of a more chronic type, just as other so-called zymotic diseases. In fact, the indurated or infecting chancre, as it has been called, should, I think, more properly, perhaps, be called the first of the secondary symptoms. It would not be within the scope of these few remarks to point out what I believe to be the well-marked and distinguishing characteristics of infecting and non-infecting chancres. The initial symptom of syphilis, I believe, varies, and is by no means constantly to be met with under the form of a Hunterian indurated chancre; but soft or non-infecting chancre vareis in its distinguishing characteristics very little in different instances, and may, in most cases, be readily recognised. I am by no means disposed to deny that there are cases of difficulty which cannot be ranged under either category, but for the great majority of cases the duality of venereal sores is a doctrine to which I lend my full adhesion.

In all cases of doubt it is better to wait a little for the development of the disease. The soft or non-infecting chancres usually present characteristic and constant appearances. The initial symptom of syphilis is variable just as the later manifestations may vary, but not in the same degree.

In the case of true syphilis some delay cannot prove injurious. The administration of mercury may modify, but it cannot prevent, the manifestations of syphilis. Besides, another great desideratum accrues from a little delay—the activity of the treatment can be guaged by the violence of the disease. Ricord's treatment of six months iodide of mercury and then three months iodide of potassium, is quite unnecessary, and therefore injurious in such cases as the two I have recorded. Where syphilis assumes so mild a type very little treatment other than hygienic measures is required, and of these one of the best is the Turkish bath, and to this a short course of iodide of potassium may be added.

In both these cases the induration supervened upon the sore. There was not an induration first and then an ulcer.

Since writing the foregoing remarks I had an opportunity of examining the *origo mali* in the shape of the woman who infected the policeman. She had been re-admitted to the union hospital, where I saw her on Friday, March 5th, covered with condylomata, both anal and vulvar—some secreting, some healed. I ascertained from her that the dates assigned by the policeman for his intercourse with her had been correctly given, and that she had been under treatment in the hospital for manifestations of secondary syphilis at the end of October and beginning of November. My surmises were then correct as to the secondary origin of the contagion, in the first as well as the second instance I have quoted.

WERE THE PRIESTS OF ANCIENT EGYPT THE FIRST PHYSICIANS?

By M. Donovan, M.R.I.A.

Some wags, more witty than wise, have said that physicians are the offspring of sin; for, say they, one of the immediate consequences of the disobedience of the two first inhabitants of the world was the denunciation of disease and death on their posterity. But they forget that curative herbs were created before man sinned, from which we may infer that life was not intended to flow in an uninterrupted stream of health. Thus physic can be traced, not to the fall of man, but to his state of innocence, and thus punishment was tempered with mercy.

It is reasonable to suppose that the means of alleviating corporeal suffering was one of the earliest of human pursuits. Many an absurd story has been related about the origin and first notions of remedies. Galen does not think it beneath him to report that the medical art was said to have originated in the recovery of sight by a goat, which was accidentally wounded in the affected eye by a pointed bulrush. He also quotes an absurd story related by Ælian to the effect that enemata are imitations from the bird Ibis, of Egypt, which, filling the skin of her long neck, as if it were a bladder, with the water of the Nile, introduces it into her body by means of her bill.

The relief of the sick by artificial means must have

originated in casual observation, for nothing can be less obvious to the primitive mind than the possibility of alleviating a morbid condition of the body by the introduction of substances which are not articles of food. That relief from pain is procurable from external application is a fact much more easily discoverable, for here both reasoning and accident might contribute to disclose the important truth. A person scorched by fire would naturally try the remedial efficacy of cold, and the relief which he would obtain from it might induce him to try the effects of external refrigerants in local inflammations arising from other causes, and hence would originate the idea of topical applications. But no hint of the use and powers of internal medicines could be derived from such sources, or from reasoning, however easily it might from accidental causes of very probable occurrence. The results arising from the eating of agreeable sour or bitter herbs, or trials of the fitness of different plants and roots as articles of food, might disclose influences over the animal economy, that would soon arrest attention, and suggest a search for other medicinal agents, possessing the invaluable property of controlling the aberrations of health. In such a view, there is, after all, little of conjecture, for the probability is so high as to produce conviction that in some such way must the art of restoring health have originated.

It would soon happen that persons whose inclination led them to inquire into the properties of simples would progressively collect information which people generally did not possess, and at length would be so far distinguished for this useful attainment, that their opinions would be sought and deferred to, however crude their conceptions and simple their means. In such beginnings the art of medicine very probably originated, and, if so, it is in vain to search for its invention in any particular country. It was invented everywhere, if the expression be allowed, as soon as a community existed, and, accordingly, the ancient authorities place a discoverer in almost every country of the Eastern hemisphere. It was of course cultivated in some places more than others. Conringius says—"*Apud Ægyptios tamen pene primo omnium illam magis solitæ cultam, extra dubium videtur esse.*"—(*Univ. Art. Med.*, 1687).

Ancient Egypt has been always considered as the earliest nursery of science and literature. The priests were the appointed guardians of knowledge as well as the superintendents of the education of youth; and, from the little that can be collected on the subject, it appears that the priests did not possess much of the learning at that period, and pretended to more than they knew. Amongst the records kept by the priests, history alludes to some which related to a kind of medical code, much mystified and disfigured by superstition. There is a passage in Isocrates on which the learned Dr. James founds his opinion that the priests of ancient Egypt were the first practitioners in medicine. The passage quoted by Dr. James is as follows:—"The priests, who enjoy many advantages, have for the relief of the afflicted invented a system of physic which does not prescribe dangerous medicines, but such as may be used as safely as their daily food; hence it is that the Egyptians are a people of sound and robust constitution, and live to a great age."

This does not, however, in my mind substantiate the fact which it is brought forward to support, viz., that the priests of Egypt were the first practitioners of medicine. It seems to prove two positions of a contrary tendency; first, that the priests invented a *mild* practice of physic, and, secondly, that there was some *other* practice, in which powerful and dangerous medicines were used. Why would the invention of a gentle mode of treatment be spoken of in terms of commendation, unless there had been in use a more rough and dangerous method, which was not of their invention, and with which a comparison was made? From this quotation the inference might also be drawn that the practice of the priests was a simple preliminary treatment, employed only in mild forms of disease; while the exhibition of more active remedies was reserved for a different class of practitioners. To administer relief of the former kind would be but an act of humanity, and such as would be expected from their sacred calling, especially as it appears they were liberally provided for by the State.

Diodorus Siculus says that "Out of the records in the sacred registers from things done in former times, they (the priests) read profitable lectures for present use and practice" (lib. i.). To understand this, it is to be remembered that the inscribing of knowledge on columns was a device anciently practised in certain parts of the world. Josephus says the sons of Seth inscribed two columns, one of brick and the other of stone, with their astronomical discoveries. It appears from various testimonies, that in the age of Hermes, and long after, it was the custom in Egypt to inscribe their literature on columns, instead of writing it on the papyrus (Conringius). Hermes, otherwise Mercury, otherwise Thoth, inscribed all his knowledge on columns. These writings were in the care of the priests; they were no doubt the same that they employed as a source of information for their lectures, for we have it on the authority of Eusebius, that they were preserved in the most secret places of the Egyptian temples, and, according to Clemens of Alexandria, some of them were on medicine.

Thus the passage of Diodorus, above quoted, shows that in his time the duty of the priests was to instruct the people in the knowledge contained in the sacred registers, some of which were on the subject of medicine, to the use of which the people were very much addicted. The medical knowledge which their profession thus obliged them to possess, was that which they employed in charitable dispensations. Its quality may be judged from the circumstance of its immutability and antiquity. But if this is to be received as evidence at all of the interference of the priests in medicine, the following has an equal claim. In another place Diodorus says—"The physicians make use of receipts prescribed by law, constructed by the ancient physicians; if they cannot cure the patient with them, they are never blamed, but if they use other medicines, they suffer death, inasmuch as the law-maker appointed such receipts for cure as were approved by the most learned doctors, such as by long experience had been found effectual." Here, then, both ancient and modern physicians are expressly mentioned, but not a word is said of their being priests, nor in any other part of the histories of Diodorus, and there can be little doubt that, had the two characters ever been combined, he would not have failed to mention a circumstance so unusual in the customs of mankind as the execution of their priests, protected as they have always been, even in the most barbarous ages. Strabo details the duties of the priests (lib. xvii.), and speaks of themselves elsewhere, but does not allude to their exercising the art of medicine. Herodotus speaks distinctly of physicians, and the regulation of their profession: He says—"The Egyptians, in the pursuit of health, take a variety of strong medicines during three successive days in every month, believing that all diseases arise from repletion. Next the Libyans, they are the most healthy; they eat certain fish and birds raw. The medical art is thus distributed by the Egyptians:—Every disease has a physician to itself, who cures nothing else; all places are filled, therefore, with medical practitioners. There are doctors of the eyes, and doctors of the head, and doctors of the teeth, and of the stomach, and of all inward complaints" (Taylor's "Herodotus" ii., 136). But not a word is said of the supposed twofold ministry of the priests.

Let us now contrast this body of negative evidence with a passage in Clemens of Alexandria, on which Dr. James partly founds his opinion. He says—"There were forty-two books of Hermes of great account, which contain all the philosophy of the Egyptians; the six last are in a more particular manner studied by the παστοφοροι, pall or cloak-bearers (a particular order of priests), as relating to medicine. These treat of the constitution of the body, diseases, instruments,

the eyes, and lastly the disorders peculiar to women." Dr. James translates παστοφοροι pall or cloak-bearers "a particular order of *priests*." Why they should be designated priests does not appear: the etymology παστον φερω does not convey that signification: "παστοφορος ædituus" a church-warden (*Hederici Lex*): "one who carries about a case containing the image of a god" (Donnigan): παστον a chamber or house of a priest, and φερω to carry (Donnigan): these are the only traces of the priesthood I can find in the word, but they do not indicate that the παστοφοροι were priests, much less that they were physicians. The passage in Clemens merely declares that the subjects mentioned constituted in a more especial manner a part of the education of the παστοφοροι, whatever their office may have been; but no sufficient reason appears to induce a belief that they were priests; and still less that they professionally practised the medical art as supposed by Dr. James.

On the whole, it does not distinctly appear, by any historical record, that medicine was practised by the priests of ancient Egypt; and several historians who treat of the state of physic in these ages, by their silence on the subject of its being the province of the priest, disprove the existence of such a custom. We only find that these sacred characters made the healing art a part of their studies; they were obliged to do so, because we learn from Celsus and others, that medicine, in its early ages, was a branch of philosophy; and from Pliny that it remained so down to the days of Hippocrates who first separated it. Now, the Egyptian priests being the conservators and diffusers of philosophy, and well paid for their labours by being in possession of one-third of the land, were bound to understand and teach physic as a part of a general education. It should be recollected that Clemens flourished in the second century of the Christian era; that Diodorus and Strabo were his predecessors by half a century; and that Herodotus lived no less than six centuries and a-half before him. Whatever advantages the first had with regard to knowledge of ancient usages, so had the others in a greater degree. If Clemens alluded to his own times, his evidence does not apply; and he seems to do so. If it be affirmed that the usage is of much more ancient date, then the statement is unsupported by historical evidence, and is even opposed by the silence of historians professing to write on the very subject.

It is probable that in ancient Egypt medicine was thus regulated: the physicians procured transcripts from the priests of the prescriptions authorised by law, and employed them as they were bound to do under penalty, the priests occasionally using the same formulæ in cases perhaps of charitable dispensation. No doubt this kind of legal medicine was common amongst the people; for they were all addicted to inordinate care of health, and to remedies; so much so that some ancient authors have sarcastically said that the Egyptians were all physicians.

The professed physicians were only bound to treat diseases according to law for the first four days; previously to the expiration of that period, the administration of a purgative would be punished with death: but after it, they might use their own judgment. This extraordinary fact is testified by Diodorus and Aristotle, the latter of whom thus epitomises it:—"It is stupid in any art to govern according to written rules. So in Egypt, it is lawful for physicians to adopt a different mode of cure after the fourth day; but if they adopted it prior to this, it was at their own peril" (Taylor's "Aristotle" p. 342). The treatment of the incipient disease we know often determines the sequel: the physician had to contend with legal disabilities, and little character could be derived from practice constrained by law: but they were rendered independent of character; for Diodorus says that they were allowed a salary from the public income. It seems pretty certain, therefore, that medicine never made much advance in a country where improvements were in a manner interdicted by law, and punished with death.

It may be here observed that the learned Conringius does not even suggest the idea of the union of medicine with the office of the Egyptian priests, notwithstanding his extensive researches on all subjects connected with medical literature, although he thinks the art was first extensively cultivated in Egypt. It is quite a different thing, however, to admit with Pliny the value of the oracular dispensation of cures vouchsafed by the gods which we know were delivered by the priests, and which, by acting on the imagination, often effected surprising recoveries, as indeed the supposed intervention of supernatural agency has done in our own days.

Throughout those parts of the Old Testament in which Egypt is mentioned, there occurs nothing that could lead to the belief that the medical care of the sick was entrusted to the priests. But there is a passage which may be understood in such a way as to render it probable that seventeen centuries before the birth of Christ there were persons practising medicine as an independent art; and who are consequently the first physicians that appear on the records of history. The subject is curious, and it may be interesting to inquire what sort of persons these practitioners were. In the 50th chapter of Genesis, verse 2, we read, "And Joseph commanded his servants the physicians to embalm his father, and the physicians embalmed Israel." The Hebrew root of the word "physicians" means to heal (Parkhurst), and, as a plural masculine noun would mean *healers*, hence some sort of medical practitioner would be meant. It is true the word also means giants, but that cannot be its acceptation here. But it appears that these persons also embalmed Jacob, a duty which required much experience, and which was, of course, a part of their profession. Now we know that many medicinal substances were used in the process of embalming; and these it was the duty of the physicians to understand how to mix, and to employ. But if their profession were to heal diseases and to preserve bodies, and if the latter duty required that they should mix and employ medicines, it is to be supposed that they would render the same services in the healing department; for why should they provide and use medicines for one branch of their profession, and not use them for the other, which was by far the more useful? If this view be correct, Joseph's physicians were practitioners who, besides prescribing for diseases, provided medicines and fitted them for exhibition—a very natural association of duties; and, when occasion required, opened, disembowelled and preserved dead bodies. They were, therefore, in some respects, the same as the general practitioners of the present day, and this would be evidence not only that the real practice of medicine, of whatever kind it may have been, was not in the hands of the priests, but that general practitioners have existed as a profession for 3,500 years.

It has been sometimes admitted that, amongst the Jews of antiquity, medicine was practised by the priests, because in some parts of the Scriptures they were enjoined to perform certain services for the sick. They had it in express command from God to watch over "the plague of leprosy;" and, from the same Divine source, they were taught the symptoms by which that loathsome disease was to be distinguished. In the 13th chapter of Leviticus, we find ample details on this subject: and this fact is in conformity with the opinion that the priests had never made disease their study, since it was found necessary so minutely to describe the symptoms of leprosy, in those days so common a calamity.

In taking leave of this part of the subject, one observation only need be made. It is certainly true that in ages near our own times, the clergy and persons under religious vows, did, in various countries, minister to the corporeal as well as the spiritual wants of the people. Fosbrooke, in his work on "British Monachism," gives facts of this kind, but very much disparages the motives. Speaking of England, he says—"Medicine was mostly professed by clerks, because they alone were capable of reading the Latin works on the art of healing. From the nature of some of their prescriptions, there appears an evident intention of confining this art, as well as others, to the dogmas

of the existing religion ; for which reason relics were introduced into the materia medica. The hairs of a saint's beard, dipped in holy water, were taken inwardly (he quotes M. Paris). A ring taken from the body of St. Remigius, and dipped in water, is said to have produced a drink very good in fevers, and different diseases. Relics were also hawked about, and money given to the bearers for access of the sick to them."

A little intermixture of worldly policy may be found also in the clerical medicine of other countries. Amongst the negroes of the Gold Coast, the priests have been always the physicians. When the priest was consulted, he first took care that a proper offering was made, as a sheep or a hog, according to the circumstances of the patient ; without which a recovery could not be effected. A new offering must be made if the disease increased : and if it proved obstinate, many other of the sable physicians would be called in, each of whom would piously suggest that the offering should be renewed.

In China, to this day, the priests as well as the physicians practise medicine, such as the practice is. In some parts of Hindoostan, the priests not only had the care of the sick, but fed and clothed them. Sir John Chardin, in his travels in Mingrelia, informs us that the duties of physician and surgeon to all Mingrelia were discharged by a Theatine friar. But we have better instances of clerical medicine than any of these, A learned dispensatory was written by a priest of Tournay named Joannes de Sancto Amando. Basil Valentine, the author of "Currus Triumphalis Antimonia," which made us acquainted with the virtues of antimonials in many diseases, was a Benedictine monk, and as he himself says, a scarcely ever failing physician. Kermes mineral, which once enjoyed a high reputation as a medicine, was brought into notice chiefly by a Carthusian friar, and hence was called Carthusian powder ; it was made generally known by an order of the King of France in 1720. Peruvian bark was originally called Jesuits' powder, because first introduced by that order of the priesthood. Many other instances might be adduced ; but enough has been said to show that although the sacred profession did not give origin to the art of medicine, it contributed to its improvement, and often applied it to the alleviation of human suffering.

Amongst some of the nations of antiquity there was neither an acknowledged code of medicine, nor physicians; nor did the priests interfere in medical affairs. Whatever knowledge of remedies existed was diffused amongst the population ; and this, when necessity required, was called into action in a singular manner. We can easily conceive how crude, incongruous, and absurd must have been the chaotic mass of notions which could be suddenly collected from street passengers, and which was nevertheless to guide, or rather bewilder, those who had the charge of the sick. Such a state of things existed in the days of Herodotus, four centuries and a half before Christ, in the splendid City of Babylon, which, although it boasted one hundred brazen gates, could not, on an emergency, produce one physician. That traveller and historian says—"The Babylonians have an excellent practice ; they have no physicians by profession ; but those who are diseased, being brought into the public places, whoever passes the sick man advises with him concerning his disorder ; and if he has himself at any time laboured under the same complaint, or knows one affected in the same way, recommends the remedies by which he himself, or others, were cured. To pass a sick person in silence, without inquiring his complaint, is deemed a breach of duty." (Taylor's "Herodotus"). Strange that so dangerous a practice should have been considered excellent.

The same usage obtained at Rome. It is affirmed by Pliny that for six centuries after the foundation of the City, there were no physicians in that capital. During that period, the custom was to carry the sick to the Forum, in order that the opinion of passengers might be taken on their cases. It is probable that Pliny meant Roman physicians when he specified six centuries ; for in another place he states that the Physician Archagathus settled at Rome, U.C. 535. And Dionysius, of Halicarnassus, says that in the year 301 after the foundation of the City, so dreadful a pestilence raged in Rome that there were not physicians enough there to attend the sick. It must be admitted, however, that there were no Roman physicians ; for all who practised in Rome were Greeks. The Romans made no progress in medicine, and little in any of the sciences.

The Greeks imitated the Egyptians in everything; so much so that a resemblance is observable between many of the institutions, customs, and opinions of the contemporaneous people of the two countries. The Greeks piously stole occasionally an Egyptian deity, and one by one borrowed the whole Egyptian mythology, and converted it to their own purposes, sometimes palpably, and sometimes under names which effectually screened the theft. In like manner, they borrowed their medicines and medical opinions, and adopted something like their mode of collecting medical knowledge, and performing cures. The Egyptians had their Thoth or Hermes ; everything that related to him was accounted sacred ; he himself was worshipped as a divinity ; and on him was bestowed the superlative epithet, "Trismegistus," or *thrice renowned*. From this deity their notions of medicine were derived. The Greeks attributed a descent just as lofty to their art of medicine. To their Esculapius they gave the glory of its invention, and in gratitude for his favours they deified him. No less than sixty-three temples were dedicated to him in Greece and her colonies. His wonderful cures were recorded, not on pillars, but on tables of marble ; and long after his death he considerately communicated with his votaries concerning their health. It was the custom to bring all sick persons to the temple of Esculapius, where the priests and priestesses, who were the descendants of the god, propitiated his favour for the patient. Various ceremonies and mystical solemnities were practised on the sick, the influence of which acting on their disordered imagination seldom failed to produce visions or dreams in which the promised disclosure of the mode of cure was made, or fancied to be made, and which disclosures the priests assured them were vouchsafed through the direct intervention of the deity Esculapius himself. The patients, when recovered, left behind them a record of their cure, and all discoveries thus ascertained were engraved on tables of marble, and deposited in the temple. Such implicit reliance was reposed in the records of this temple, that Galen declares his patients would more willingly have abided by them, or by their dreams, than by his prescriptions. Fortunately, however, for the purses of the regular practitioners of antiquity, the temple with all its records and nostrums was consumed by fire ; and thus an end was put to the very profitable trade which was therein privately carried on by the priests.

This Esculapius, a Phœnician by birth, deserves some notice as one of the fathers of the healing art ; for, notwithstanding the ridiculous accounts of his life and parentage fabricated by the Greeks, there can be little doubt that a person of this name did once exist, although of much more humble origin and less extravagant pretensions. It is matter of history that he was surgeon to the expedition of the Argonauts ; and that he was instructed in the knowledge of simples by an eminently accomplished person whose name was Chiron, and whose life has been so mixed up with fables, that we know nothing of him more than that the constellation Sagittarius commemorates his skill.

Esculapius seems to have flourished about 1263 years before Christ. The following account of him given by Diodorus Siculus (Lib. iv., cap. 4.) probably contains some obscure truths amidst the disguise of fiction and absurdity in which it is dressed. Esculapius, the son of Apollo and Coronis, was a person of acute intellect. Earnestly devoted to the study of medicine, he discovered many valuable remedies, and at length performed such wonderful cures of persons whose cases appeared hopeless, that he was re-

ported to have raised numbers from the dead. Pluto, on learning this, complained to Jupiter that, in consequence of the recoveries effected by Esculapius, the periodical number of deaths decreased, and that the empire of his infernal majesty was seriously threatened. Jupiter was so incensed that he hurled a thunderbolt at Esculapius, and put him out of condition to recover any more dead men.

THERAPEUTICAL MEMORANDA.

STRYCHNIA IN FATTY DEGENERATION OF THE HEART.

By J. Waring-Curran, L.K. & Q.C.P.I., L.R.C.S.I., &c.

During the summer months cases of heart disease appear more frequently and impart the impression that affections of this important organ, by their greater prevalence and the urgency of their symptoms at particular times, are influenced or controlled by the state of the atmosphere in a great measure. In the district in which I reside patients who laboured under fatty degeneration seemed to suffer in a very marked degree during the months of July and August of last year. The majority of those patients whose malady I successfully battled against by a treatment to be presently explained, passed through the winter remarkably well, and did not evince any return of the distressing symptoms so characteristic of this form of heart disease until the end of June, Wednesday the twenty-second being one of the hottest days since the hot period of last July. In treating cases of fatty heart accompanied by all the pathognomic symptoms of the disease, I have hitherto experienced much uncertainty, and, in many instances, vexatious disappointment. My attention was first accidentally directed to the great value of strychnia as a therapeutic agent in this malady by my prescribing it for a lady who suffered from a non-inflammatory affection of the spinal cord, and who, at the same time, possessed a fatty heart. Under the action of a mixture whose chief components were liquor strychnia and iodide of ammonium—a drug I have elsewhere shown to be more powerful in its effect, and more strikingly efficacious than the iodide of potassium—I was struck with the effect produced upon the heart, and the rapid manner in which the organ appeared to recover itself after a couple of weeks' treatment. I was strongly tempted to push my experiments further, and during the hot months of last summer I had ample opportunity of so doing, and of thoroughly satisfying myself that the strychnia produced a more marked and more beneficial effect than any other drug hitherto prescribed by me. Under its influence I noticed patients rally and obtain quiet sleep, who dreaded lying on the back, and I observed severe forms of dyspnœa pass off, and sharp attacks of angina subside from its use. The preparation I invariably used, and continue to employ, was the liquor strychnia. I commenced with four grain doses equivalent to the one-thirtieth of a grain, steadily increasing it until I gave what was equal to one-tenth of a grain, together with two grain doses of the iodide of ammonium, a small quantity of spirits of chloroform and camphor julep as a vehicle. In some cases I was forced to forego the administration of the drug (owing to the supervention of muscular twitchings, but, very curious to mark, the twitchings commenced about the precardial region, and in one instance confined themselves to the left arm), and substitute the citrate of iron and ammonia for a few days instead. I also recommend the iodide of ammonium to be freely rubbed in over the heart in the form of cerate. Should there be fainting attacks I advise small quantities of brandy or sal volatile, but I have ever remarked, once the powerfully stimulating effects upon the muscular system of the strychnine manifests itself, that syncope and cardiac distress pass off. Some authors tell us that strychnine produces paralysis of the heart: an over dose of the drug may have such an effect; but my experience is, that, by its operation on the whole system through the medium of the spinal motor nerves, it produces a powerful tonic effect in certain debilitated conditions of the system, and that in no disease is this more readily appreciable than in fatty degeneration of the heart, wherein it acts very powerfully in giving tone to, and increasing in a marked manner, the muscular contractions of this organ. My object in combining with the strychnia the iodide of ammonium was that it might act as an alterative and absorbent.

Literature.

LECTURES ON CLINICAL MEDICINE.*

We hail the appearance of this volume with pleasure. Like its predecessors, it is full of valuable matter; and by a physician who, we believe, had no superior, if indeed he had an equal. Since we last spoke of him, this great physician has passed away, leaving the Profession, however, many mementoes of his unrivalled powers of observation and reasonings. As he thought highly of our Graves, whose works he so constantly quotes, so may we think of him, and undoubtedly there were many points of resemblance between the two men. But this is not the place to enter on such a subject. The present volume has been issued by the Sydenham Society, as one of its yearly volumes, and they have done good service in so acting, not only in this, but in the former volumes.

The present one is made up of twenty-five lectures, or as we think they should be called "Clinical Essays," for this would represent what each, in reality, is. To enter into these separately would far exceed our present limits. We can only then refer to those which strike us as being peculiarly good. The third in the volume is on "Ozæna" and the reader will find it full of important matter, as well as the treatment the author has found the most effectual in this complaint. Of its great obstinacy we are warned again and again, and indeed for ourselves we consider the disease, especially in its severe forms, almost incurable. It is very easy to relieve it, and apparently cure it. But it is sure to return, and must too often be looked upon as a life-long disease, as well as one which entails frequently great misery, as regards the fœtor, and quite capable likewise of slowly but surely sapping the springs of life. So much depends on the local treatment that we may venture to hope that the improved methods of examination of the back of the throat and nose, lately introduced, may help powerfully in aiding the cure of the disease, for we have little doubt, if all the parts affected could be reached, the disease would be much more amenable then it is. Our space prevents us noticing several valuable lectures on Affections of the Larynx; Phthisis; Hæmoptysis, &c. But we would direct the special attention of our readers to the several chapters which follow on Pleurisy, and its Results; particularly the question of tapping the chest. Nowhere will there be found such a full and, in every way, complete account of this subject as in these pages. It was well known the author was a strenuous advocate for early operation in these cases, and the success resulting certainly seems to prove he was right. In these countries it is not the practice to interfere at such an early stage, and the question arises—do we not then lose valuable time by such delay? It is only right to state that a London physician—we think it was the late Dr. Addison—strongly advocated early operation, and this several years since. There is, however, a point not to be overlooked in this matter, and this is, that the British practice is, we believe, more effective than French. Hence it follows that in many

* Lectures on Clinical Medicine, Delivered at the Hotel Dieu, Paris. By A. Trousseau. Vol. III. Translated from the Edition of 1868. Being the revised and enlarged Edition. By John Rose Cormack, M.D. Edin., F.R.S.E., Fellow of the College of Physicians of Edinburgh, &c. London: The New Sydenham Society. 1870. Pp. 557.

cases, at least of pleuritic effusions, the disease yields to the treatment, and surgical interference does not become necessary. In discussing this subject, it may be well not to overlook the point. It should be stated that the lectures on this important subjects, are illustrated by a number of very well detailed cases, and also that the subject of traumatic effusion of blood into the pleura is also considered, but into it we cannot enter. We have here to pass by some of the valuable lectures ; but one devoted especially to the treatment of pneumonia calls for some remarks. We need not say what a difference of opinion exists at the present day on this point, some holding that our treatment should be entirely expectant ; and others doing so little that it may be considered but a modification of the former. We do not side with either of these ; we much prefer acting according to the emergencies of each case. It is not, however, of our own views we would speak here, but of the author's, and we are very glad to find him advising antiphlogistic treatment, including drugs and antimonials. He makes also the important remark, that the same doses of antimonials will not be borne at one time as at another, thus confirming the experience of all the great minds who have gone before him, and refuting the ideas of those who hold that diseases are ever the same, and who make the treatment of disease a routine. The reasoning and observations which run through the entire lecture seem to us unanswerable, and we only wish we could enter more fully into them. The concluding part of this essay is, we ought to add, occupied with the subject of pneumonia, as it attacks the upper lobe of the lung, and also the treatment of some of the forms of delirium which attend frequently on the disease by means of musk.

The lectures which follow we can only name. They are on "Tapping the Pericardium, and Organic Affections of the Heart," "Alcoholism," "Spermatorrhœa," "Nocturnal Incontinence of Urine," "Glucosuria," "Polydipsia," and "Vertigo." We can only say for these that each and all of them are full of interesting and practical matter, and any of our readers who may want to consult the book on any of these subjects will not be disappointed here. Indeed, where all the volumes are excellent we are not sure but that the present one is the best, and we only wish there may be more to follow.

SCOTLAND.

Not very long since we took occasion to make a few remarks upon the necessity of some reconstruction of the curatorial board in the University of Edinburgh, similar to what was proposed by Sir Alexander Grant, in his address at the opening of last winter session. It was no actual transgression into which the curators had fallen in their appointments to medical chairs, which led us at that time to advocate this reform; on the contrary, we had particular pleasure in referring to the admirable manner in which they had exercised their patronage. But the histories of the appointments were not such as to encourage the belief that future vacancies would always be filled with equal judiciousness. The constitutional weakness of the board was too well known to us ; and, while with grateful astonishment we reviewed the past, it was with trembling anxiety we anticipated the future.

We now feel how utterly disproportionate our worst fears have been when viewed in connection with the actual realities which the recent election to the Chair of Midwifery has established. The magistrates of Edinburgh, in their capacity as delegates to the court of curators, have with characteristic impetuosity and unreasoning zeal been endeavouring to anticipate the national memorial to Sir James Simpson ; and, by placing the gown which had fallen from his shoulders upon those of his kinsman, have imagined they were conscientiously discharging a solemn duty, in gratifying their own eccentric notions of what is due to the name of Simpson. This is, perhaps, he most charitable view to take of their recent act ; and in this aspect it would be sufficiently ludicrous, were it not for the disastrous consequences with which their clumsy enthusiasm is fraught.

We are spared the painful necessity of pointing out the immediate injury done to the University in the person of the recently elected professor. With singular unanimity of opinion the Profession and the public have openly agreed in considering him as occupying the position of an obstructive. If with this decision *he* is satisfied, we have no other course but to submit. But what are the prospects of the University of Edinburgh if the present constitution of the curatorial board is continued ? When a vacancy again occurs, with what reason can we believe, what reason have we to hope, what right to expect, that men of eminence will present themselves as candidates for the appointment, or expose themselves to the risk and mortification of having their just claims ignored, because they are not sufficiently popular to satisfy the unsearchable understandings of the municipal delegates ? We greatly fear that the higher the qualifications of the individual the greater will be the unwillingness to undergo such an ordeal.

It is commonly affirmed that out of evil a certain amount of good may be confidently expected to result. We are inclined to hope that this may be the case in the present instance. While the election of Dr. A. R. Simpson supplies an answer to the familiar question of "What's in a name ?" the rejection of Dr. Duncan affords conclusive evidence of the utter uselessness of the present system of testimonial-giving. The principle has been defended on the ground that testimonials assist in guiding the decisions of a mixed constituency, and they are said to be specially adapted to the intellectual capacity of those who occupy seats in our municipal councils. The folly of such reasoning, and the falseness of the premises upon which it is based, are abundantly proved by the result of the recent election. Dr. A. R. Simpson was elected by the delegates of the town council on account of the name he bore, which, for the sake of appearances, was supported by a batch of testimonials which had failed to get for him a similar chair in the University of Glasgow ; and Dr. Duncan would have been elected by the delegates from the University on account of work accomplished and success achieved, and which, irrespective of the combined evidence of the one hundred and thirty-four splendid testimonials he presented, entitled him to all he desired at their hands.

Of the successful candidate we have no wish to speak with disrespect. We have always understood him to be an excellent man, and a most successful practitioner. The most that can be said of him is, that he is the nephew of Sir James Simpson, and his successor in his chair. We trust time will be good to him, and that in his present difficulties he will meet with friends who are wiser and better able to advise him than those who placed him in them.

Professor Lister has been appointed Surgeon in Ordinary to the Queen in Scotland.

University of Edinburgh. — Election of Professor of Midwifery.—The curators of the University of Edinburgh met on Monday, the 4th of July, in the University Court-room, for the purpose of electing a Professor of Midwifery to fill the chair rendered vacant by the death of Sir James Y. Simpson. All the curators were present, with the exception of Bailie Skinner, who is at present on the Continent, but who had left a sealed paper containing his vote. Dr. Alexander R. Simpson, Glasgow, was nominated by the Lord Provost ; Dr. Keiller by Bailie Russell ; and Dr. Matthews Duncan by Sir William Gibson-Craig. Bailie Fyfe spoke in support of Dr. Simpson, and Lord Neaves and Mr. D. Milne-Home in support of Dr. Matthews Duncan. Bailie Skinner's sealed paper was opened, and it was found that his vote was given in favour of Dr. Simpson. Dr. Matthews Duncan and Dr. Simpson having each three votes, and Dr. Keiller only one, Bailie Russell withdrew his amendment,

and gave his vote for Dr. Simpson, who was thus elected by four to three votes. A large number of students waited outside the door of the Court-room while the election was going on, and the announcement of the result was received by them with very decided tokens of disapprobation.

The following requisition to Dr. Alexander R. Simpson, who was recently elected Professor of Midwifery in the University of Edinburgh, has been numerously signed :—"We, the undersigned medical graduates and students in the University of Edinburgh, think it would be a becoming act on your part—considering the feeling in the Profession and among the students against your recent election to the Chair of Midwifery in this University—to resign the same, feeling that your appointment is detrimental to the University and to your own personal interests ; and that this act would be at once graceful and do more to hand your name down to posterity with respect and esteem than the fact of your having been Professor of Midwifery in the University of Edinburgh." We also understand that a requisition to Dr. Matthews Duncan, to give a six months' winter course of lectures on Midwifery, in order that his students may be qualified for examination before the University Board, is in the course of signature, and that nearly three hundred names have already been appended to it.

MR. SYME.

If an Edinburgh graduate were asked to enumerate the celebrated men who, during the last thirty years, had best served to maintain the reputation of that city as a school of medicine, distinguished above every other in Europe, the name which would first occur to his mind, and to which he would give articulate expression, would be that of Professor Syme. In doing so he would be influenced by those feelings of profound admiration and respect which, from the moment on entering his class-room, Mr. Syme inspired in the minds of his students—impressions which time only served to increase, as the value of the instruction then received became more fully understood. Others, by a more brilliant display of genius, may have won for the University of Edinburgh a greater amount of popular renown, but none have ever surpassed, or, more correctly, have ever equalled him in the influence for good which he has exercised through his pupils over the whole civilized world, or in establishing upon a firm basis the science and art which he professed.

Mr. Syme was born in Edinburgh on the 7th November, 1799, being the younger son of John Syme, Esq., of Cartmore and Lochore, the representative of a highly respectable Fifeshire family. His elder brother, who survives him, is David Syme, Esq., of Warnoch, a deputy-lieutenant and sheriff substitute for the county of Kinross. Mr. Syme received his early education at the High School, and in the very building which afterwards formed a part of the Royal Infirmary, an institution he was destined to render so famous. From the High School he passed to the University, where, besides prosecuting his literary studies, he devoted considerable attention to the study of chemistry, one result of which was his discovery, at the age of seventeen, of the method of rendering cloth waterproof by caoutchouc in solution. An account of this he himself has given in a short paper annexed to his work entitled "Contributions to Pathology and Practice of Surgery." Entering upon his professional studies, he soon after was entrusted by Mr. Liston, who was then teaching anatomy, with the charge of his dissecting rooms, and, on Mr. Liston ceasing to lecture on that subject, in 1822, he was succeeded by Mr. Syme, who was then only twenty-two years of age. Three years afterwards he commenced a course of "Lectures on Systematic Surgery," and, notwithstanding that Liston, Lizars, and Fergusson were also lecturing on the same subject, his class-room was crowded, frequently numbering upwards of 200 students. We have before us his "Syllabus of Lectures," published in 1831, which corresponds in every particular with the plan on which his "Principles of Surgery" is based—a work which has reached a fifth edition, and which for vigour, lucidity, and graphicness of detail is unequalled in medical literature. Failing to obtain an appointment in connection with the surgical staff of the Royal Infirmary, Mr. Syme opened a private surgical hospital in Minto House, the expense of maintaining which was defrayed, in a great measure, by the fees he derived from those gentlemen who, under the name of apprentices, acted as his assistants. In this hospital, in 1829, was instituted for the first time in Britain a system of clinical instruction which it is impossible too highly to characterise. There are thousands living who can bear witness to its matchless success. The bold course which Mr. Syme then adopted was characteristic of his whole life. Surrounded as he was by opponents of acknowledged eminence in surgery, no undertaking could have been more difficult or dangerous than that he then accomplished—one from which men of lesser genius and greater ambition would have shrunk, or in attempting would have failed. The motives which actuated Mr. Syme were doubtless those by which he was ever distinguished, the desire of honestly discharging duty, and a manly consciousness of his own ability to do so.

In 1833 the Professorship of Clinical Surgery in the University becoming vacant, he was appointed to the chair, and as the system of clinical instruction which he had introduced could be carried out only within the walls of a hospital, accommodation was afforded him by the managers of the Royal Infirmary for that purpose.

On the death of Professor Liston, in 1847, the Council of University College, London, appointed Mr. Syme their Professor of Clinical Surgery, an honour he was led to accept from the strong desire he felt to introduce into the London school his system of instruction. The reception he met with from the students attending that University was enthusiastic, and his success as a teacher of clinical surgery was as highly appreciated in London as it had been in Edinburgh. Finding, however, that he was expected to deliver lectures on systematic as well as on clinical surgery, he resigned the appointment, which he had held only a few months, and returned to Edinburgh in July, 1849, when he was shortly afterwards re-elected Professor of Clinical Surgery. Mr. Syme's action in this matter was singularly in keeping with his whole life. The duties he undertook in London he knew his own ability thoroughly to discharge ; those which in addition he found unexpectedly imposed upon him he felt he could not, with his other engagements, fulfil to his own satisfaction ; and, with his characteristic horror of anything approaching sham, he retired from a position which he alone thought he was unable to occupy.

From 1849 to 1869 Mr. Syme held the chair of Clinical Surgery in the University of Edinburgh. The principles upon which the course was conducted were thus given by himself :—"The objects of this course are to teach the discrimination of surgical diseases by pointing out their distinctive characteristics in the living body, and to impress the principles of treatment by showing their application in practice. With these views, all the patients whose cases come under consideration are placed before the students in the theatre of the hospital, when, with due regard to their feelings, the opinions entertained as to the seat and nature of the malady are freely expressed, and the means of remedy deemed requisite are administered either at the same time or upon some other more convenient occasion." The cases seen were all new, being selected from among the patients who happened to be in the waiting-room on the days of lecture. It was then his extraordinary diagnostic powers were seen to greatest advantage, and few, if any, can recall an occasion in which his opinion was not confirmed by the result of immediate operation or more prolonged treatment. His statement of the reasons which guided his judgment, and determined his method of treatment, was always clear and explicit, and never failed

to convince; and, although conveyed in language of singular conciseness, was intelligible even to the youngest of his students.

In operating, Mr. Syme, as might be expected from his general character, never displayed any brilliancy in style; the interests of the patient before him alone occupied his attention. Having determined on what was to be done, he did it with a dexterity that has never been surpassed; and his clear judgment enabled him to meet any emergency with calmness and decision.

It is impossible to attempt within the limits of a notice such as this an estimate of the work Mr. Syme accomplished. To him we are indebted for placing among the regular operations of surgery the excision of joints; for the operation of amputation at the ankle-joint, which bears his name; for the treatment of stricture of the urethra by external incision; and for our knowledge of the pathological condition and appropriate treatment of many formerly obscure diseases of the rectum. These are a few from among the many labours Mr. Syme achieved, and are selected because on each he wrote at some length.

As a medical reformer Mr. Syme occupied a prominent position, and the weight attached to his views was evinced by the fact that, but for his sudden indisposition last year, he would have been appointed President of the General Medical Council. His last literary effort was expended on this subject.

The most striking feature in his character was his blunt honesty, which sometimes manifested itself in a way not pleasant to others or advantageous to himself.

In controversy he was a dangerous opponent from the logical force of his strong common sense. Whatever cause he espoused he did so from the firm conviction that it was on the side of truth.

The many honours which were paid to Mr. Syme by academic and scientific bodies were exactly suited to his own desires; others, bringing with them greater notoriety, he might have possessed had he cared to accept them.

After a life of active usefulness of more than usual duration, Mr. Syme died on the evening of June the 26th, leaving behind him a reputation second to none, and which will endure as long as the healing art itself.

A HOMŒOPATHIC CHALLENGE OF PRIORITY IN THE DISCOVERY OF CHLOROFORM.

The *Monthly Homœopathic Review* publishes the following narrative of the discovery of chloroform which, it says, may be relied on as correct:—

Shortly after sulphuric ether had begun to be used for producing insensibility to pain during operations, it was, by way of amusement, tried one evening on a number of persons assembled at the house of Mr. Walker, homœopathic chemist, then residing in Liverpool, but now of Conduit street, London. It was found to be long in producing any marked effect, and in most cases was followed by sickness and vertigo. The operator was Mr. Waldie, the analytical chemist at the Liverpool Apothecaries' Company, and to him Mr. Walker remarked, that as chloric ether, when administered internally, was preferred to sulphuric ether in many cases, because of its not producing sickness and headache, no doubt it would prove a better anæsthetic; and that if found not to be strong enough, chloroform, from which it is made by dilution with alcohol, would certainly have the same properties, and should be tried. The experiment would have been made there and then, but the hour was late and the laboratory of the hall shut up, so that no chloroform could be obtained. It would have been useless to have tried elsewhere for it, as at that time it was used only for making chloric ether, and nearly all of that medicine used in Liverpool was made in the Apothecaries' Hall.

About a month after this conversation Mr. Waldie had occasion to visit Edinburgh, and called on Professor Simpson, whom he found experimenting on various gases as a substitute for sulphuric ether, which he also had found very imperfect in its operation. Mr. Waldie then mentioned that he had thought of trying chloroform, and, as none could be found in Edinburgh, he promised to make some and forward it as soon as he returned to Liverpool. Professor Simpson, however, with his accustomed energy, at once set to work and had some made by his neighbours, the Messrs. Smith, chemists, and Mr. Waldie had scarcely reached home when he received a pamphlet giving the result of numerous successful trials made with it.

Registered for Transmission Abroad.

The Medical Press and Circular *is published simultaneously in London, Edinburgh, and Dublin, every Wednesday morning. Price* 5*d. Stamped* 6*d.*

By Post to Annual Subscribers, £1 2 6
,, *If paid in advance* 1 1 8

*** Post Office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London.
Moffat & Co., 6, D'Olier-street, Dublin.
Maclachlan & Stewart, South Bridge, Edinburgh.
Sole Agents for the United States,
Messrs. Kelly and Piet, Baltimore.
Annual Subscription, *post free*, Ten Dollars.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JULY 13, 1870.

THE BILL AND THE COMMONS.

That the Medical Bill has been smuggled through th House of Lords our readers have already been apprised. We say smuggled deliberately, for it is manifest that the Government, as represented by the Privy Council, has purposely betrayed the Profession. It was thought by many that the bill was introduced into the Upper House first, in order that it might receive from the Peers all the attention it deserved, and so go down to the Lower House as a carefully digested measure that would content the Profession. But the event has proved otherwise. A foregone conclusion of the *quidnuncs* who can earwig the Privy Council has been pushed in an indecent manner through the Lords, and, as if not satisfied with carrying his ridiculous bill, Earl de Grey has deliberately insulted the 20,000 practitioners by sneering at their capacity for self-government. Still we do not despair. In spite of official arrogance, good sense and justice have raised their voices, and the echo will yet be heard in the Lower House.

We tender hearty thanks to the Marquis of Clanricarde for the stand he made on behalf of the right of the Profession to be represented in the Medical Council, which

costs it so dearly in honour and in cash. Unhappily his opposition was too late, and it came after a weary debate on the Irish Land Bill, so that Earl de Grey managed to get his way. To the Earl of Lichfield, too, we owe thanks. He brought forward, though also at a late period, an amendment in favour of direct representation. That one word *direct* defeated him. He had evidently taken his cue from the clique that rule the British Medical Association in a manner that their own agitation most thoroughly condemns. Had he merely asked for representation, we have reason to think Lord de Grey, with all his insensibility to the claims of true liberal thought, would have hesitated to refuse. At any rate this good has been gained—the bill will come to the Commons laden with the verdict of several enlightened Peers in favour of self-government for the Profession. The nonsense about want of machinery will go for nothing in the presence of members elected by University constituencies. They will at once point out that the same machinery by which they are elected is available for electing members of the Medical Council; and surely it is no insurmountable task to model a similar machinery for each of the other corporations. A single clause directing the members of the Medical Council to be elected by the holders of the diplomas of the several bodies would give the Profession a representation that would at once change the aspect of affairs. Much mischief has been done by the advocates of *direct* representation repudiating what they are pleased to call the *indirect* method. Away with these internal jealousies, and let all unite to demand representation simply. The *method* can be debated when the principle is conceded. The clique that governs the British Medical Association has been guilty of a great breach of trust in this matter. It has done its best to stifle what it has not yet adopted, and has concealed the fact that it was ordered to ask for the plan it has scarcely the hardihood to claim as its own, though the manner in which it assumes to have originated the direct plan is too much for the gravity of any reformer of ten years' standing.

Away, then, with this indecent jealousy, and let all unite in the single cry for representation in the Council that squanders the money of medical practitioners whom it neither protects nor respects. The one other point—the one-portal system. Without that the bill is useless. It will meet in the Commons Sir John Gray's bill. When the two are discussed together, we hope this will be insisted on. We want no triple-headed monster, and, rather than have the three new boards, we would go on as we are. Amalgamation is proceeding voluntarily. The corporations have nearly established a system as good as that of the Government bill, and, if let alone for another year, will complete it. Rather, then, than take the miserable abortion offered us by Government, let us wait another year. We call upon all our readers to use their influence towards this end. Ten thousand practitioners have signed a memorial that has been treated with contumely. Let each of these ten thousand write to the representative of his borough or county, and to every other M.P. he knows, explaining and urging the points we have laid down in this article, and we predict that the bill will either be abandoned or so changed as to give satisfaction. Perhaps it would be best for it to be abandoned to the "slaughter of the innocents." Not that it is "innocent." It is as clumsy an attempt to effect by elaborate contrivances what might be done in the simplest manner as ever disgraced a Government office—as outrageous a perpetuation of oligarchical mischief as ever emanated from a bureaucratic centre. And this from a Liberal Government! Why, the most fervent worshipper of the past would sweep away the dust that is here preserved as a relic. The defenders of centralization, the apologists of despotism itself, would never stand godfathers to such a measure. Let us, then, with one voice repudiate. We have asked for bread, and are offered a stone; we have expected a fish, and lo! a serpent is presented to us.

We repeat the bill is utterly bad, and the whole Profession should at once act. "A good measure, or nothing," should be our cry. Let the table of the House groan under the weight of petitions; let members feel that they must reject such tinkering as this, or be prepared at the next election to be themselves rejected.

SURGEONS AND RAILWAY COMPANIES.

Several months ago, in the columns of The Medical Press, we had occasion to refer to the manner in which surgeons engaged by persons injured in railway travelling, and whose accounts are subsequently paid by the company, should act. We tried then to show that a railway accident ought not to be viewed in the light of a God-send, that no unprofessional conspiracy should be entered into between patient and doctor, and that no railway company should be dishonestly or unfairly mulcted. These remarks are forced upon us owing to an unhappy circumstance which has lately occurred in an English town. The particulars of the case are not yet made public, but private information has reached us which clearly proves the importance of the precepts we tried to teach our brethren. A person feigned to be injured at the time of a trivial railway accident; a certain surgeon, who is now forced to fly the country and for whose apprehension a handsome reward is offered, entered into such an understanding with his patient that the company was heavily mulcted. Subsequent events proved that the man, who was a maligner, deceived the company, and that the surgeon was in the habit of hunting up railway accident cases, entering into arrangements with them to be paid 5 *per cent.* on the amount obtained, with his own bill, which was usually *un*usually heavy. This surgeon wandered far to look after such patients, and is now forced to wander farther that the law may not reach himself. As a preliminary the patient in the present instance, who spent the moneys obtained and which he has not had to refund, is arrested, and we believe bail has been refused for his liberation.

Lately, our attention has been directed to other cases wherein heavy bills have been charged by surgeons, because they feel a railway company can afford to pay. We yield this and no more, that a railway company should be viewed in the light of a rich patient whom it is desirable to retain and not offend by dishonourable means nor dishonest actions, that fair charges should be made for work done, and that the object should not be to bleed unduly. In this, however, we fear, although our Profession as a body is honourable, that there will still be found men ready to do the dirty action, and thus bring dishonour on our calling. That the individual who boasts getting or having obtained heavy verdicts for his patient may be deprived of the power, and that railway companies may be saved unfair

charges, we suggest that in each town and village one of the most respectable and trustworthy of the practitioners should be named to look after all patients of the company in his district, and that, should another practitioner come in before him, both should continue in attendance so long as they are in harmony; but that if the company is subsequently to pay the doctor, and the patient has no particular choice, the medical nominee of the company should go on with the case; on the other hand, should the patient consider his case made lightly of, and appear to his relatives more serious than the doctor acting for the company considers, that he or they be at perfect liberty to call in further advice. This is not likely often to occur if the gentleman chosen by the company be one of reputed honour and skill in the district in which he practises. The patient it is who makes in all these cases the mountain of the molehill, and we sympathise with many companies who have recently been severely mulcted. Juries appear to have little sympathy for them if we may judge of the sweeping verdicts at times awarded. Honesty is the best policy in this as in other matters, and we think the Profession cannot be too cautious in dealing with them. If, as we have just stated, railway companies be considered in the light of rich and influential patients whose patronage we desire to retain, there is nothing to fear; but if, on the other hand, conspiracies are entered into, sooner or later the disgrace comes out, and punishment is the result and the reward.

Notes on Current Topics.

Deductions from the Income-tax of Medical Men.

At the Quarter Sessions recently held in Ennis, the Chairman pronounced a decision which is very important, and which to some may appear novel and extraordinary. It appears that the Income-tax Commissioners, in assessing the professional income of Dr. Cullinan, allowed him to make deductions for the keeping and maintaining of two horses, but they refused to allow any deduction for keeping a groom or coachman. Dr. Cullinan, whose servant is exclusively an outside servant, appealed from the Commissioners to Mr. O'Shaughnessy (the chairman), who dismissed the appeal, his interpretation of the law being such, that if any medical officer to a dispensary, or any physician connected with any public institution (who by law are allowed to make deductions for the keeping and maintaining a horse when necessary for the performance of their duty), drives even once to dine with a friend, or to vote at an election, or to do any other act not strictly professional and official, he forfeits the privilege of making any deduction whatsoever for either horse or servant. In Dr. Cullinan's case the arrangement appears the more extraordinary and illogical, because he is allowed to deduct for the horses but not for the servant, though the same law and principle obviously apply to both. Dr. Cullinan seems to consider the interpretation of the law in this case as not only repugnant to reason, but also contrary to the spirit and words of the Act of Parliament; but, as it appears that there is no appeal from the learned Chairman's decision, we do not see where he is to look for a remedy.

The Prospects of the Vaccino-phobia Agitation.

We observe with much satisfaction that even in its stronghold the vaccino-phobia agitation is in a very melancholy condition of development. Whether it be in money or influence, its progress has been by no means encouraging to the foolish people who have identified themselves with it; and, if the pressure of steam which its stump orators have been able to get up may be estimated from their own representation, the public have need to give themselves very little trouble about the matter.

The first annual meeting of the members of the Manchester Anti-Vaccination League was held last week. From the report for the past year it appears that the outlay has been £51, the income £31, leaving £20 due to the hon. secretary. A letter had also been received from the Bishop of Manchester, in which his lordship said, "The vaccination question must become one of primary sanitary importance, if the facts alleged can be substantiated. They do not, however, prove to my mind that vaccination is mischievous—indeed, its benefits appear to me to be established by an overwhelming weight of evidence—but simply that the vaccine lymph is often poisoned, in which case, of course, it must be mischievous, and may be fatally mischievous."

We wish the Bishop of Manchester, who appears to have been adopted by the vaccino-maniacs as a disciple, could convey a little of his own good sense into his hare-brained patrons. Truly, "*if* the facts alleged by them could be substantiated, the vaccination question must become one of primary sanitary importance."

In these days, when the most solemn and cardinal questions are settled, in and out of Parliament, by agitation and by the lavish use of talk and ink, it is instructive to contemplate the upshot of the vaccination craze. One of the most important of our means of sanitation has been discredited, and doubts thrown upon its efficiency, which it will take years to remove; those earnest in guarding the public health have been troubled to counteract the attack, and even the Legislature has been moved in the matter; and by whom? By a few loquacious and self-conceited meddlers, who, it now appears, are utterly insignificant either in rank, money, influence, or sense. Let it be remembered that paper, ink, and garrulity are at all times within the reach of every agitator who thirsts for notoriety or for subscriptions, and let us learn therefrom to pass in silent contempt the agitation of such persons, unless we can find in it convincing facts, sound argument, and the acquiescence of educated and thinking men.

Summer Diarrhœa.

A contemporary noticing that cholera has already figured in the returns of London, that the late Lord Clarendon died from diarrhœa, and that this last disease is on the increase in London, while last year it nearly deprived us of the Premier, goes on to say that "it behoves the Profession to submit to searching examination the newly projected theory" respecting the causes and treatment of this insidious malady. The writer speaks then of Dr. Chapman's theory, well known to our own readers, observing that "one of the most eminent pathologists of the present day" has announced it to be not only "in harmony with the results of the most recent physiological discoveries," but further a "consistent and intelligible

explanation" of the phenomena of the disease. In Dr. Chapman's work on Cholera the theory is very fully explained, and the treatment by ice to the spine illustrated by numerous cases. At this season that those who have not yet tried the method may advantageously consult the work we have named.

The Small-Pox Epidemic in Paris.

On Monday week last a meeting took place between the Ministers of the Interior and of Agriculture, the Prefect of the Seine, the Prefect of Police, and M. Tardieu, President of the Committee on Public Health, for the purpose of concerting new measures for the mitigation of the epidemic which afflicts the capital. It was resolved that an urgent application be made to the Academy of Medicine that they shall address the public in favour of the pressing necessity for re-vaccination. This demand, being brought before the Academy, resulted in the appointment of a Committee, composed of MM. Depaul, Tardieu, Behier, and Fauvel. The Committee held a meeting at once, and an hour afterwards submitted to the Academy a provisional address, which they recommend it to adopt unanimously. The Academy of Medicine has given an example of zeal and celerity which we recommend to the attention of officials at our side of the English Channel. Within a few hours the proclamation was in course of extensive circulation.

How many sheets of foolscap would be spoiled? how many days or weeks wasted? how many journeys from post to pillar undertaken? and how much money spent in the achievement of so much work by an English Government Department? The negotiations would probably outlive the epidemic.

Hold! St. Pancras.

It is rumoured in the parish that our last week's remarks under this head have not been without effect on the minds of some, and that consequently the mischief is postponed, if not stopped. We hope this may prove true, and that thus reason may prevail.

Utilization of Sewage.

We understand that the authorities of Southampton, profiting by the example set them at Hastings, have determined to adopt the A B C process of utilizing the sewage of their town, and thus to preserve the local waters and beach from pollution. Any doubt that may exist as to the sufficiency of this process for purifying sewage water so as to render it fit to be discharged into rivers, cannot apply to the waters discharged into the sea.

Black Death in Georgia.

One hundred and fifteen persons died with cerebro-spinal meningitis in Coffee county, Georgia, in the month of March. Malignant epidemics of this disease are prevailing, besides, in parts of Mississippi, Florida, South Carolina, and Pennsylvania.

Royal Bounty.

An example for the imitation of all Sovereigns has been given by the King of Italy. There was much wanting in Florence an hospital for the blind. Victor Emmanuel has generously applied the 45,000 francs which were to have been applied to the purchase of a royal crown to the foundation of such an institution. His Majesty has also sent 5,000 francs to the Children's Ophthalmic Hospital, founded at Turin by M. Sperino.

The Medical Club.

This afternoon (Wednesday), at 3 p.m., there is an adjourned special meeting at the Medical Club, to which we hope all members will go who possibly can. The existence of the Club is at stake. With the present rate of subscription, and the present expenses, it will be impossible to continue, and the members should therefore resolve at once what course to take. The Profession ought to have a Club, and we trust some mode of maintaining it may be adopted. Either an increase of subscription or a diminution of rent (which means of comfort also) seems the natural conclusion, unless a large increase of members could be obtained. That, of course, would be the best of all.

A new Swimming Bath.

The Russians are said to pass directly from the Sudatorium into the open air and roll themselves in the snow. The hydropathist boasts of the wondrous stimulant powers of the alternate hot and cold douche; and physicians have recourse to the hot-water bag and ice-bag alternately with much confidence. Doubtless the tonic influence of cold water is heightened and its safety increased by the previous use of warmth, and for general purposes a cold plunge bath in close vicinity to a tepid bath is a desideratum. Mr. Charles Herrman, of Croydon, a Fellow of the Institute of Architects, has devised such a bath, we think, very successfully. It consists of a small central tepid bath, containing 30,000 gallons of water, the boxes surrounding which open posteriorly on a much larger cold swimming bath; so that, after a tepid bath, the swimmer has only to pass through his box for a cold plunge.

Contagious Diseases Acts.

We hear that the Government Commission, shortly to be appointed for the investigation of these Acts, is likely to be a large and popular one, comprising members of both Associations for and against the carrying out of the Acts. The Association against the Acts in London has recently determined to merge itself into the ranks of the National Association, and have a paid secretary in London to manage the affairs of this gigantic agitation. We trust sincerely that the Association may not fall too much into the hands of the evangelical or ultra-religious party: in this country they are the greatest foes to all enlightened endeavours to improve the condition of the unfortunate and degraded, or to offer any remedy for suffering.

The Brighton Aquarium Company.

The Brighton Aquarium Company, for which a special Act of Parliament was obtained last session, is about to erect on a large scale an aquarium at Brighton. The site of the aquarium commences at the toll-house of the Chain pier, and extends to within a few yards of that structure, and will be nearly half the length of the main building of the Crystal Palace, Sydenham, and 100 feet in width. Besides the aquarium, in which will be found tanks ranged on both sides of the vast hall, and of a size to contain the largest specimens, there will be above the hall grounds

laid out as a promenade, furnished with ferns and plants. In addition to these, there will be attached to the building an entrance court. Outside the aquarium will be arranged terrace and garden walks, bounded on the south side by a sea wall and approach road; these, overlooking the sea, will form a promenade ground.

The Corporation of Brighton has, in accordance with the special Parliamentary powers furnished to it in the Company's Act of Parliament, agreed to contribute a cash subscription or free gift to the Company of £7,000. Great success has attended the establishment of aquaria on the Continent; and at Hamburg, under the management of Mr. Lloyd, the resident manager of this Company, the shareholders received back in dividends in two years the whole of the capital they had paid; and it is most likely that a properly managed aquarium, constantly supplied with interesting specimens—of which there are thousands totally unknown, even to the most scientific men—is sure to prove an object of the greatest attraction to all classes of society, and be highly remunerative to the shareholders. The capital of the Company is fixed by Act of Parliament at £40,000 in shares and £10,000 in debentures, with power to increase by £10,000 in shares and £2,500 in debentures. An estimate in detail of the anticipated income appended, promises a net revenue of £11,310, which, on the share capital of £40,000, now to be issued, after paying debenture interest, shows a dividend of over 25 per cent. per annum. A contract for the erection of the aquarium, the building of the sea wall, and laying out of the grounds, &c., has been entered into, by the terms of which the aquarium is to be open for the admission of the public by the 31st December, 1870, and the whole of the works completed by the 1st July, 1871. The important post of manager has been filled by the election of Mr. W. A. Lloyd to that office. He has been engaged on the Hamburg aquarium from its commencement, and it is under his able management that the shareholders of that undertaking have had such very favourable returns made to them.

Post-Mortem Examinations.

Dr. John C. Steele, the Medical Superintendent of Guy's Hospital, was summoned before Mr. Benson a few days ago under the Anatomy Act (2 and 3 William IV., cap. 75, sec. 7), for unlawfully causing the body of William Millbourne to undergo anatomical examination without the permission of the person having legal possession of it.

The case has an important medico-legal bearing. We believe, with Dr. Steele, the Act was passed for special purposes. "At all public institutions, such as charitable places and union workhouses, the medical authorities had power to make pathological examinations to meet the requirements of the Registrar-General." Dr. Steele tells us, *it would have been impossible to know the cause of death in the present case unless a* post-mortem *had been made.* Now, the Registrar-General exacts accuracy. With all respect to Mr. Benson, we do not believe the case comes under the provisions of the Anatomical Act. The majority of patients and their friends know the rules of the hospitals before entering them. Pathological investigation would suddenly stop short if we are to be denied *post-mortem* examinations. An Irishwoman, a few years ago, gave liberty for a *post-mortem* examination to be made upon her son, who died of an obscure complaint, "because," she said, "I may get the same disease myself, and they'll know now about treating it;" but, after the examination was concluded, she bitterly lamented the fact, and by her affected lamentations drew a crowd round her, whom she informed the hospital authorities stole "the lights and livers of her poor Jack, and stuffed him with straw," in order to excite sympathy. Has the present case cropped forth for the same purpose? We think, in the instance before us, had Mr. Carter Millbourne spent upon his father, during his lifetime, the money which he, or somebody else, must find to pay lawyers, that it would have reflected more to his credit or theirs than in bringing into court for investigation the particulars of a case which cannot injure the authorities of Guy's, or break through the existing rules of our noble institutions.

Dissection in Hospitals.

A question has been litigated in the London Police Courts, which is of very great interest to the Profession, and which appears difficult of solution in any way which shall at the same time preserve public benefits and respect private feelings.

At Southwark Police Court, Mr. John Charles Steele, M.R.C.S., and superintendent of Guy's Hospital, was summoned before Mr. Benson, under the Anatomy Act (2 and 3 William IV., cap. 75, sec. 7), for unlawfully causing the body of Samuel Millbourne to undergo anatomical examination, without the permission of the person having legal possession of it. Mr. Carter Millbourne, son of the deceased, and the complainant, said that on the 1st of June he took his father to Guy's Hospital. On Thursday morning, the 16th, he was alive, but fast sinking. Witness saw him again at four in the afternoon, and remained with him until his death, about 5 o'clock. He saw the nurse and sister of the ward, and desired to take the body away then, but the latter told him he could not remove it without an order from the steward, who would not be in attendance until after 9 o'clock the next morning. She also told him that the house surgeon might wish to make a *post-mortem* examination. Witness informed her he could not consent to that without mentioning the circumstances to the other members of the family. Witness left the hospital at half-past 5, and next morning, at 20 minutes past 9, he called and saw Dr. Steele, and told him he had come to claim the body of his father, but it was not brought until seven in the evening, and then it was in a coffin, cut up in the most shameful manner. Witness proceeded to the hospital on Saturday morning, the 18th, and saw Dr. Steele, who told him it was done without his knowledge. He sent for some one to ask about the *post-mortem* examination. That person said, "Yes; there was a complete *post-mortem* examination. The brain was removed, as well as the windpipe, heart, &c." Dr. Steele said the Act was made for special purposes. At public institutions, such as charitable places and union workhouses, the medical authorities had power to make pathological examinations to meet the requirements of the Registrar-General. It would have been impossible to know the cause of death in the present case unless a *post-mortem* examination were made. An anatomical examination was merely cutting a body up for the students. Mr. Thomas H. R. Hooper, M.R.C.S., Blue Anchor road, said that on Sunday, the 19th ult., he was called in by last witness to see the corpse of his father. He examined it, and found it cut about as though an hospital *post-mortem* examination had been made. The cause

of death was stricture, and there was no occasion to remove the brain. Dr. Steele said that the disease might extend to the brain, and it was necessary to open the head to ascertain the cause of death. Mr. Benson here observed that, according to the evidence, it was a question for further investigation whether it did not come under the Anatomical Act. Mr. Benson was of opinion that when a body was claimed by the relatives, and they had arranged to take it away, the hospital authorities had no right to cut it about without their authority. There were some points of law of vast importance to both sides, and therefore he should adjourn the case to give the hospital authorities an opportunity of consulting with their legal adviser.

The question is one which we think ought not to be regarded from a medical point of view, for it cannot be maintained that the fact that a patient dies in hospital, instead of his own home, confers any right to interfere with his body. The sick poor, in availing themselves of charitable relief, do not in any respect surrender their rights, and it would be a subject for great regret if the feeling of distrust which often leads relatives to remove the patient when in *articulo mortis* should be intensified by imposition of any legal disability on them. However unfortunate it might be that obscure causes of death should remain undiscovered, and that relatives should act churlishly in the matter, it would be utterly improper for the Profession to obtain its information by an infraction of their rights and utterly indefensible to do so for any other purpose than the essential investigation of the individual case.

Royal College of Surgeons of England.

The Council adjourned the election of a representative in the Medical Council until to-morrow (Thursday), the 14th. Mr. Hawkins does not wish to be re-elected. It is said Mr. Quain did not attend the last meeting, as he expected to be appointed. Once more, we ask the Council not to usurp the right of appointment. The Fellows and Members constitute the Corporation, and Mr. Cock will forfeit all the goodwill he has elicited if he does not call another meeting to discuss this question. There is no need for hurry, and the man who rushes into the vacant place must expect to be covered with the anger of the whole body of Fellows and Members. If he pretend to speak in their name, he will be a mere impostor.

The New Councillors of the College of Surgeons.

Professor Erasmus Wilson and Mr. Henry Lee were elected by the Fellows on Thursday last; the former polling 121 votes, and the latter 112. Messrs. Spencer, Wells, and Holmes Coote each polled 80 votes. We congratulate the successful candidates, and venture to offer them a suggestion. If they take their seats at the special meeting to-morrow, let them assert the rights of Fellows and Members to elect the representative of the College in the Medical Council. One of them we know holds our views on this subject—perhaps both. If so, they will prove a valuable reinforcement of the Council. Mr. Cock will surely call the meeting he was asked to do, and let the Council postpone any appointment until after such a meeting; and we shall see the result. It is now come to such a pass that every one seeking election into the Council must be judged by this one test.

The Edinburgh Appointment.

A meeting was called for Monday night, in London, to discuss the appointment of a successor to Sir J. Simpson. Though our report is not ready, we may remark that the feeling must be strong which leads to a protest in London against an Edinburgh appointment. There seems little doubt that Dr. Simpson would have had no chance had he not been the nephew of Sir James, and as little that this is a sorry way of honouring the deceased. We leave the ferment occasioned in the north to our Scotch editor; but speaking as Englishmen, unknown to any of the parties, we cannot but say we agree with our Edinburgh contemporary. To us the lesson of this scandal is that it illustrates the absurdity of placing the patronage of University chairs in such hands, though it would not be easy to provide a perfect electoral body. Some recent appointments at London hospitals and colleges have been made in quite as scandalous a manner, although we have nothing to urge against the persons selected.

In a University is there no way of entrusting the election to the most distinguished graduates in the faculty in which the vacancy occurs? There are objections, no doubt, to such a course, but a popular body could not be worse than six or seven town councillors. Fancy the Lord Mayor and three aldermen being allowed to elect hospital physicians and teachers in our medical schools!

Medical Cross-Swearing.

The unreliability of partizan medical evidence in Courts of Law has been very forcibly brought under the attention of a Committee of the House of Commons by Mr. Baron Martin, and we trust that some steps will be taken to provide for the assistance of judges by disinterested medical assessors. In the Admiralty and other Courts provision is made to enable the judge to arrive at a fair conclusion on points respecting which he cannot be expected to be correctly informed, and it is ridiculous that any non-professional arbitrator should be called upon, as are the judges in railway compensation cases, to strike a balance between the opposition swearing of rival doctors. Under the regulations of the Railways Act power is given to the Court to order an examination by an assessor, but the provision has not been made use of, in consequence, we presume, of some technical difficulty.

If the Committee should arrive at any conclusion which will discourage cross-swearing amongst members of our Profession, it will contribute materially to its dignity, and we shall be glad to be spared the spectacle now so frequent of medical witnesses swearing black white against each other, and receiving from judges and juries not the least credence or consideration.

Mussel-Eating.

It is surprising the quantity of mussels imported into our manufacturing towns. The working-man appears to feast upon this shell-fish with a marked preference, if we may judge of the large consumption of it. A visit to the markets of Manchester and like towns will reveal the fact that mussels were largely sought after and eaten by the manufacturing class at a time of year when some restriction should be placed upon their sale, for during the months of May, June, and July they are a dangerous commodity, not having recovered from the effects of spawning, and in many instances produce serious mis-

chief. We have lately observed the grave results which arise from a careless indulgence in mussels, from the general rash over the surface of the body—so characteristic of unwholesome fish—to the protracted, and, in some cases, fatal diarrhœa. In France, where mussel-farming is cultivated with the same care as that of oysters, and where they are placed under the operation of the fishery laws, we find, during four summer months, no mussels are sold for consumption in the markets or shops. Even if they were, they would not be so dangerous as the large fat mussel to be found in our markets, and consumed with so much recklessness as to future suffering by the working-man. Disease is engendered and propagated through the carelessness with which the dietary of our people is managed, and serious epidemics arise through incaution. Accordingly we believe it should fall to the duty of all inspectors of markets to prohibit the sale of unseasonable articles of food. How often do we see lobsters and crabs vended, at a time when they are most baneful; and how frequently are our professional services required to minister to suffering arising from the injurious effects of stale or unseasonable shell-fish!

Dr. Brady, M.P., has been appointed a Deputy-Lieutenant for the County of Leitrim.

The Sale of Poisons (Ireland) Bill passed the second reading in the House of Lords on Thursday last.

The amount realised for the sale of the late Charles Dickens's pictures, and other works of art, on Saturday last, was £9,410.

Mr. Stone, the resident surgeon at Christ's Hospital, has just sent in his resignation, after thirty-five years' service.

The Royal Institution of Great Britain has received a legacy from the late Alfred Davis, Esq., for the promotion of experimental researches.

Mr. and Mrs. C. J. Freake have paid the sum of £420 to the treasurers of St. George's Hospital as the proceeds of a concert given by them at Cromwell House, South Kensington.

Nature states that the University of Vienna has decided to admit women to all the advantages of its medical school, and that two French students have already availed themselves of the privilege.

The Lord's Day Rest Association have petitioned the House of Commons—That the employment by the State of upwards of 20,000 persons in the department of the Post Office on the Lord's Day is not justified by public necessity.

Her Majesty the Queen will proceed in state to open the Victoria (Thames) Embankment to-day (Wednesday). This gigantic work is one of the best and most useful specimens of engineering skill in the metropolis.

Mr. Alfred Smee, F.R.S., F.R.C.S., &c., will again contest the seat in Parliament for the city of Rochester, vacant by the death of Mr. Kinglake. We heartily wish our *confrère* success.

Mr. Weeden Cooke has resigned the office of Senior Surgeon to the Royal Free Hospital, held by him for the last twenty years. It is understood Mr. Cooke has been compelled to take this step in consequence of increasing demands on his time in private practice.

M. Taschereau, Director of the Richelieu Library in Paris, has just bought for thirty thousand francs the very rare collection of books, portraits, medallions, &c., relative to Michael de Montaigne, the collection having been made in a period of fifty years by Dr. Payen, of the St. Germain watering-place, in Upper Savoy.

Correspondence.

ENTIRE LOSS OF SPEECH AFTER SMALL-POX.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—From having had, some years back, under my care in hospital a girl aged seventeen who lost her speech after small-pox, and in three months began slowly to regain it, I venture to predict a similar result for Dr. Waring-Curran's case after typhoid fever, recorded in this day's Medical Press and Circular. My patient returned to her service in robust health in every respect, except that she could not emit any sound. From the efforts made to speak, it seemed to be a case of acute balbuties, depending on effusion in the neighbourhood of the medulla oblongata. The chief treatment was blistering the nape of the neck. Yours, &c.,

29, Lower Gardiner street, Dublin. W. B. Peebles.

CONTAGIOUS DISEASES ACTS.

Letter from M. Lefort to Dr. Charles Drysdale (translated).

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—The insertion of the following letter from M. Lefort may prove as interesting to some of your readers as it has to myself, and I therefore take the liberty to ask for space for it in your valuable and most catholic and liberal of all medical journals in this country.

I remain, with profound respect, yours faithfully,

Charles R. Drysdale, M.D., M.R.C.P.L., F.R.C.S.E.

2 Rue de l'Université, Paris, 27th June, 1870.

My Dear Colleague,—I have received with great pleasure the number of the Medical Press, and I thank you warmly for your amiable attentions to me. The number of illegitimate children is just as you remark, in the proportion of one illegitimate child against less than three legitimate children; but I do not see that divorce, if made more facile, would change anything in this respect. In fact, if the working man (in France) does not marry, it is not because he fears to undertake an engagement which is with difficulty broken by legal means. The workman fears to give up his liberty, and to fall into misery in giving himself up to nourish a wife and children. He finds a work-girl who consents to be his mistress, he frequents her, but he rarely lives with her. If she becomes pregnant, he quits her without remorse, and seeks for another. The woman, on her side, does not hold out for marriage, because the looseness of morality (*relachement des mœurs*) brings it about that among the working classes there is scarcely any difference made between the legitimate wife and the concubines.

Is it the absence of facility of divorce which has gradually caused this condition of things? I do not think so. The true cause consists in this, that in Catholic societies religion teaches dogmatic morality, but not morality *independent of religion;* when scepticism and free examination have shown all the absurdities of the Catholic religion, the workman, not being sufficiently educated to understand the laws of natural morality, and having abandoned his religion and the morality which rests on divine prescription, has no longer any rule to direct his conduct, except instinct. Between England and France there are profound differences, sometimes to the disfavour of one, sometimes of the other; public opinion is very

different. It is for this reason that it is difficult to judge concerning either people by a citizen of the other ; and, that I may not leave the subject of prostitution, I may observe that a measure which would prove excellent in England would produce no result of utility in France. Such is the principal reason of the divergence of opinion which exists between us on several important points.

Bien à vous,
(Signed) Leon Lefort.

P.S. It seems to me that M. Lefort has quite shown us that the Catholic marriage without divorce is *one* great cause of the illegitimacy of Paris. He says that the workmen have quitted that faith, but have no other. Why, then, does not the French Government endeavour to show them that it holds that faithful domesticity is far more noble than the evanescent unions he says are so common, by giving the sanction of society or natural morality to unions less stringent than the Catholic Church permits—*i. e.*, to marriage with greater facility for divorce.

C. R. D.

THE LATE SIR J. CLARK, BART., M.D., K.C.B., F.R.S.

Another of our veterans have passed away. Although the late Sir James Clark had of late years retired from practice, yet he still remained emphatically the Queen's Physician, taking part as Her Majesty's senior medical adviser and friend in all consultations, and frequently alone in attendance. He was born in December, 1788, and so had nearly reached the age of 82. He went to Aberdeen, entering at King's College, of which subsequently he was M.A. From thence he went to Edinburgh. He entered the Navy as assistant surgeon, but in 1815 he left the Service and resumed medical studies at Edinburgh, where he graduated M.D. in 1817. Dr. Clark travelled much on the Continent, thus preparing the material for his work on Climate, which appeared in 1828, and has ever since been more or less looked upon as a valuable authority. In spite of all that has since been written on this subject, we constantly find Dr. Clark had anticipated much now offered us as new. Prior to this he had spent eight winters at Rome, where he made the acquaintance of Prince Leopold of Saxe Coburg. It was this which led to his success: that Prince on his settling in England made him his physician, and this led to his succeeding Dr. Maton as physician to the Princess Victoria, so that on Her Majesty's accession to the throne he was gazetted as first physician to the Queen. In his work on Climate he ably set forth the claims of the Isle of Wight as a health resort, and the Undercliff, which he particularly pointed out, is still looked upon by many as more adapted for English invalids than any Continental winter climate.

Sir James Clark was placed on the Senate of the London University on its foundation, and he took a lively interest in other schemes of an educational kind. In a pamphlet on Clinical Instruction he pointed out many a neglect that has since been remedied in education and examination. He was a thorough medical reformer, a strong advocate of the one-faculty system, a friend of the general practitioner, and an opponent of those corporati on abuses which have so degraded the Profession. When the London College of Physicians, late in the day, offered him its Fellowship, with the true spirit of a reformer he declined the honour of being elected in a manner that has always been unsatisfactory ; consequently, he remained to the last outside the magic list of Fellows—an example we wish a few more would follow. On the change of name of the old Licentiates to the new grade of Member he consented to be thus classed, so in this year's list of the College his name appears as the eleventh in the Members, his date being 1826, and ten others surviving who had joined earlier (from 1814 to 1824). Perhaps his decease among the Members may remind the Fellows of the work that exists outside them, and make them promote the Members a little faster. The only painful part of the late physician's career related to the case of the late Lady Flora Hastings He was much blamed in many quarters, though his friends declared he could clear himself but for his position at Court. Whoever was to blame, there can be little doubt now on any one's mind that Lady Flora was killed by the aspersions cast upon her. It was demonstrated that she never had been pregnant, and yet she had to endure the disgrace that attached to such a charge. It was a sad, sad case, and all who are familiar with the sweet sadness that pervades her poems cannot but keenly feel for the misery that urged her to an early tomb. Innocent, yet knowing that the majority thought her guilty—bearing too with her the load of that disease which simulated pregnancy—she pined away and died—a victim to Court gossip, aided by erroneous diagnosis.

We pass from this to remark that for many years Sir James enjoyed not only the friendship of the Royal Family, but that of many distinguished men in science and literature. Besides his chief work which we have named, and his "Treatise on Consumption and Scrofula," he wrote in the *Cyclopædia of Practical Medicine* and in other quarters. He also took a part in establishing the *Medico-Chirurgical Review*.

He remained to the last interested in his brethren and in many institutions, and belonged to many Societies. He was a Vice president of the Scottish Universities Union, an Association which has thus within so short a time lost two of its Vice-presidents, both of them Baronets, both medical men—the subject of this notice, and the late Sir J. Y. Simpson.

Medical News.

Biennial Festival of the Hospital for Diseases of the Throat.—This Festival was celebrated at the Freemasons' Tavern on June 29th, under the presidency of the Right Hon. the Earl of Powis, who was supported by Lord William Lennox, Rev. Dr. Brock, Rev. H. R. Haweis (chaplain to the Institution), Dr. Morell Makenzie, Dr. Billing, F.R.S., Captain Butler Fellowes, C.B. Rev. Dr. Bell, M.D. and Messrs. Lennox Browne, G. A. Smith and others. In proposing the toast of the evening, "Prosperity to the Hospital for Diseases of the Throat," the noble chairman drew attention to the fact that since the establishment of the hospital in the year 1863, it had relieved upwards of 24,000 poor persons. Many of these had come from the most remote parts of England, on purpose to seek advice at the hospital. The hospital was entirely free to all the necessitous poor of the land, and, having no endowment, it was entirely dependent on voluntary subscriptions for its support. The chairman coupled with this toast the name of Dr. Morell Mackenzie, who was received with the warmest applause when he rose and in a speech that, though short, was well to the point, returned thanks for the hospital and its staff. Dr. Mackenzie briefly narrated the rise and progress of the hospital up to its present condition ; he said what they now wanted was to purchase the freehold of the hospital and get more room for their patients, who were outgrowing the space afforded by the hospital for their accommodation. Dr. Mackenzie fully agreed with the views of Captain Galton that it was a mistake to make a hospital a splendid and costly pile of architecture designed to last to the end of time ; a hospital should rather be a building designed to stand but for a period of years, so that when it became unhealthy from the constant impregnation of its walls and timbers with the exhalations of the sick, it could be pulled down and built up again all fresh and clean. Among other speakers were Mr. Brudenell Carter and Rev. Dr. Bell ; this last gentlemen, touching on special hospitals and specialisms, said that a man to be a really skilled specialist must have a good sound general knowledge first from which his special line of practice gradually developes and becomes prominent. The sum of over 1,000 guineas was subscribed during the evening, and of this the noble chairman contributed 50 guineas, Mr. Crook £50, and several of the City companies and firms gave 10 guineas. A donation was also received from Lord Hyde, though he was not able to be present in person, owing to a well known bereavement in the family.

English Poor-law Medical Officers' Association.—The meeting takes place this evening. From the annual report of the Council to be submitted we learn that one hundred and twenty new members have been enrolled during the year. Several deaths have to be lamented, especially that of the venerated Richard Griffin. The annual balance sheet shows the finances of the Association to be in a healthy condition, the balance of £58 carried forward last year being somewhat increased. The expenditure has been heavy, principally owing to the arrangement entered into with the publishers of the *Poor Law Chronicle* for the supply of that Journal to the members. Your Council express the gratitude of the Medical Officers to the President of the Poor Law Board, to Dr. Brady and the other gentlemen who spoke in support of the Superannuation Bill, and to the 139 who voted in its favour. By this one of the "objects" of the Association, viz., "to obtain superannuation allowances for the Medical Officers," is achieved; Medical Officers are now placed on the same footing as other Poor-law Officers with regard to pension. The Council say they cannot sufficiently express the obligations the Association owes to the medical journals for the constant sympathy and support it has received in their columns.

Novel Method of Illustrating Disease.—On Monday the 4th inst., according to the notice given by this journal, Mr. Balmanno Squire showed his method of demonstrating skin diseases. The room having been darkened, magnified images of the patients themselves were thrown considerably larger than life size on the spacious screen of the theatre by means of the dissolving-views apparatus, so that all the details of the various eruptions were plainly visible even from the most distant parts of the theatre, and were equally discernible by every member of a large audience. Mr. Squire after giving a *resume* of the acknowledged difficulties of imparting a practical knowledge of the medical art to students, proceeded to show, by the crucial test of actual experiment with the examples brought forward how that the method he submitted would dispose at least of the more serious of these difficulties, and explained that it was not only applicable to the department of practice that he himself followed, but was capable of wide extension to the subject of medical education generally. The plan he proposed would, by magnifying the object to be demonstrated, enable every detail of it to be seen by every member of a large class, and to be pointed out to all of them by the lecturer at the time he was describing it. More than this, it was known that, even if disease would consent to stand still in its most instructive phase util the time that it was wanted for the purposes of instruction, common humanity prevented our withholding relief from the sufferer in order that other sufferers might benefit by the instruction to be derived from him. But, by the method proposed, the patient might be instantaneously photographed in his most instructive phase before either the natural progress of his disease or its amelioration under the resources of art has impaired its utility as a means of conveying instruction, and at the same time, in cases where colour formed an important feature of it this could be added to the photograph itself by an expert artist working under the eye of the teacher himself. In the case of cutaneous disease, the most difficult of all subjects to illustrate by these means, colour was certainly a most important feature. But he appealed to those he saw around him, many of whom he knew to be well versed in this special subject, whether the illustration he had brought before them were not in colour as well as in form and shadow sufficiently life-like to afford a lecturer ample opportunity for pointing out to a class of students all the essential peculiarities of each disease and to enable those students when they entered upon private practice to recognise at once the nature of similar cases whenever they might meet with them.

Sunstroke.—The three following deaths have been registered as caused by sunstroke: a butcher, aged 59 years, died on the 23rd June at Middlesex Hospital, of sunstroke; a girl, aged 6 years, died on the 27th of June, at Bethnal Green, after eleven days illness, from the same, and a boy, aged 5 years, died on the 25th of June, at Poplar, "sunstroke (5 days) convulsions."

Apothecaries' Hall, Blackfriars.—At a Court of Examiners, held on Thursday the 30th ult., Mr. F. W. Willmore, Walsall (Birmingham School of Medicine), was admitted a licentiate of the Society of Apothecaries'; the following passed the primary professional examination, viz:—Messrs. J. W. Fordham and Cyrus James, of the London Hospital; J. E. Richards, of University College Hospital; Thomas Strafford, of St. Bartholomew's Hospital; J. M'Dougal Tudge, of Guy's Hospital; and Samuel Wilson, of the Newcastle-upon-Tyne School of Medicine.—The following were admitted Licentiates on the 7th instant:—Frederick Barton, of St. John's Wood; Henry Parmiter, of Dorchester; and William Vickers, of London.

University Life Assurance Society.—The quinquennial statement of this old established Society has just been issued. From it, and from personal knowledge, we gather that it is in a most flourishing condition, and with the uncertainty and want of confidence at present existing with regard to life assurance societies, it is pleasant to turn to such as this. Established in 1825 for, and maintained ever since solely by University men, it is enabled to declare the enormous balance, applicable to quinquennial division, of £166,619. When we consider that this sum represents clear profits over the working expenses of the past five years, and that the insured may take their bonuses without the semblance of doubt as to the legitimacy thereof, or safety of the undertaking, it naturally suggests that the examiners are more particular as to the lives they accept; that university men are longer livers than the general public, and that the basis is sound and the management everything that could be desired.

Cancerous Degeneration of the Stomach and Emphysema Pulmon um, Treated with Oxygen Gas.

The *New York Medical Gazette* reports a case thus:—Mrs. P., aged sixty years, very anæmic; was in December of 1869, attacked with pleuro-pneumonia of the left side. After recovery, the patient began to suffer from frequent vomiting, which occurred once or twice every week without any provocation, as it often took place in the morning before she had eaten anything. She also suffered from constipation, requiring the frequent use of laxatives. There was at times a tenderness of the whole gastric region, but no tumour could be felt anywhere, except a slightly hardened spot over the ascending colon, whenever deep pressure was made. The position and size of the liver were normal. Her general appearance was cachectic, the colour of her skin being of a yellowish hue.

In the beginning of March, she began to suffer from dyspnœa, occurring at first only during the night. As both percussion and auscultation showed the lungs to be in perfect order, I supposed the dyspnœa to be the result of nervous asthma, and prescribed morphine in the usual dose. Within a few weeks, however, emphysema pulmonum was rapidly developed, the dyspnœa increased, and finally the patient was unable to get any sleep, or even to remain in the recumbent position. I now ordered the inhalation of the oxygen, expecting of course, only to alleviate the urgent dyspnœa, and to render the patient more comfortable. In this I succeeded admirably. The inhalation of three gallons of the gas relieved the patient greatly, allowing her also to sleep during the greater part of the night, which had not happened before for over a week.

The patient died from exhaustion, April 19th, 1870. I was not permitted to make an autopsy.

NOTICES TO CORRESPONDENTS.

ON VACCINATION.

To the Editor of the "Medical Press and Circular."

DEAR SIR,—Will you kindly give a few words in review of the enclosed "Handbill on Vaccination," and very much oblige,—

Dear Sir, your obedient servant,

Worcester, July 5th, 1870. WILLIAM W OODWARD, M.D.

Extract:—"*The statistics of all countries distinctly prove* that the deaths, loss of sight, and disfigurement from small-pox diminish in proportion to the practice of vaccination. Before vaccination was discovered, small-pox caused *half a million deaths* in Europe annually, of which *eighty thousand* occurred in Great Britain and Ireland; while a considerably still greater number lost their sight and were disfigured for life from the same cause. Now wherever vaccination is stringently enforced, small-pox is unknown. It has disappeared from Ireland, where vaccination is universal, almost entirely from Scotland, where 90 per cent. of the population are vaccinated, and the disease is only lurking in England in places where it has been imported, or where vaccination has been neglected. The fact that the nurses at the Small-Pox Hospi-

tal (who are all regularly re-vaccinated) have never taken small-pox, is asufficient proof of the power of vaccination over that disease."

⁂ It gives us very great pleasure to notice some of the arguments contained in Dr. Woodward's "Handbill of Vaccination." The deplorable ignorance of Professor Newman and other well-meaning gentlemen on most matters connected with pathology, have rendered them bitter opponents of the Compulsory Vaccination Acts. Happily, the nation at large is not of the opinion of these gentlemen, or we should have the mortality of Paris from small-pox 250 a week, re-enacted in London before long. If Mr. Newman and his friends in the "Co-operator" would but look at the admirable little work of Dr. Guy on hygiene, recently published in the form of "Lectures on Public Health,' they would, we feel almost persuaded, be inclined to abandon their crusade against the greatest medical discovery ever made,—that of vaccination as a prevention of small-pox.—Ed. M. P. & C.

ENTIRE LOSS OF SPEECH.

To the Editor of "The Medical Press and Circular."

Sir,—Under the above head Dr. Waring-Curran has described an interesting case which occurred in his practice.

To show the entire loss of the faculty, I quote that gentleman's words:—"No human sound of any kind can escape her; she is more mute than the most dumb patient I have ever seen." Farther on in his paper are these words:—"The case demonstrates, however simple a disease typhoid fever may appear to be, how disastrous it may prove itself by causing afflictions like the present, *which no art can modify, nor method of treatment remedy.*"

To this harsh opinion I cannot but take exception, and I am sure that Dr. Waring-Curran will agree with me that there is reason for my so doing, since it *is* in the power of art to modify such a defect as he describes, and of treatment to remedy such a loss.

"There is no paralysis, no symptom of cerebral mischief, no wasting of any of the muscles, nothing unusual *to be observed* about the throat or tongue; there is perfect power in all the limbs." If there be "no cerebral mischief," it occurs to me that the cause of the aphonia lies in paralysis of the vocal cords (in which, of course, there would appear to be "no paralysis, no symptom of cerebral mischief, &c., &c."): and then the treatment by external galvanism to the throat and neck, and by internal galvanism to the vocal cords themselves by means of Dr. Morell Mackenzie's instruments, would, with the aid of the administration of strychnine, restore the voice and the power of speech. I have had not a few cases similar to that described by Dr. Waring-Curran, with the exception that the utter inability to make any sound in the throat did not follow typhoid fever, and I am able to say that the power of making a sound, and the faculty of speech, were restored by the means I advocate. It was only yesterday the following case came under my notice:—

J. T. presented herself some time since at the out-patients' department of the Hospital for Women and Children, complaining of total loss of speech, and of the power of forming any sound in the throat. This had been going on for some time before she had applied to me for relief. She was put on strychnine and ammonia, and galvanised morning and evening, the poles of the battery being opposed externally. The power to form sound, and to fashion the lips, &c., so as to frame words, was brought back in a few days, and soon the faculty of speech followed. Considering herself cured, she discharged herself, but had shortly afterwards to apply again. The same benefit from treatment resulted, but as the voice did not permanently remain, I asked Dr. Morell Mackenzie kindly to admit her into the Hospital for Diseases of the Throat, which he at once did. Yesterday she came to me speaking as well as ever. It will, however, need a little time to test whether temporary or permanent relief has been afforded.

By means of galvanism and suitable internal treatment, I have been enabled to restore sight, where that sense was even wholly lost; to make the deaf to hear, as well as the blind to see and the dumb to speak, and the halt and the lame to walk aright.

In reading over Dr. Waring-Curran's article a second time, I notice he says, "Everything has been done that science and art could suggest to restore the voice;" but if he has not tried the plan I have advised, I should commend it as worthy of a fair trial.

G. de Gorrequer Griffith, L.R.C.P., Lond.,
Senior Medical Officer to the Hospital for Women and Children.

VENTNOR COTTAGE HOSPITAL AND ITS CERTIFICATES.

To the Editor of "The Medical Press and Circular."

Sir,—I quite agree with your article on the letter of your correspondent last week, as to the abuse you have so properly denounced.

I, too, have been asked to fill up these lengthy forms. I have always objected to fill them up, but have done so out of a feeling of charity, as the poor patients would otherwise be refused.

I believe, however, that in the case of the vaunted Ventnor concern, the majority of applications are refused.

Alpha.

Obscene Advertisements.—We, who have done no little in the field of endeavouring to purify the columns of the daily press, delight to find that our able contemporary, the *Saturday Review* has gone to work with a will for the past few weeks in exposing some of the contumely connected with indecent advertisements, whilst there is recommended a system for disinfecting the journals such as that long since advocated by our correspondent, "Justitia," in these columns, and endorsed by ourselves. We are glad to find that our own remarks, combined with those of the *Saturday Review*, have purified the columns of the *Standard*, *Daily Telegraph*, and *Observer*. We regret, however, to find the *Morning Advertiser* so stupid and blind, ultimately, to its own interests, for unless a radical and sweeping change is effected in refusing the insertions of the quacks' advertisements, we must ask our professional readers not to subscribe to the paper. We agree with the *Saturday Review* that the *Standard* should not admit even in the hour of penitence and purification, such advertisements as speak of ladies for *corps de ballet*, "who must be well formed, and of good personal appearance," &c. Papers admitting such advertisements we must not allow our daughters or sisters to peruse. "To the pure," of course, "all things are pure;" but the corruption and vileness of *Reynolds's* and *Lloyd's* are too much for a refined mind to bear. We submit the Manchester papers—the *Manchester Courier* and the *Manchester Examiner*—together with the provincial press of England, need also a thorough cleansing, and we agree with the general tenor of the remarks made by the *Saturday Review*, of July 9th, that if such journals cannot be reasoned into decency and propriety they can be *starved* into it. We ask all fathers and heads of families to look to the morning papers, and admit no organ which represents the charlatan, stoops to immorality, and trades upon indecency.

M.D. (Calcutta) informs us that the question of over-population and large families is exerting great interest in India, where "many parents are so poor, that they foresee their children must be paupers." He will scarcely expect us to reply categorically to his questions.

Dr. Henry Murray.—Your letter has been forwarded to the secretary, who will doubtless reply to your inquiries.

How not to do it.—A correspondent of the *Times*—"Sperans"—writes to the effect that a few years ago he bequeathed a few thousand pounds to produce quite £200 per annum to St. George's Hospital; but, finding from a newspaper report that a retiring official of the institution was asked to accept a pension of £200 a year, "Sperans" changed his mind, and altered his will. We venture to inform "Sperans," had he consulted the Governors of St. George's Hospital, the newspaper report which produced so serious an injury to the hospital fund could have been satisfactorily explained.

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

Half-Yearly Journal of Mental Science.
Braithwaite's Retrospect. London: Simpkin, Marshall, and Co.
Half-Yearly Abstract of the Medical Sciences. London: John Churchill.
On the Primitive Vegetation of the Earth. By J. W. Lawson, F.R.S.
Cholera and Choleraic Diarrhœa. By George Johnson, M.D. London: John Churchill and Sons.
Vital Statistics of the Borough of Salford. By Dr. Syson.
Las Ciencas Medicus. Pacific Medical Journal. California Medical Gazette. British Journal of Dental Science. Nature. Homœopathic Review. Journal of Homœopathy. Le Mouvement Médicale.

VACANCIES.

Charing-Cross Hospital—Assistant-Surgeon.
Hospital for Women, Soho square—Surgeon.
Birmingham Lunatic Asylum—Assistant Medical Officer. Salary, £80.
Preston Royal Infirmary—Junior House-Surgeon. Salary, £60.
Worcester Infirmary—Assistant House-Surgeon. Salary, £50.
St. Mary's Hospital, Manchester—Two Out-door Medical Officers. Salaries, £60.
Lincoln Dispensary—House-Surgeon. Salary, £120.
Lancaster Union—Medical Officer. Salary and extras about £70.
Liverpool Royal Infirmary—Demonstrator of Anatomy.
Anderson's University—Professorship of Scientific Chemistry.
University of Durham—Medical Tutor. Salary, £120.
Middlesex Hospital—Physician's Assistant.
Berkshire Hospital—House-Surgeon. Salary to commence at £60.
Newport Union, Monmouthshire—Medical Officer for each of five districte of, the Union. Salaries, £30, £40, £40, £40 and £45, respectively.
Leeds Dispensary—Assistant Resident Medical Officer. Salary, £60.
Ashton-under-Line Infirmary—House-Surgeon. Salary £80, with board and residence.

APPOINTMENTS.

Alexander, R. R., M.B., Assistant Medical Officer at the Buckinghamshire Lunatic Asylum, Stone.
Bennett, J. H., M.D., Medical Officer to the Redcar Board of Health.
Derry, B. G., M.R.C.S., Assistant Medical Officer at the Cornwall Lunatic Asylum, Bodmin.
Dickinson, E. H., M.B., House-Physician to St. George's Hospital.
Harrison, A. R., M.D., Resident Medical Superintendent of the General Lunatic Asylum, Douglas, Isle of Man.
Haward, J.W., L.R.C.P.L., F.R.C.S., Assistant-Surgeon to the Hospital for Sick Children, Great Ormond street.
Holroyd, W. S., M.R.C S., House-Surgeon to St. George's Hospital.
Jessop, T. R., F.R C.S., a Surgeon to the General Infirmary, Leeds.
Keyth, W., M.D., Consulting-Surgeon Royal Infirmary, Aberdeen.
Mitchell, H., M.B., Medical Officer for the Cockermouth District No. 2 of the Cockermouth Union, Cumberland.
Nunneley, F. B., M.D., additional Assistant-Physician to the Hospital for Sick Children, Great Ormond street.
O'Connor, J., M.D., Medical Attendant to the Constabulary, Ardfert.
Rayner, Dr, Assistant Medical Officer at the Bethlehem Hospital for Lunatic
Rutherford, J., M.D., Medical Superintendent of the Argyll and Bute Lunatic Asylum at Lochgilphead.
Shaw, T. C., M.D., Medical Superintendent of the Metropolitan Asylum District Asylum at Leavesden.
Thomas, J. D., M.B., F.R.C.S., Resident Medical Officer at the University College Hospital.
Thursfield, W. N., M.D., Officer of Health for Wellington, Salop.
Williams, J. F, L.S.A.L., Medical Officer and Public Vaccinator for the Eythorne District of the Eastry Union, Kent.
Wood, J., L.A.H.D., Resident Apothecary at the County Infirmary, Cashel, Co. Tipperary.

Marriage.

Stone—Hooper.—On the 11th of July, at West Lavington, Wilts, by the Rev. Matthew Wilkinson, D.D., Prebendary of Salisbury, Wm. Donnett Stone, M.D., F.R.C.S. (exam.), of 31 Myddelton square, to Emily Josephine, only daughter of William Hooper, Esq., of Littleton House, West Lavington.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JULY 20, 1870.

CONTENTS.

Original Communications.

EXPERIENCES OF A REGIMENTAL SURGEON IN INDIA.

By G. A. Gordon, M.D., C.B.,

Deputy Inspector-General of Hospitals.

(Continued.)

Cholera.—The notes upon which my present observations are based, range at intervals from 1841 to 1867. Some refer to actual personal experience, some to cases casually seen in course of inspectorial duties, while others are the result of perusing official documents, as well as the works of army surgeons who are, from their position, capable of expressing themselves with some degree of authority upon the subject. I am well aware that of late years the phenomena of cholera and the laws according to which it would appear to be regulated have been investigated with a degree of care and by the aid of scientific appliances unattainable at the time to which my earlier observations refer; yet, how far knowledge in regard to these two important points has been advanced beyond the point at which it then stood is a question, the solution of which must, I fear, be left to individual thinkers.

With these preliminary remarks I would observe that, like all other medical officers who have been some years in India, two forms of the disease have come under my notice, namely, the asphyxiated and the spasmodic. The former is of comparatively unfrequent occurrence, but its attack is, in the great majority of instances, fatal; the latter is the form which usually prevails epidemically, and although it also is unfortunately fatal in a ratio almost beyond any other disease which now affects our troops in India, it nevertheless leaves room for treatment, and affords recoveries in so many cases, even of the most desperate nature, as to encourage us in continuing our remedies when their use is based upon scientific principles. These two forms are not recorded separately in statistics of regiments, so that it is practicable to state the actual ratio in which they respectively occur, neither am I now in a position to represent in figures the precise extent of, and mortality among, the various classes of persons borne upon a regimental establishment. In the records of the 10th Foot, however, I find accounts of 162 cases as treated from time to time. Of these, 85 were fatal among the soldiers, giving a ratio of mortality of 52·46 per cent.; of three officers attacked, all died; of 24 women 17 succumbed, or 76·83 per cent.; and of 10 children attacked, 8 died, or a ratio of 80 per cent. In some of these instances the disease attacked isolated individuals, but in the great majority it prevailed in epidemic form, and when it did so its rate of mortality was greater than under the former circumstance.*

The records of the regiment clearly show that the disease prevailed most extensively and severely during the first four years of its Indian service. The actual cases of the malady are stated to have been on an average 120 per annum during that period, the average yearly number for the subsequent nine years being 43. These facts are quite in accord with what has been noted by other observers, for it is now acknowledged that although the danger is undoubtedly great of cholera appearing in a regiment during the earlier period of its Indian service, yet epidemics of this disease often occur in what used to be called *seasoned* corps as well as individuals; that in the case of persons their greatest liability to such attack is first in the early period of their residence in the country, and again when they have spent many years in its exhausting and *malarious* climate.

As to the precise nature of cholera, or of the influence upon which the disease primarily depends, it may, I think, be confidently asserted that, notwithstanding all the care and scientific acquirements of the able men who have set themselves to the investigation of this point, our actual stock of definite knowledge regarding it is little if at all more satisfactory than it was many years ago. True it is that we may be upon the threshold of discovery, yet the

* See also a paper on this disease by the present writer, *Med. Times and Gazette*, Nov. 22, 1856.

condition as at present existing is as I have stated, and I much mistake if some of the remarks on the disease published in 1846* are not quite as applicable now in 1870 as they were when first written. At that time I had witnessed two outbreaks of the disease in India, namely, one in the Buffs in 1843, while the regiment occupied the fort of Allahabad, and again the following year on the return of the corps to that station after the campaign against Gwalior. I then observed that were the question asked What is cholera? nine-tenths of the Profession would answer, and correctly, "I do not know." "All we do know is, that the disease is generally attended by profuse vomiting and purging of a clear liquid resembling rice water; and from the immense quantities evacuated we can only account for its generation by supposing it to be the serum of the blood, of which there is hæmorrhage going on from the inner surface of the stomach and bowels." Can it yet be asserted that, as regards true knowledge of this subject, we are in a better position than we then were? Nor is it in regard to cholera alone that a similar remark is applicable. In the great majority of *morbid* conditions, and in the ordinary manifestations of the *vital* functions, we are accustomed to observe definite processes as taking place, but when we endeavour to trace them back to their ultimate causes we speedily find ourselves dealing with mere abstractions. This fact must be familiar to all who have endeavoured to trace up the causation of disease to its primary source, and, therefore, I need now only remark that we are probably neither in a worse nor better position in regard to our theories as to the origin of cholera than we are of many other diseases which we are accustomed to speak of as depending upon *malaria*, climatorial influences, epidemic influences, septic conditions, and so on. What really are all such terms but mere abstract expressions?

An attempt has indeed been made to define the actual influence upon which the disease cholera depends, but it is almost needless to observe the definition has merely resolved itself into words; the actual conditions have not been demonstrated. Thus we read in one place the actual cause described as consisting of an unknown something the essentials for the development of which include 1. The cholera miasm; 2. Humidity, and 3. The prevailing wind; that it is earth born and air conveyed; again, that the cholera germs lie hidden in the ground, that occasionally they are extricated in sufficient quantity to develope a few cases of the disease, and that when the atmospheric condition, including air and water, is favourable to the *cholera seed*, the disease becomes developed in its full vitality. These are indeed not the actual words employed by some modern writers on the subject, but they indicate the purport of speculations intended to take the place of established facts.

It is true that of late years various circumstances have been observed which would seem to indicate that an alliance of no distant kind exists between cholera and certain forms of fever. In reports of medical officers stationed at Peshawur, I, on many occasions between 1862 and 1867, observed remarks to the effect that such apparent alliance between cholera and intermittent fever had been suspected by them; that, in fact, in many instances, it was not possible in the very early stages of the attack to prognosticate whether the symptoms were those of cholera or of the severe form of ague prevalent in that insalubrious valley; at Calcutta I have had occasion to observe a similar circumstance, and statistics prove that epidemics of cholera are in many instances followed by epidemics of fever. Medical officers who have served in the West Indies as well as in India, have, moreover, remarked that in not a few cases the character of the disease reminds them much of what they had observed in yellow fever. I have myself seen two cases in which this was particularly apparent, namely, one that of an officer in Calcutta, and a second in the person of a soldier at Tientsin in China. In both, *black* vomit was unequivocally present, and in both the attack was rapidly fatal. May I also refer to my papers on "Army Surgeons," * in the *Medical Mirror* for 1868-69, for further evidence as to the supposed relationship of these two terrible forms of disease? These circumstances may no doubt indicate the fact, so often expressed by army surgeons, that geographical position and conditions connected with physical geography, climate, &c., modify the phenomena produced by similar causes, but they do not enable us to arrive at any more definite views than we already entertained as to the ultimate nature of that cause.

Adverting to the manner in which the disease makes its attack and is propagated, the experience of our army medical officers is very much in accord. They know that the disease may and does prevail, not only in different parts of India, but in the same stations at different periods of the year, and that in the great majority of instances the outbreak of an epidemic is preceded by a marked prevalence among the soldiers of diarrhœa, although there are exceptions to this rule. The results obtained from a study of the records of the 10th Foot are quite in accord with general experience that the disease usually begins in Bengal during the earlier part of the year, and gradually travels from that point towards the north-west. They moreover indicate that the course of the epidemic is not under all circumstances thus regular. For example, in 1845, when cholera occurred and prevailed fatally in that corps and the 9th Lancers at Meerut in 1845, the epidemic without doubt reached that station from the westward. In confirmation of the view that the disease does not in all cases occur in the North-west Provinces as an extension of the disease from Lower Bengal, I would refer to what Dr. Macpherson † says on this subject. He believes the common notion to this effect to be groundless, and the importance in regard to the disease attached to the Gangetic valley to be quite exaggerated. Among other facts he mentions the occurrence of the disease among the pilgrims of Hurdwar in 1783 without any recorded connection with Bengal; that similarly in 1816, it occurred to all appearance, spontaneously among a tribe of gipsies halting at Sahibgunge; that in 1781 it was introduced into Bengal, having probably come down the Gangetic valley.

On more recent occasions its progress has been found to be irregular; the epidemic not only missing places in its onward progress, but actually doubling back upon itself as it were, and devastating those very stations or villages which it had at first spared. In other instances it has been found to spread in all directions from a place or a body of persons affected, as if from so many distinct foci, while in still another set of cases it has suddenly appeared at several places at great distances apart, the intervening towns and districts remaining free and throughout the season completely exempt from it.

Among other characteristics of the disease I may observe that outbreaks seem to have no reference to the prevalence of particular winds or "monsoons;" that cases do not occur continuously in barracks, houses in cantonment, or even in towns and districts; and that although in the great majority of instances communication can be traced between the affected and persons or places subject to the disease, yet it is not always possible to establish any such connection. It is impossible to do so in what are called sporadic cases of the disease, and often in the case of ships in which it suddenly appears many days after being at sea.

Unquestionably, the malady in many instances seems to become localised in the most filthy part of cantonments and cities. This is not always the case, however, as illustrated during the attack among the Buffs at Allahabad, for at the very time the men of the 3rd Foot were severely visited by it, notwithstanding their being carefully managed as regards cleanliness and accommodation in barracks, the

* Principal Diseases of India. Published by Trelawny Saunders.

* Published separately by Lewis of Gower street.

† Cholera in the East.

native inhabitants of the neighbouring dirty and crowded baazar were comparatively exempt.

A point of considerable importance in reference to the history of this disease is the fact that although the occurrence of accidental or sporadic cases is, in many instances, preliminary to an outbreak of the malady in epidemic form, yet they are not necessarily so ; while, on the other hand, an epidemic may suddenly burst upon a station or body of troops without the occurrence of any conditions to account for the circumstance. The most delicate chemical experiments have hitherto failed to detect any difference in the condition of the atmosphere on such occasions as compared with times when the disease is altogether absent, and the supposed prevalence of *fungi*, *blue mist*, and various other apocryphal existences must as yet be looked upon as constituting more a plausible and convenient theory than as established facts. We do know, however, that whether an epidemic attacks suddenly and unexpectedly, or advances steadily from more distant stations, whether preceded by diarrhœa or not, its greatest mortality takes place for the most part in its earliest period. It may disappear as suddenly as it occurred, or, according to a common expression, gradually expend itself ; it may continue onwards in a definite course, may as it were retrace its path as already mentioned, or seem to altogether disappear, either for that particular season or for several weeks. It has generally been considered that the occurrence of a thunderstorm such as are frequent in India conduces to the termination of an epidemic of this nature. No doubt such is the case in many instances, but that the rule is by no means invariable was proved on the occasion of the outbreak already mentioned as having taken place at Meerut in 1845. On that occasion the disease seemed to burst upon the station immediately after the occurrence of such a storm, and with this peculiarity, that its early violence fell more severely upon the officers and their families, than upon the soldiers and theirs. The commanding officer and the wife of the surgeon were among its earliest victims.

At the time to which my remarks chiefly refer, the number of stations occupied by British troops in India was far fewer than they have more recently been. The greater number of them were erected either on the banks of or adjoining the larger rivers, and then it was observed that this disease seemed also to travel along the course of those streams, although, perhaps, more frequently upwards than according to the current of them. It was, however, well known that the onward progress of an epidemic was interrupted by the occurrence of a river in its track, and that certain parts of a river's course seemed never to be free from the presence of this disease. Several years have now elapsed since it was customary to send our soldiers in country boats by river to the more inland stations, or down to Calcutta from them. Steamers with the large troop boats attached to them superseded the miserable boats in which soldiers were formerly transported, and steamers have now in their turn been surpassed by the railway. During the many years, however, that troops were conveyed in the manner first mentioned, medical officers in charge of them knew well that danger always existed. When the fleet had to "come to" for the night upon a low-lying shore several cases of cholera might, as a matter of course, be looked for, while there were particular tracts along the river course, in traversing which a more or less severe outbreak was tolerably certain to occur ; yet in neither case did any circumstance present itself materially different from the ordinary conditions of the voyage. One well-known tract of this kind existed during several miles of the river course between Bhaugulpore and Monghyr. There the Ganges, which during the dry period of the year was scarcely a mile in breadth, became so large during the rains as to extend to a breadth of ten or even upwards. The district being not only very flat, but the soil of rich alluvium, tracts which, during the rainy season were completely submerged, were left uncovered during the dry seasons, and thus became prolific sources of emanations from organic matters deposited in and upon them ; but then again the same remark applies with more or less force to other portions, of the Gangetic valley, and hence, I fear are not here of themselves sufficient to account for the disease having domiciled itself at the places mentioned.

But there are certain localities distant from rivers where cholera is similarly domiciled—but such I am able to speak of from my own knowledge. It occurs at Raneegunge and from thence some distance along the grand trunk road, or, in other words, in the coal district there ; and there are probably readers of these pages who, when marching with troops by the road in question, have had painful experience of the circumstance. When a very few years ago the 55th Regiment landed in India, detachments as they disembarked, were sent by the road in question *en route* to Hazarabagh, and while on the march suffered very severely from an outbreak of the disease which occured as each in succession arrived at Raneegunge, and clung to them during their earlier marches.

It has generally been considered, and I belive with good reason, that this disease is most prone to attack persons residing upon or near ground floors of houses in India. There may, however, be exceptions to this, the epidemic appearing under certain conditions to leap, as it were, over a wall, attacking the occupants of the upper story to the comparative safety of those below. Of this an illustration occurred in my own experience very lately. When in 1863 cholera prevailed at the military station of Benares, a building formerly used as a mint was by the Rajah of that place given over for occupation by a portion of the 20th Regiment, so as to reduce the numbers in barracks. This building consisted of two stories ; an enclosure around it was bounded by a high wall, so as to cut it off from the adjoining native bazaar. The disease seemed to advance through the bazaar, and in its progress reached the building in question. Instead, however, of the men accommodated in the ground floor being the first attacked, those in the upper storey were so. In fact, I am under the impression that the latter altogether escaped, although upon this point I cannot now speak positively.

It almost amounts to a platitude to remark that among the circumstances which, under certain conditions, give rise to cholera, and localise the disease in particular places, defective conservancy arrangements and impure water are among the most constant and most important. The facts have come to be universally acknowledged ; yet, according to practical experience in India, it is found that neither does cholera necessarily prevail with greatest intensity in the dirtiest parts of towns, nor is the disease at all times caused by the use of water holding decomposing organic matter in suspension. If we are to look upon the ultimate cause of the malady as an actually existing entity, dormant under certain conditions, but capable of being roused into activity under certain as yet undefined influences, we may in some measure be able to account for the first circumstance alluded to, and explain why, for example, the parts of Calcutta, and other native towns, in which filth of all kinds is permitted to lie festering in the streets, are less constantly the scenes of cholera than streets in which, by means of so-called "drains," matters of that description are allowed to remain stagnant at an inconsiderable depth from its surface, polluting the soil and producing emanations which become doubly pernicious by the obstruction thus placed against their free escape. In the one case, such emanations are no sooner formed than they are diluted and carried away by the winds, or by the rain, whereas, in the other, they probably undergo processes which increase their injurious properties ; thus it may be that persons residing immediately over or near an imperfectly constructed underground sewer become attacked by cholera, while those in the vicinity of more openly objectionable places escape. In the same way, a ready explanation presents itself of the little injury to health which occurred from the most offensive native habit, in the absence of public latrines, or other receptacles of filth, the residents of villages, and also of considerable towns, repairing to the outskirts in the early morning to perform their functions ; so also may we ac-

count for the absence of injurious results in China, from the custom adopted in that country of irrigating the growing crops with liquid ordure, while the presence of imperfect drains or soil otherwise saturated with animal matters, are frequently visited by outbreaks of this disease. In fact, it appears to me that in many cases the system of superficial drains for cantonments in India is for these reasons more suited to the conditions of the country than that of underground sewers, such as are being now recommended for adoption.

(To be continued.)

THE DIETETIC VALUE OF ALCOHOL.*

By George Ogilvie, M.D.

Professor of the Institutes of Medicine, University of Aberdeen.

By alcoholic beverages I understand such as will yield alcohol by distillation, contain the principle either free, or in some state of combination analogous, perhaps, to what are termed by chemists ethereal compounds. The action of alcohol, and in so far therefore of the drinks which contain it, though in some of its phases sufficiently well known, is in its whole extent so complex that it has never been thoroughly analyzed, so as to indicate the functions and organs primarily affected, the precise nature of the changes induced, and the way in which they are associated so as to produce the general effect. To give precision to our ideas of its so-called exciting and depressing influence, and to show how far its action is general, and how far in the first place local on the tissues, in consequence of its constricting influence on animal matter and its great power of permeation, all this requires more careful research than has yet been brought to bear upon it. We have here, too, this additional source of perplexity, that the use of these beverages enters so largely into our convivial pleasures that to many the idea is intolerable of any objection which would, to a great extent, curtail their employment, while on the other hand the amount of evil—social, moral, and physical—which undoubtedly results from their actual abuse, has naturally excited in the minds of many such a feeling of aversion, as to put them out of a position to give a fair hearing to any arguments for their use being ever advisable or even legitimate. *In what way* alcohol exerts its influence on the system we have as yet no very clear idea. The notion formerly prevalent that it is wholly or mostly excreted again in a free state is not borne out by the latest and most accurate observations (those of Thudichum, Dupre, and Anstie), except when taken in quantity ; and then probably only in part—the portion so discharged passing off, it would seem, by the physical law of exosmose, and that part only which is retained, and altered in the system, influencing it physiologically. That a portion is discharged free is indicated by the odour of the breath and urine, but, from the affinity of the alcohol for the blood and tissues, the elimination seems to take place much more slowly than the absorption. But though we know nothing *positive* of the reactions of what is retained in the system, we may conclude that it does not undergo oxidation to any great extent—as assumed by some authors—for when any quantity is taken in a state of health the elimination of carbonic acid is reduced instead of being increased, as is also the resulting evolution of heat.

The effect of alcohol on the system is remarkably different when taken in small and in large quantities, as is forcibly pointed out by Dr. Anstie. In the former case it seems to invigorate the natural functions under depression, somewhat as food does, and therefore may be considered—when judiciously employed—a legitimate constituent of diet ; while in the latter, poisonous symptoms of a narcotic kind are produced, especially depression of nervous force, and, through this, derangement of most of the important functions of life. The invigorating effects, however, which are the sole result of small doses, appear also as the primary symptoms which follow the administration of larger quantities ; for this simple reason, that as, under ordinary circumstances, the absorption of the alcohol is gradual, there will generally ensue, even after an excessive dose has been taken, a stage in the series of phenomena when, the quantity in the circulation being but small, only the primary stimulating action is manifested, though as more is taken up by the vessels the symptoms of true intoxication speedily supervene. However noxious these last may be it is therefore no paradox to maintain that the preceding state may be not only pleasurable, but one also of a perfectly normal and healthy character, as mere exaltation of the natural play of the functions, and that, if the quantity taken had been sufficiently small, this state had never passed into the other.

But intoxication in the physiological sense is a very different thing from that style of it which attracts general notice, and to which the term is popularly confined. The first symptom, according to Dr. Anstie, is a flushing of the fæces (from paralysis of the *vaso motor nerves ?*) To this succeeds an impairment of the cerebral functions, and especially of the controlling power, though, as the cerebral circulation is at first quickened, the immediate result is increased rapidity of thought, to the flow of which we have to abandon ourselves from the enfeeblement of the power of control. It is probably this subsided play of cerebral action—of which a man remains conscious after losing the power of control—that is credited as an increase of the imaginative faculty.

As a farther stage the power of articulation is affected, and the co-ordination of the movements of manipulation and locomotion, and the narcotism may be pushed so far as to cause death by arrest of respiration. The first effect on the circulation is acceleration of the pulse with diminution of force, then irregularity and intermittency, and at last, in case of an excessive dose, stoppage of the heart's action. This is probably the last function to succumb ; according to Dr. Richardson the heart still continues to contract feebly when the breathing has ceased, and all outward indications of motion are over.

Side by side with the very different effects of large and small doses of alcohol, must be put this other law which greatly modifies the former—namely, that the intoxicating or narcotic effects are much more readily induced in a well-fed and plethoric state of body, than when the nutritive functions are depressed, as by exhaustion, starvation, hæmorrhage, nervous shocks, or fevers, and other debilitating diseases. Under such circumstances an amount, which would produce marked intoxication in a full and healthy state of the system, may do no more than give a stimulus to the vital processes which is wholly beneficial and followed by no perceptible prostration or other unpleasant reaction.

But, admitting that alcohol in small doses may have no prejudicial effect on the system, experience seems to have satisfactorily shown that none of the beverages which contain it are really *necessary* articles of diet, in health and under ordinary circumstances, even in the restricted sense of rendering it more perfectly adapted for the support of the fabric, inasmuch as we find not only individuals, but large bodies of men, enjoying the most robust health without using them at all. There is no reason for considering their habitual use to have any power of enabling the system, if otherwise well nourished, to bear up better against fatigue and exposure, or of neutralizing the effect of malarious influences ; and there is great unanimity on the part of those who have had most practical experience, in the opinion that their use, so far from fortifying the system against extremes of temperature, diminishes the power of endurance in the case both of heat and cold.

On the other hand there is no sufficient evidence to show that their moderate use is *necessarily* unfavourable to health or inconsistent with longevity ; so that if any choose to employ them, either as a luxury or as suited to

* Read before the Medico-Chirurgical Society of Aberdeen, June 2, 1870.

specialities of their condition, I do not see that, either on grounds of medical experience or of physiological induction, any serious objection can be raised to their doing so, keeping always within the strict limits of moderation. But here, of course, lies the practical difficulty, especially in regard to the stronger forms of spirituous liquors, of which a much smaller quantity than is commonly supposed will, in a state of health, induce a condition which physiologically is certainly one of incipient intoxication, though not generally recognized as more than healthy excitement; and experience shows that the habitual use, even in such so-called moderation, of the stronger alcoholic drinks, has a tendency to induce structural changes in the heart, stomach, and liver, which eventually give rise to various morbid affections. By its great power of permeation the spirit is readily brought in contact with all the tissues of the body, and, besides the immediate functional effects thereby developed in the nervous system, it seems also to exert a slow condensing action on the connective tissue—much as it does indeed on all animal matter—which is probably in some way concerned in those morbid indurations of the more important viscera, of such common occurrence in hard drinkers.

Seeing, then, that the use of these beverages—especially the stronger kinds—may be considered in general only a luxury, and one too grossly abused by many to the destruction of their health and peace of mind, and to the production of much social mischief, we cannot wonder that there are some who absolutely condemn their use, and that others who do not go this length would allow it only exceptionally, considering them better excluded from the ordinary diet of health. To this some writers of high professional and scientific standing have given more or less the weight of their authority. I may mention in particular Dr. Carpenter and Dr. Parkes. The latter, in his "Military Hygiène," urges very forcibly the propriety of excluding spirits and the stronger wines from the ordinary diet of health, insisting especially on the mischief of the promiscuous issue of spirit rations to troops and sailors, and referring to the experience of the American navy and of many "temperance" merchant ships, in support of the expediency of withholding these articles. Yet, granting this to be true of ordinary diet, the exceptional cases are by far too important to be safely overlooked, and the following may be mentioned as instances in which the limited and *discriminative* use of alcoholic drinks might be advantageously adopted :—

1. Under circumstances tending to induce mental depression, and thereby a predisposition to infectious or other disease, or unfitness for hearty work. The evidence, indeed, of any positive protecting influence on the part of such beverages against infectious or malarious diseases is (to say the least) not convincing, but still they seem likely to be of use—not certainly when given promiscuously to all—but administered with discrimination to those most liable to be affected with that extreme depression of spirits, which in some outbreaks of cholera appears to have a powerful effect in predisposing to the disease, and enfeebling the powers of resistance. Their use, of course, should be combined with every other possible arrangement for producing a healthy exhilaration, diverting the thoughts and relieving the despondency so liable to prevail in the presence of an excessive mortality.

2. After severe fatigue or exposure such stimulants are useful where there is any flagging of the heart's action, or much impairment of the digestive powers, for in such cases the natural restoratives—repose and food—are not always available over fatigue, sometimes produce a state of nervous agitation unfavourable to rest, but in which sleep is often readily induced by a small dose of alcohol—while in those cases in which the powers of the stomach are so easily upset by fatigue, grief, or anxiety, that food is not digested and becomes only a source of discomfort, the simultaneous administration of a modicum of wine or spirits often restores the function of digestion sufficiently to enable the system to recruit itself in the natural way by the absorption of aliment.

3. That such stimuli have any sustentative power against fatigue is neither proved nor even rendered probable by any evidence before us, but certainly, when unusual exertion becomes necessary in an emergency, the system may be thus temporarily braced up for the push; and it does not appear that the subsequent prostration is thereby increased. This applies both to bodily and mental work. Dr. Carpenter bears full testimony to their wonderful efficacy in quickening and freshening the mental power during a brief period, through which it could not otherwise have been sustained. Of course a corresponding depression is subsequently felt, but it is rather traceable to the fatigue of over-exertion, than to the reaction consequent on over-excitement. (*On Alcoholic Liquors*, p. 212.) The depression indeed is probably less than if the system had been braced up to the extraordinary exertion merely by a vigorous strain of the will or some other simply coercive influence; for the alcohol seems to be more than the mere "spur" to which Dr. Carpenter compares it—there is reason to believe that it actually supplies in some degree the unusual waste of special tissues in the conditions of the case. Of course the health suffers under the habitual recourse to stimuli in such circumstances, but the damage follows rather from the repeated overstraining of the powers than from any immediate bad result of their use if pushed only so far as to meet the necessities of the case.

4. Alcoholic liquors may also be of use in helping through a temporary exposure to cold, when the natural resource of increased muscular exertion is not available. But there is a singular unanimity—both among physiologists and men of practical experience—that their habitual use greatly impairs instead of increasing the power of enduring repeated or long-continued exposure to cold, besides rendering such exposure more liable to be followed by injurious consequences to the health.

5. Alcohol has been recommended as of use when the diet is insufficient, from its apparent power of diminishing the metamorphosis of tissue and the resulting waste by excretion. This it has in common with tea, coffee, tobacco, and quinine, but probably in a greater degree. But as such husbandry of food at the rate of change in the body must diminish the *energy* of the vital processes, it can only be considered as the lesser of two evils—it may enable men to subsist longer on a limited supply of food, and prevent some of the sufferings of starvation; but it must be attended with a loss of strength and a depression of health, rendering them more liable to succumb under the pressure of disease or other causes of exhaustion.

In all cases the substantive power of alcohol is much more marked in those who are in a state of exhaustion or depression, than in a fresh and well-fed condition of the nervous system, and its beneficial effect is shown only when the quantity given is such as not to induce any of the proper symptoms of intoxication; but when the powers of life are much exhausted, and the strain or exposure is great, large doses may often be given without this effect being induced, while in a full and vigorous condition of body a comparatively small quantity will do so.

6. The most legitimate customary use of alcoholic beverages is in those cases which lie, as it were, between health and disease, such as that of chronic dyspepsia, in those who have overtaxed their strength or otherwise injured their tone of health, in which the patients labour under a deficiency of appetite and digestive powers without indications of disordered action in any organ. In such cases, with the assistance of a small but habitual allowance of alcoholic stimulants, a long life of active exertion may be sustained, while the vital powers would speedily fail without their aid, for want of the measure of food which the system needs, and which no other means seems so effectual in enabling it to appropriate.*

The *modus operandi* is not so clear, but, as we know from the experiments of physiologists that the local application in moderation of alcohol to the mucous mem-

* Carpenter, Physiol. of Temperance, p. 183.

brane of the stomach increases the flow of gastric juice, we may fairly assume that its judicious administration will increase the digestive powers, in cases where their deficiency is due to an imperfect flow of the solvent fluid. The great power of permeating animal membranes characteristic of spirit may also possibly facilitate the absorption, as its stimulating properties do the reduction of aliment, for it is quite conceivable that in the process of endosmose the alcohol may carry along with it a proportion of nutrient matter. The local effects, indeed, of the application of alcohol are deserving of more attention than they have yet received. It is, I believe, in the majority of cases the best of all discutients, and has a very remarkable effect in relieving many forms of cutaneous irritation and other local inflammations; so much so, as to give some reason for concluding that the virtues of this nature ascribed to various officinal *tinctures* and *liniments* are really due to the spirit entering into their composition. Of the same nature I am inclined to think is the beneficial action of vinous and spirituous liquors in weak digestion. Here also I believe that their operation is mainly local, and that they act very much as internal embrocation to the digestive organs. It is a farther question, on which, however, time will not now allow me to enter, whether they act directly by their free and rapid endosmose on the capillaries of the past, or indirectly by a reflex action, through the *vaso motor* nerves.

The same *general* principles will apply to the corrective power of alcoholic drinks in other forms of weak health—the main object of their use being to invigorate some important function, previously depressed—as the action of the heart or the play of the nervous system—so as to restore the balance of health, and allow the other vital processes fair play. When the effect goes beyond this, it is prejudicial instead of being advantageous.

When we pass from weak health to obvious disease the instances in which alcoholic liquors may be administered with benefit are naturally more frequent, but they are of a kindred nature, falling principally under the following heads :—Debility connected with dyspepsia ; prostration from starvation ; hæmorrhage or profuse discharges ; nervous shocks, as from extensive skin burns ; and certain stages of fever. The beneficial action of alcohol in such cases is attended with phenomena strikingly different from those which it produces in the healthy body, where its effect is to lower the animal heat, while in the debilitating affections where its use is indicated it raises to the normal standard the temperature previously depressed, as is well shown, especially in cases of sinking from hæmorrhage. How is this to be explained ?

Is it by the direct oxygenation of the spirit ? I think not,—at least, in the main—for though it might be supposed *à priori* that, from the combustibility of alcohol, its presence in the circulation would raise the temperature by its direct combination with oxygen in respiration, and though some writers have thus explained its effect in keeping up the animal heat and vital force generally in the treatment of extensive burns of the skin, still we have as yet no direct evidence of an increase in the production of carbonic acid under its administration in such cases, while in a state of health its free use has been clearly shown to lower both the temperature and the amount of carbonic acid exhaled.

May it not simply be that, so long as the action is merely to invigorate the heart's play, the impulse thus given to the circulation tends of itself to raise the temperature ; but immediately on any narcotic effect being induced, the capillary circulation is so affected as to interfere with the due reaction between the blood and tissues, and thereby to diminish oxidation ; for the amount of oxygen absorbed must be in close correspondence with that of carbonic acid formed in the blood, inasmuch as the one gas is taken up by the displacing action of the other ? Now, in a state of high health and full feeding so trifling an amount of alcohol suffices to induce the preliminary stage of its intoxicating or narcotic action, that it may be reasonably questioned if we have as yet any satisfactory account of its effect on the respiration and temperature in doses too small to have any influence of the kind.* Only we know that in disease, quite as much as in cases where it may be used in health, the beneficial action of alcohol is shown so long only as it is given in quantities short of producing its characteristic intoxicating effect on the nervous system, even in its slighter degrees, though a large amount may sometimes be given in depressed states without any appearance of such symptoms.

To go more at length into these uses of alcohol would lead me into the department of therapeutics, to which it is not my object at present to make any reference, except as eking out the brief abstract, now attempted, of its dietetic value.

Hospital Reports.

ST. VINCENT'S HOSPITAL, DUBLIN.

Diffuse popliteal aneurism.—Difficulty of diagnosis.—Amputation by Wharton's mode.

By E. D. Mapother, M.D.,
Examiner in Surgery, Queen's University.

I publish the following case thus prematurely, being unwilling that it should be delayed for six weeks, till my return from an American tour.

T. G., a thin and most pale and bloodless lad, aged seventeen, sought admission to St. Vincent's Hospital on June 23rd, for "a swelling behind the knee." As he removed his trousers I remarked to the class that the swelling had much the shape of aneurism, but the history and character of the case dispelled that notion. He said that when rising from bed one morning towards the end of March he felt a small, somewhat moveable lump above the calf of the right leg, and found that the joint was slightly stiff. He had never received an injury. He poulticed the swelling, which gradually increased until his admission to hospital. The swelling equalled in bulk a large cocoa nut, reaching from the upper fourth of the calf to three inches above the flexure of the knee. As the patella moved freely, and as there was not, nor had there been, any pain or fulness in front, it appeared the joint was healthy. There was no pulsation, thrill, or bruit, in any part except at the outer condyle of the femur, where it seemed that the superior external articular artery had become increased. It struck us that the vessel was the seat of the pulsation, as it existed in a narrow line over the elastic mass. The swelling was firm and elastic, save in two points, which being soft, and projecting to the extent of about half a walnut, suggested that they contained fluid. The patient had never complained of pain. There were three of the glands near the saphenic opening enlarged, but not hardened, and for two inches along the vein there seemed to be a thickened chain of lymphatics. Several large tortuous veins were visible on the surface, which was not otherwise discoloured. The pulsation of the tibial arteries was indistinct, but there was not œdema or coldness of the limb. Extreme anæmia, with murmurs in the neck and at the cardiac orifices, and a weak pulse beating 90 in the minute, were the only constitutional features worthy of note. On the 2nd inst. an exploring needle was thrust into one of the soft points, for two inches, and on the 5th into the other ; five or six drops of reddish serum flowed along the groove in each instance. The site of the first pulsation became, after four or five days, of a dusky brown hue, and more soft and prominent than before, and continued to discharge a little serum. I and all my colleagues after repeated consultations believed the tumour to be encephaloid cancer, and in this opinion three of the most able hospital surgeons

* According to Dr. Richardson's latest experiments the *immediate* result of the administration of alcohol—answering to that of a very small dose—is to raise the temperature a degree or less. This is followed by a depression of five or six degrees, as its intoxicating action is progressively developed.—*Medical Times*, Dec. 18, 1869.

in Dublin, who had each separately examined the case with us, unhesitatingly concurred. All advised removal of the limb, one suggesting disarticulation at the hip. Another eminent surgeon, Mr. Colles, who examined the tumour, wrote to me (for I was unable to be present) :—"I incline to the opinion of aneurism, but decidedly it is a hard nut to crack." We could not adopt this great surgeon's view, having regard to the want of pulsation, bruit, thrill, diminished bulk on pressing the femoral, œdema or coldness of the limb, to the youth of the patient, his account of the case, and the result of exploration. The lad anxiously desired the operation, although informed that his weakly state promised but a slight chance of success. On the 12th inst. I amputated in the upper third, so as to saw the bone near the top of the medullary canal, and I made a single square flap from the anterior and outer aspects—the plan introduced by Mr. Wharton, Vice-president of the Royal College of Surgeons. The simplicity of this operation, and the adaptation of the flap round the bone to the inner and posterior aspects where the soft parts were cut straight down by a single sweep of the catlin, were most satisfactory. Very little blood was lost during the operation, but during the afternoon and the next morning there was considerable venous oozing due to the great poverty of his blood.

To-day (16th, when I must leave town) he progresses favourably, and I feel certain my colleagues will afford him every possible chance of success.

Dissection proved that the tumour was an aneurism, the sac of which had given way. Half-coagulated and half fluid blood lay immediately under the skin, but the unbroken part of the sac towards the joint was filled with a mass of solid fibrin as large as an orange. The gastrocnemei muscles were broken down, the posterior ligament and periosteum stripped from the tibia, and the bone indented and softened.

It is consolatory to reflect that the patient did not suffer by the erroneous diagnosis; for with this large diffused aneurism, with sloughing, suppuration of its contents, or destruction of the joint imminent, amputation was advisable, and that before he had been further reduced in strength.

When aneurisms have been mistaken for tumours and abscesses by such masters of surgery as Desault, Dupuytren, Earle, Dease, Syme, Pirogott, and Paget, it is not surprising that the mistake should recur; but, in order that diagnosis may be perfected, it is the duty of every surgeon to record such cases with accuracy and candour.

ON THE PROSPECTS OF THE SEWAGE QUESTION.

Discussion at the Metropolitan Association of Medical Officers of Health on Dr. Letheby's Paper.*

Dr. Cobbold said that individually he regarded the sewage question as one which was three parts out of four a chemical question. On this account he thought that chemists should have the advantage of speaking first upon it. Dr. Letheby had referred specially to the remarks made by him in his *brochure*. Now, though the observations he made there were written in a warm—perhaps too warm a strain, he believed there was no statement which he was not still prepared to substantiate. And he thought, since he had gained more experience in experimental researches, that he could now write a pamphlet much more cogent than that to which Dr. Letheby had alluded. With reference to parasitic diseases, he would only say that he knew of two patients in this country who were suffering from that frightful malady which was so destructive in Egypt. These patients at every urinary discharge must pass a number of the eggs of this parasite, and if the number of persons so afflicted were increased five-fold, the chances of the extension of this disease must likewise increase. But happily there were so many contingencies which the parasites had to encounter before they arrived at the human body that the community were yet spared; still he held by the statements contained in his pamphlet. Then take the case of ordinary tape-worm disorders, respecting which he had much experience. There were about 3,000 persons in London suffering from this cause, who each passed from 4 to 12 joints a day, each joint containing 30,000 mature eggs, which would give at least a daily return of 450 millions, but he believed 1,000 million eggs was nearer the mark. A certain number of grains of organic matter per gallon were found by chemists in sewage, of which organic matter these eggs must be part and parcel. A handful of large entozoa parasites had been taken from the Craigintinny meadows. If this sewage were distributed far and wide, it was certain that a considerable portion of these millions of eggs must gain access to the herbivora. It was known, from experimental researches, that measles were developed productively in beef. It was a popular notion that pork only developed measles, but he would assert that in underdone beef persons ran a greater risk. The proportion of tape-worm disease derived from measly beef was as 7 or 8 to 1 in the case of pork. It was, therefore, to incur an enormous risk to distribute sewage which contained these germs over the land. It was possible to decimate the population of any town within a certain number of months by the distribution of tape-worm germs, there being one tape-worm in particular which produced a disease of the human body at present causing the death of 400 persons annually in this country. If that parasitic disease should increase in the same proportion as other parasitic diseases, such as the ordinary tape-worm, a result would follow such as still obtained in Iceland, where one-sixth of the population died annually from this cause. Having these facts to deal with, and knowing the developmental process through which these parasites passed, he thought they were called upon to ask people to pause before adopting a scheme so gigantic as that now proposed, fraught as it was with consequences so serious as those which he believed were involved in it.

Mr. Holland said he did not believe any portion of Dr. Letheby's paper, and he thought the writer was inconsistent with himself. In the first place he alleged that twenty times its volume of water would purify the sewage poured into it, and afterwards he asserted that even a small quantity of water from irrigation meadows was poison. Was Dr. Letheby prepared to recommend that the soil should be burnt; if not, what did he propose to do with it? Unless he was prepared to recommend that all human manure should be burnt to avoid the supposed risk, his argument went for nothing. He (Mr Holland) believed that the danger of spreading disease by the irrigation system was purely imaginary. Where was the evidence of disease having been produced where the system was adopted? He had made inquiries on the subject and could find none. At Carlisle he asked whether the sheep had the rot, and was answered that they had not. At Edinburgh cows had been fed with grass from the irrigated meadows for 60 or 70 years, but there was no evidence of the prevalence of disease amongst them. It was true that they were not very healthy, but this arose from their mode of life. Everything was done to stimulate the production of milk from them, and they suffered from want of exercise and fresh air. Sewage was nothing but manure suspended in water, and the error was not in putting it on the land at all, but in putting it on in excess. At Carlisle he had been told that the residents in the neighbourhood of the irrigated fields were unhealthy, but on inquiry it turned out that there were no inhabitants in close proximity, and of those who were anywhere near there were abundant causes of unhealthiness in the condition of their houses.

Dr. Carpenter considered that the arguments of Dr. Letheby were based upon a false foundation, and that either he had little practical acquaintance with the facts from which he had drawn his inferences, or had taken only such portions of them as were calculated to sustain his view of the case. Dr. Letheby had alluded to some statements made by him, and had specially referred to the sanitary state of the fields at Beddington. The people of Croydon were some of the earliest to adopt any sanitary arrangements at all. They were compelled to adopt some plan, because of the terrors of the law—no less than five or six injunctions having been obtained against them, and the local board were threatened with committal to prison unless they ceased to do certain acts. That was in 1858, and in 1859 and 1860 they obtained powers to do what they had since continued to do. In 1860 the irrigation meadows were laid down, and they had been in active operation to the present time. Until this year no complaint, either officially or otherwise, had been made of injury arising from these meadows. Previous to 1860 the town had been put to thousands of pounds expense for damage occasioned by the sewage, but from that year till within the last nine months

* This paper has already appeared *in extenso* in the Medical Press and Circular.

they had been free from such liability. In 1860 they laid down 276 acres of land for the purpose of irrigation, and to remove the mischief which 19,000 people produced by their sewage. Since then the population of the town had increased to 50,000, and he was free to confess that the quantity of sewage was too much for the land. The result had been that occasionally of late the water was not so effectually purified as it should have been. Until 1867 no cases of fever occurred there. The water of the effluent stream passed through the grounds of a gentleman residing in the neighbourhood, and even at the present time trout might be seen swimming about in it. That being the case, was it not evident the plan adopted for dealing with the sewage was the correct plan? Indeed, Dr. Letheby said so himself, and it had been shown in that room that, if sewage were made to pass through 5 feet of earth, it would be rendered perfectly innocuous, and would be perfectly oxidized. Surely, then, the passage of sewage over land where it was exposed to the air and came in contact with growing vegetable matter, would remove from it all those elements which were injurious to health, and the water would go off perfectly pure. Dr. Letheby was in the position of an engineer who, some years ago, wrote a pamphlet to prove that it was totally impossible for a steamboat to cross the Atlantic because she could not carry sufficient coals, and whose pamphlet was issued at the very moment that a steamer was actually accomplishing the feat. The town of Croydon was a standing proof that sewage could be successfully disposed of in the way Dr. Letheby asserted to be impossible. With regard to the question of health, he might state that, since the beginning of the year, there had not been a single case of fever reported to the Board of Guardians from Beddington, and he might add, as the medical attendant of most of the wealthy families there, that he had not had a single case of fever, either typhus or typhoid, among them since the irrigation meadows commenced. With reference to the effect upon the inhabitants of Croydon proper, surely, if the emanations from the farms were so dangerous as represented, the inhabitants of the densely populated low-lying parts, which were within 500 yards of the outfall of those farms, would have suffered from typhoid. But for a long period there had not been a single case in that low district, and with the exception of a few cases of scarlet fever there had been no fever there at all. The irrigation process went on during the winter as well as the summer, and in the former period of the year the water had gone off pretty nearly free from those elements which were injurious. This was the result of experience of the system forced upon the parish of Croydon, and which they had not taken up of their own will. Having observed the process, and seen its effects, he was positively convinced that the air which passed over the fields, instead of being injurious, was a benefit to the people living around. It was a positive fact, with regard to Norwood, that the moment the irrigation fields were established the mortality fell from 18 to 15, and had remained so. Dr. Letheby said he had evidence of water coming off the fields in an impure state. He (Dr. Carpenter) knew that there had been such instances, arising from the fact that persons had gone to the fields, broken down the carriers, and pulled at the sluices, letting the water out. Dr. Letheby knew very well that the argument to be drawn from the chemical analysis of the water was valueless, unless he was aware of all the circumstances of the case.

Professor ANSTED, being referred to by the chairman, as having had experience in these matters in connexion with the city of Milan, said he hardly felt qualified to take part in the discussion, although, perhaps, so far as a certain amount of familiarity with works of this kind went, he might be able to afford some little information. The general subject appeared to him as far more belonging to the medical man than the geological engineer, if he might so denominate himself. Having had the opportunity, now and then, of noticing the results obtained during the irrigation of considerable tracts of land on a large scale, with material more or less mixed up with sewage, he thought he was justified in saying that in most cases, if not in all, those results had been certainly unfavourable to the general health of the neighbourhood. The chairman alluded to his experience at Milan. He knew the town well, and the way in which the sewage was conducted over the fields in the lower part of the town, and he believed, on the evidence of medical men—some of whom had been examined by parliamentary committees in this country, and whose evidence might be found in Blue-Books—that the result of the system pursued there was eminently unsatisfactory with regard to the health of the people living near where the works were carried on; and it was not astonishing, for no one could go into the lower parts of the town near the stream and the works without being conscious of their being eminently disagreeable, and probably unhealthy. The Italians were not particular on the subject of smells, but it was confessed that these were very objectionable. The sewage was carried over the fields, and took its course. Sometimes it was used, and in all probability, when that was the case, it passed off the ground without doing any damage to the water of the stream; but during a great part of the year such was not the fact, and the consequence was that the stream in its course was much polluted. And this was a result which he had also observed in other parts of the world. A few days previous he had the opportunity of visiting the irrigation works at Aldershot, and there it was perfectly clear to him that the farm which took the camp sewage and was working it was utterly inadequate for the quantity put upon it, and that, from the nature of the irrigation, the sewage water carried over the fields could only be used upon a very small scale, while the greater part of it necessarily ran away into the river. He could not help thinking that in most cases this must be the result. It was not for him to say, what was the right method of getting over the extraordinary difficulty which the public were called upon to face, but that some method must be adopted was evident. The question before the meeting was whether the particular method of carrying on the work suggested by the Royal Commission on the Pollution of Rivers was likely to be practically useful. As far as his own experience and knowledge were concerned, it seemed to him that the method of carrying away the sewage and utilizing it by irrigation might be successful upon a small scale, where the population was limited and the acreage was large; but he could not see much probability of its being successful upon a large scale, for what upon a small scale would practicably do no harm—say in the case of 200 or 300 acres—would be attended with very serious results in the case of a large city or town. It might be very well in the case of Croydon, where the population was small, but the limits of the adaptability of the system were soon reached, and could not be advantageously extended.

Mr. LIDDLE remarked that in dealing with the subject they had two enthusiasts to encounter—Dr. Letheby and Dr. Frankland—whose papers were always read with attention, and probably between the two some useful information might be gathered. He was disappointed in the paper just read, because it contained very little which was of practical benefit to the meeting as a body of sanitary officers. It raised objections to the existing modes of operation, but it gave them no hint as to what could be done with the sewage, how to utilize it without creating a nuisance, and exposing the community to those fatal consequences which Dr. Cobbold had described.

Mr. CREASY thought it was necessary to explain in some degree the sort of conflict of evidence which had taken place. When Beddington was mentioned, it should be known that it was a large district, and that a portion of it had little to do with the sewage question. The sewage fields of Croydon had been well chosen with reference to population, but certainly in every cottage on the estate there had been typhoid fever through the whole course of the time—not a cottage had escaped. And as to the outfall at Beddington Corner, every well was contaminated, and not a house was free from fever. At Carshalton he had had cases of enteric attack. At Beddington Corner, near the outfall, four children had been taken out of one house in a day stricken down with scarlet fever.

Dr. CARPENTER interposed the remark that the local nuisances in connexion with those cottages were quite sufficient to produce all the fever complained of, without seeking a cause in the outfall sewer a quarter of a mile off.

Mr. CREASY said that might be, but the watershed went in that direction. In every one of those houses an examination of the tongues of the inhabitants would show that there was enteric irritation. The same indications which were caused by the Croydon sewage on one spot arose from the existence of cesspools on another.

Mr. HAWKSLEY said he could fully justify the statements made by Mr. Creasy, for few persons were better acquainted than himself with the results of the irrigation works at Beddington Corner. He had been professionally called down to look at those works at intervals for many years, and also in consequence of complaints having arisen, although Dr. Carpenter stated that there had been no such complaints since 1860. When on other occasions he had been in the neighbourhood on totally different business he had taken samples of

the water as it fell into the Wandle, and had them analyzed. He had also been up the stream, and looked at the confluence of the two waters, which ran over the meadows in different directions. On one recent occasion he found one of those waters exceedingly clear, and the other about as foul as it could be. These two waters met, and passed down by the side of the cottages just mentioned, and thence to the Wandle. In the month of February last he was down there; the sewage was then frozen over the whole surface of the land for acres and acres, and was not in the state which Dr. Carpenter had described. But, besides that, he had been there in the summer, and in the summer it depended very much upon the state of the water as to whether the sewage, when passed upon the land, stank or not. In warm weather it often stank frightfully, especially on "muggy" evenings. The sewage then gave off a very sickening, though not necessarily a very powerful, odour. The same sort of thing occurred everywhere when sewage was applied to land—at the Barking farm, at Edinburgh, at Aldershot, and every place he had visited. It had been stated, to his great surprise, in the course of this discussion, that at Carlisle the sewage did not stink. Most assuredly it did in hot weather, although the entire quantity of sewage put upon the enormous acreage of land there was only from 200,000 gallons a day as a minimum, to something under 400,000 gallons as a maximum, which was only one-sixth of the sewage of Carlisle. And it was there of so little value that the other five-sixths were allowed to run away into the river, though the acreage of land for its reception was sufficient to utilize the whole. As to the commercial economy of the system, he had made a great many inquiries, and he had been told very frequently of crops being sold at £18,£20, and even £25 an acre, and that every one was delighted with the effects. But when he came to ask what was the net result of the year's working, he was answered, "Ah, that is another thing." "Well, but what is it?" "Well, we lost so many hundred pounds last year"—and in some cases so many thousands. There was not one single place he had heard of where the application of sewage for the purpose of sanitary disinfection was proved to be a commercial success. It was a commercial success at Edinburgh. Why? Because it was not applied for sanitary purposes. They used as much as they required for irrigation purposes, and the remainder ran into the sea or river nearly as foul as when it entered upon the land. But this was not the question now before the meeting. The question before them was one which almost every one could answer for himself. Take the case of plain irrigation by water only—pure water—water issuing, as in the majority of irrigation schemes in this country, from chalk springs. They all knew that when water was put upon land in certain seasons of the year in that state it did fertilize the land, and good grass crops ensued. But what was the result in a sanitary point of view? Fever and ague were produced. Go to Italy. He had been over all the irrigation works there, extending for 200 miles in one way, by 60 or 70 in the other, and what was the result? The people were in a state of actual decrepitude, not simply affected with fever, but with rheumatic complaints, and there was a great deal of cretinism. The same thing existed in the South of France, where irrigation by water only was adopted. Superadd to this foul organic matter, and what must be the result. He believed there was really nothing to be learned upon the subject. His own opinion was that of all unsanitary applications the most unsanitary was that of the application of sewage to land by way of irrigation.

Mr. CREASY said the Beddington grass was irrigated as long as it could stand up, and then it was sent away to market with the sewage some inches up the stem. So that if Dr. Cobbold was right there was an opportunity for the development of entozoa there.

Dr. LETHEBY, in bringing the discussion to a close, said he thought Mr. Holland had not quite apprehended the statements he had made. He had said all along that sewage going into a running stream where there was abundance of vegetation, fish, and a large quantity of oxygenated water, even in the condition of sedimentary sewage, was by a natural process quickly disposed of. But what he also said was that the main cause of all those nuisances which arose from the discharge of sewage into running streams was the sedimentary matter it contained, and that the distribution of sewage upon the land at the present time did not provide a remedy, and was accompanied by a large number of disadvantages. He said, further, that there was another means whereby these sedimentary matters could be separated—that by a process of chemical precipitation, as by lime, sulphate of alumina, or the agents employed by the A.B.C. Company, or that recommended by Mr. Blyth, they had the power to do certainly, and without danger, what they were not doing certainly when the sewage was put on the land, and with a great deal of danger. By this system of precipitation they could separate those solid elements and could superadd agents which were not particularly injurious to the highest forms of animal life, but were deadly to those creatures referred to. There was indeed a mode within their reach of dealing with those sedimentary matters which were the real cause of nuisance by accumulating in the rivers, and of rendering the water in such a condition that it might safely be admitted into a stream of eight or ten times its volume. It was a fact that in every one of the places visited, where the irrigation system was adopted, they found—whether by accident or design—abundant evidence of those evil results which it was most desirable they should seek to avoid. The system of precipitation, by chemical processes, could, however, be carried on without the slightest danger to the public, but this could not be said of any system of irrigation; for it was indisputable, from the investigations of Dr. Murchison, that sewer gases would produce sewer fever; and as these gases are abundantly evolved from irrigated land, no doubt it was a question open to a great deal of discussion as to how far they must be diluted before they would cease to produce dangerous consequences. He had told them what he found in his own experience at a model place—the Hebble Brook—where the inhabitants were so decimated by fever that the system was obliged to be stopped. He was asked whether the sewage then was to be wholly lost, and not utilized upon the land? He hoped he had sufficiently answered those questions by showing that the proposed mode of dealing with it was open to the objections that it was dangerous and uncertain, and that there were other better means of dealing with it. He did not mean to say that by irrigation sewage could not be defœcated, but he contended that the system required great attention, and that the result could not be realized in practice; whereas, by the adoption of chemical processes, there was a safe and certain mode of accomplishing the object, and, so far as he knew, these processes were more economical, for there was not a single instance in the country in which the utilization of sewage by irrigation had proved profitable.

On the motion of Mr. Liddle, a vote of thanks was given to Dr. Letheby for his paper, and the proceedings terminated.

Treatment of Orchitis by Blistering.

In a recent number of the *Pacific Medical Journal*, Dr Cooper mentions a case under his care. It was that of a young officer who had just contracted gonorrhœa of the virulent type prevailing among the Indians. It being a fresh case, and the first attack, I thought it a fit one for the so-called "abortive" mode of treatment. I therefore injected at once a strong solution of nitrate of silver, taking good care to prevent it from passing farther back than the scrotum. The pain caused was intense for some hours; but the desired effect of destroying the virus was not produced, for soon after violent orchitis came on, either from the natural course of the disease or from its being "driven back," literally or metaphorically. This new inflammation was so severe as to deprive the patient of rest and almost of reason, while the necessity of his very soon taking the saddle made it important to act energetically. Fearing the delay required by the usual modes of treatment, I decided on counter-irritation as the quickest, and having none of the more rapid vesicants at hand, applied the Emplast. cantharidis 4+4 inches, on the inner surface of each thigh near the groin. As soon as vesication commenced the orchitis began to subside, and in a few hours was quite relieved and did not return. I may add that the vesication extended to a considerable part of the scrotum, but I had no doubt that the more distant blistering was the cause of the relief experienced.

The gonorrhœa returned, and was treated by milder means with success, but whether any ultimate effects followed the disease, I have never ascertained.

New Hospital for Bolton.—The late Mr. Stephen Blair, formerly M.P. for Bolton, leaves £20,000 to build and furnish an hospital for Bolton; and he further bequeaths to the trustees of his will a sum of £10,000 to be invested, so that the income may form an endowment for the hospital, and desires that the hospital be called "The Blair Hospital."

Registered for Transmission Abroad.

The Medical Press and Circular *is published simultaneously in London, Edinburgh, and Dublin, every Wednesday morning. Price 5d. Stamped 6d.*

By Post to Annual Subscribers, £1 2 6
,, *If paid in advance* 1 1 8

*** Post Office Orders and Cheques to be drawn in favour of A. A. Tindall, 20, King William-street, Strand, London.
Moffat & Co., 6, D'Olier-street, Dublin.
Maclachlan & Stewart, South Bridge, Edinburgh.
Sole Agents for the United States,
Messrs. Kelly and Piet, Baltimore.
Annual Subscription, *post free,* Ten Dollars.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JULY 20, 1870.

THE OBSTETRICAL SOCIETY ON INFANTILE MORTALITY AND BABY-FARMS.

Dr. Farr of the Registrar-General's office applied some time ago to the London Obstetrical Society for information upon the question of infantile mortality, a subject he has thrown much light upon. Infant mortality is much higher in the southern countries of Europe than in the northern, according to Dr. Farr; greatest in Italy, lowest in Norway. One of the first questions the Society had to reply to was, as to the number of cases of labour attended by women in different localities. This varies greatly. As much as 75 per cent. are attended by midwives in Glasgow, in Coventry 90 per cent., in the east of London from 30 to 50 per cent. In the west end very few midwives exist. It appears that in this country the married poor habitually suckle their children and often protract this lactation period until the child attains the age of two years, "for the most part with the hope that it may prevent a rapid return of pregnancy." Illegitimate children among the poor are rarely suckled; but nearly always brought up by artificial food, consisting frequently of bread soaked in water or milk, and sweetened arrowroot, sago, or corn-flour, baked flour and biscuit food; all generally of too substantial a consistency, and too exclusively farinaceous. When nearly a year old many infants are fed with all sorts of absurd articles of diet, such as vegetables, fruit, meat, salt fish, cheese, pastry, and beer. Dosing babies with anodynes is very prevalent; in Long Sutton, for instance, with a population of 600, one chemist sells 25½ gallons of "Godfrey's Cordial" annually, and laudanum, paregoric, syrup of poppies and Steedman's powders are used most extensively. Gin, too, is greatly administered to babies in large towns.

Children are not frequently sent out to nurse in this country, save in the case of illegitimate ones. The grandparents seem to nurse the child most frequently in agricultural districts. Baby-farming seems almost peculiar to London. At Wimbledon, however, it appears to be frequent, as it is throughout the western parts of the metropolis. The desertion of children, especially of illegitimate ones, appears to be far from uncommon. Desertion of illegitimate children is frequent in London; the mother being anxious to get rid both of the pecuniary burden connected with the support of the child, and of the evidence of her having had a baby. She frequently then leaves the child with the woman who undertakes to nurse it, and the ultimate lot of the child thus deserted is either death by slow starvation, or the workhouse. In some cases again, illegitimacy is not much discountenanced, and women have five or six illegitimate children. The Brixton baby-farm has of late attracted public attention, and the thoughtful mind will see at once that the death of that half-dozen of children has a great importance as indicating a certain state of social life, and suggesting the idea that the fate of those particular children may be multiplied by an unknown quantity. That baby-farms directly owe their existence to the birth of illegitimate children will hardly be doubted; but a fact of more complex origin and against the dictates of natural instinct, is the separation between parent and child, which ensues when the latter is placed at a baby-farm. The statistics of illegitimacy in this kingdom would seem to show that about 1 in 13 of all births are illegitimate, and, therefore, there are a large number of poor mothers from whom the society in which they move demands one of three sacrifices—either 1, to retain the charge of the child and be scouted for life by that society; or 2, to keep the child's existence a secret and retain their social position; or 3, more rarely society allows itself to wink at the act of the offender if (a daily reiterated falsehood) the name of aunt, nephew, or niece, be substituted for the true relationship. The second of these alternatives is usually chosen, and necessitates the giving up of the child into the hands of strangers, the mother seldom or never seeing it; hence, alienation of affection speedily takes place. The then possessors of the infant frequently neglect it, often having, in addition, a pecuniary interest in its death. To obviate these evils, the compassionate in most countries have, from time to time, instituted "Homes" and "Foundling hospitals;" but the medical observer, we hold, cannot conscientiously approve of such institutions when he daily witnesses the hazard of artificial feeding, and the evils of overcrowding of children—circumstances not brought home to the minds of the charitable founders of such places. The French system of the "crêche" would here in England be almost useless, as it only retains the child a few hours daily, and thus secrecy could not be maintained. Holding, then, that separation of the child from the mother lessens so immensely its chances of life, the question arises why society demands the sacrifice? Its reason for so doing is professedly to punish the wrong doer, but surely it might be well to reconsider whether a punishment, the carrying out of which brings about so much practical child murder, would not be better let alone. Society, if bent on reform, might still find ample scope for its energy, in raising the standard of parental care. Remembering the wide-spread ignorance of the mass of the public, and of women especially, as to the conditions essential to healthy child-development, it might, by disseminating hygienic knowledge,

bring home to the minds of parents the baneful results of such a separation, for we fancy that the majority of women would shrink from a course of action which, under wider knowledge, would appear in its true light of infanticide. Thus, the child having been born, the chance of its welfare might come to be deemed more important than the favour of society, which bears so unjustly upon the weaker party, the mother. Society might then turn its attention to the fact that even amongst legitimate children death constantly results from neglect of favourable sanitary conditions; and it might justly censure the severing of parents and children by the former residing in climates, such as India, where children cannot be successfully reared, or the banishment of children to boarding schools for many years of their life, where they are so often ill-fed and over-worked. As a rule, says the report of the Obstetrical Society, many illegitimate children die under the first year, as many as 26 per cent. in Wakefield; but, in Norfolk, Mr. Waller, of Flegg-Burg writes, "Although in this county as regards illegitimate births we stand highest but one, *i.e.*, Cornwall, the lives of illegitimates in my district are, at all events, as good as of legitimates." Norfolk seems, then, to be a humane county. In London 75 per cent. of illegitimates die before reaching one year of age.

With regard to the means of preventing the large mortality among infants, all agree in the importance of mothers suckling their children for some months, and on the mischief which arises from the practice of giving infants of but a few weeks old solid farinaceous food, not to speak of coarse diet. When the mother cannot suckle, from whatever cause, no food beyond milk and water, provided the milk be of good quality, should be given to the infant for at least the first three months. Education of mothers would save many deaths and abstinence from the use of cordials. As to the enormous mortality among illegitimate children in London and elsewhere, it requires no conjuror to account for it. If society will be so severe against the begetting of one or two illegitimate children by single women, whilst it gives its sanction to the large families of other women, who, in the eyes of good Malthusians, do so much more harm than the former, in lowering the rate of wages by the introduction of so many new members into society, it must expect to be obeyed, and to have much infantile mortality. The single woman does not take care of her child or love and cherish it, in case she may lose her situation or be prevented from the chance of attaining the only prize of social life that is left to most women—matrimony. Ages to come will read the report of the Obstetrical Society with astonishment and horror, and exclaim, These were, indeed, terrible days for women to live in!

SCOTLAND.

A MEETING of the Edinburgh University Court was held on Thursday last, when the recent election to the Chair of Midwifery was brought before the members of the court by Principal Sir Alexander Grant. In the course of a speech of considerable length, Sir Alexander, in urging the necessity of a reform in the constitution of the Court of Curators, said that, having regard to the future, it appeared to him absolutely necessary to guard against the possibility of elections being decided by party feelings in a Court which was constituted in the very peculiar way in which the Curatorial Court was. It was absolutely necessary to have a Court which would justify itself to the public. Without such a Court there must be a want of confidence and that might be a very serious matter to the University. The University had recently sustained more than one severe loss through death—illustrious men had been removed from amongst us. The University was exposed, too, to great competition in sister Universities in the country, and in schools of science of all kinds which were rising up under the patronage of the Kensington Institution, and under the patronage of the Government; and it was therefore of vital consequence that, whenever vacancies occurred, men of the greatest scientific eminence should be secured to fill them. But when an occurrence such as the recent election took place, confidence was somewhat shaken; and it seemed to him doubtful whether they could expect the best men to submit themselves to a tribunal which was felt to be so unsatisfactory. He spoke in regard to the future. He thought it was quite clear that the time had come when a change should be made in the Board of Curators; and he submitted to the members of the Court whether it would not be befitting for them to take some steps to bring about that change.

Professor Christison entirely concurred in the remarks which had been made by Sir Alexander Grant. The recent election had caused, not only in the medical profession, but amongst the educated classes of the community generally, almost universal dissatisfaction. There was a great disparity of qualification upon the occasion; but no attention was paid to that disparity by the majority of the Curators. His opinion had always been that the Board of Curators was an improperly constituted Court; and some change was absolutely necessary.

The other members of the Board, with the exception of the Lord Provost, who was absent, concurred with the Principal and a discussion took place as to the course to be pursued. On the suggestion of the Lord Rector, the Principal gave notice of the following motion for next meeting:—"That the Court shall take steps, in whatever way may be thought most proper, to obtain a change in clause 13 of the Universities Act, which provides for the constitution of the Board of Curators."

At the same meeting an application was read from Dr. Matthews Duncan to the effect that attendance upon a course of lectures on Midwifery, which he intended to commence in November, should be recognised by the Court as qualifying for graduation in medicine in the University. A similar application was submitted by Dr. Keiller. The applications were granted.

LADY STUDENTS.—At a meeting of the lecturers of Surgeons' Hall, Edinburgh, the following resolutions were passed on the motion of Dr. Arthur Gamgee, seconded by Dr. Stevenson Macadam:—"1. That it is expedient that lecturers in this medical school should be free to lecture to female as well as to male students. 2. That no restrictions be imposed upon lecturers as to the manner in which instruction is to be imparted to women."

THE Edinburgh Infirmary Act having received the Royal assent, the acting committee of contributors have resolved to hand over to the managers of the Royal Infirmary the proceeds of the public subscription. The amount is estimated at £160,000.

THE annual meeting of the Forfarshire Medical Association was held at Arbroath on Thursday, the 7th. A large number of members were present, including Professor Christison, Edinburgh; Professor Inglis, Aberdeen; Dr. Luke, and others. At the dinner which was held after the meeting, Dr. James Arrot, who presided, in proposing "Prosperity to the University of Edinburgh," took occasion to animadvert strongly on the mode of filling up the chairs in that University as exemplified in the recent election to the Midwifery Chair, which had occasioned such deep and wide-spread dissatisfaction. He thought the time had come for divesting Town Councillors *in toto* of all power and voice in such appointments. He was sure

that the University of Edinburgh had the best wishes of the meeting for its continued celebrity and usefulness. (Cheers.) Professor Christison, Edinburgh, who was present as a guest, in replying to the toast, said he was not like some people who set no value on good wishes, for he thought they were not unfrequently the precursors to good luck. The evil to which Dr. Arrot had alluded in the mode of filling up chairs in the Edinburgh University had, he trusted, now reached its acme; and when matters reached their worst there was hope they would mend. He trusted some such change as had been wished for would take place soon. So long as Town Councillors have to do with these elections, motives altogether apart from the merits of the candidates will influence their conduct. When he was elected a Professor, now thirty-eight years ago, there were thirty-three Town Councillors, and he had often mentioned in private, what he now stated publicly, that of those who supported him only two did so because they thought him the best man.

Notes on Current Topics.

Mushroom Eating.

We are getting into the season for gathering and consuming mushrooms. Within the past few days we have seen a well marked case wherein a husband and wife, who had partaken of mushrooms with their tea, which, no doubt, had been mixed up with poisonous fungi, were seized with the characteristic symptoms of cryptogamic poisoning—the sense of sinking, and impending dissolution, accompanied by cold perspirations, &c. An extract from a new book, "Every-day Objects," descriptive of the means of recognising the true mushroom from the false, the edible from the poisonous, will, we conceive, be useful at this season :—"The *true* mushroom as it develops itself ruptures the ovoid wrapper or vulva, leaving the remains entirely at the base of the pedicel; whilst in the false mushroom the *debris* of the vulva are found not only at the base of the pedicel, as in the real Agaric, but even upon the red surface of the pileus itself. These are the white irregular warts characteristic of the Amanita, but wholly wanting in the Agaricus. Then, there are two Amanitas, the Amanita muscaria, or 'fly agaric,' and the Amanita amastica, or, as the English botanists call it, Agaricus Cæsareus, the imperial mushroom." To this we would add, the sweet, delicate odour of the edible mushroom, which contrasts with the scentless, dangerous fungi, or the poisonous cryptogam possessing a dull heavy smell. The inexperienced, we hold, should not risk their lives for the sake of this delicacy; but if the extract we have quoted be carefully observed, we consider there will be little danger in mistaking the true from the deleterious mushroom, and less liability to error with its consequent danger to life.

Baby-Farming.

The publication in the *Times* of a letter signed "A.B.," purporting to be written by a lady, and giving an account of visits made to baby-farms two years ago, marks an era in the agitation that has been caused by modern revelations of English life. It is not likely that the Editor of the *Times* would admit a letter extending over several columns without ample guarantees of good faith, and yet some of the statements made are as likely to excite incredulity as indignation. We were prepared for horrible revelations as to the women who engage in the trade—but how about the medical men said to be implicated? "A.B." while accusing practitioners, and presuming, because they called themselves doctors, that they were duly qualified (how unjustifiable a presumption medical reformers know too well!), takes especial care to conceal the locality of the establishments. It is impossible to guess whether North, South, East, or West of London was visited, and the names of all the persons said to be doing a fine trade in murder are withheld. It is certainly a question whether "A.B." should not have communicated with a magistrate at the time, instead of reserving the revelations for a couple of years, and then only using them to create a sensation. Casuists will not fail to find in her conduct many a nice point both of law and morals. On the part of the Profession we can only say that, though there may be here and there a black sheep, it would be a relief to have the data furnished by which we might ascertain whether those pointed at are really qualified practitioners, or only those infamous quacks of which we should only be too glad for the Legislature to rid us. Will not "A.B." show her sincerity by helping us in this? Such particulars would be far more valuable than elaborate descriptions of the costumes in which she made her pilgrimages. It is utterly impossible to put down crime by accounts of amateur excursions into the regions where it abounds.

No doubt, she wasted hours to rouse public attention to the evil, and such statements cannot but arouse attention even when wars and rumours of wars occupy the public mind. Still, mere assertions, without proof, are of little value; for it may be fairly argued that facilities to place children out to nurse are almost necessary in the present state of society.

We have reason to believe that a number of men calling themselves doctors, but without the shadow of a right to do so, are engaged in the most infamous part of this traffic in infantile life, and whoever will assist to bring such scoundrels to justice will receive our hearty sympathy and support. It is no secret that the whole Profession is unanimous in its desire for such self-government and such power as would enable it to separate its members from all dishonourable persons; but if the Legislature will not give us this power, and if the public persist in considering a brass-plate proof of medical qualifications, who is to blame? We suffer—but the fault is not ours.

Dr. Burrows.

This gentleman has been appointed Physician-Extraordinary to the Queen. No one more fully deserves Court recognition than this able physician, scholar, and medical reformer. His presidency of the General Medical Council gave universal satisfaction, and we know that he would have been very glad to carry the reform in the constitution of that body, on which we have so often insisted. He had worked hard, too, in the cause of medical reform long years before the Council was instituted. In honouring him the Court honours the Profession. We should have been glad to hear that further honour had been offered him. Court recognition of our Profession is far too rare.

A Very Sad Spectacle.

Patience and tact—gifts with which the indefatigable Coroner for Middlesex (Dr. Lankester) is so largely endowed—were sorely put to the test on Monday, the 11th

instant, at an inquest held on the body of William Thorn, Wellesley street, Seymour street, St. Pancras.

Strange to say, the inquiry was sought by one of the medical attendants on deceased; and judging from the repeated attempts made by him to tamper with the principal witness—Mrs. Thorn—whilst under examination, coupled with insubordinate discourtesy to the coroner, and unphilanthropic hints as to blighted hopes of an equivalent in recognition for services said to have been rendered to deceased, we are reluctantly compelled to declare that the motives which induced the inquiry appeared to display less of a purely pathological character than of a parsimonious and a personal one.

The evidence of Mrs. Thorn was to the effect that for upwards of two years her deceased husband had been in bad health; that in November last one of his eyes was extracted; that he had an epileptic seizure; that from that time until the fatal termination of the case (which occurred seven or eight days subsequently—a doubt about this being employed) he was visited daily, with one exception, by Mr. William Turnbull, surgeon, at whose instigation the inquiry was now being held; that during the attendance of Mr. Turnbull she obtained a parish order, consequently her husband was visited by Dr. Thompson, one of the district medical officers, and by his assistant; that she received medicine from them; that these gentlemen were *not* aware of Mr. Turnbull's attendance, but that the *latter was aware* of the attendance of the former; that Mr. Turnbull supplied medicine up to the death of her husband; that such medicine was administered to him, on the advice of Mr. Turnbull, in preference to the parish medicine; and, alas! because witness was of opinion that if she administered both medicines they would "mix and do no good." Now, there was no attempt made by Mr. Turnbull to deny this statement; so far from doing it, that gentleman reiterated much of it, and dwelt in words emphatic, if not precise, on what he ordered to be done, what he did, and what he didn't in the matter, and how "Thompson would be paid for it"—a state of things scarcely to be deplored under the circumstances.

Having heard the evidence of Dr. J. E. D. Rodgers—deputed by Dr. Lankester to make a *post-mortem* examination—and subequently the evidence of Mr. Turnbull, the proceedings were prematurely brought to a close, both jury and coroner expressing an unanimous opinion that there was no necessity for Dr. Thompson to trouble himself by offering any explanation as to his acts, and those of his assistants in the case, the widow of deceased and Mr. Turnbull having themselves sworn that deceased received every attention—in fact, profuse medical attention—and that death resulted from "congestion of brain, and natural causes." A verdict in acccrdance was recorded.

This terminated a senseless, useless, and, we wish we might add, an *objectless* inquiry. The object aimed at, undoubtedly, was professional scandal; the object attained complete vindication of Dr. Thompson; but with it, alas! a lowering of our professional status in public opinion.

But there is a moral in those proceedings, and it is this: that it presents to the Profession a still further illustration of the anomalous position in which at any time medical men may be placed by a designing knave, a fool, or a busy-body, to gratify a grudge or to promote ulterior ambitious views—ephemeral as they may be—by seizing on a reputation patiently, industriously, and guilelessly earned; earned too in a field wherein worldly rewards are few, praise scant, responsibility great, and toil unceasing; and holding it up to the gaze of perhaps a scornful or insatiable herd.

The Usurpation of the College of Surgeons.

The Council of the Royal College of Surgeons of England has consummated its crime. It has proceeded to appoint Mr. Quain as member (for the College) in the General Medical Council. There is only one redeeming point about it. Some members of the Council opposed this act, and stated that the fellows and members had the right to elect. This we have long argued. It was, as our readers know, first stated by Dr. Prosser James; and we are informed that that gentleman has taken counsel's opinion on the point, and that this opinion is entirely in favour of his view of the law. If Mr. Quain pretends to speak in the name of the fellows and members he will deserve to be called an impostor.

The Medical Club.

The general meeting we announced took place last week and was well attended. More than 130 members had written to express their willingness to increase their annual subscriptions as proposed to five guineas for town and three guineas for country members. We should hope that the many advantages held out by the club will be more fully appreciated, and that many will join it. It is a matter of importance that the Profession should support a club, and surely the large numbers of medical men who belong to general clubs will also join their own. Those, too, who only want a single club, ought to support this.

The Medical Bill.

To-morrow (Thursday) is the day fixed for the second reading in the House of Commons. Dr. Lush—all honour to him!—will move that it be read that day three months. Sir J. Gray's Bill will be considered at the same time. Dr. Brewer has also a measure. Nothing will satisfy the Profession or be of any use to the public but the one portal and representation in the Medical Council. These are the only two things worth asking for. If denied, let us wait another year.

The Irish Registration System.

Some months ago we had occasion to notice the argument put forward on the part of the English Poor-law Medical Officers' Association in favour of the introduction of the Irish Medical Charities and Registration systems into England. Without in the least desiring to imply that those systems might not be an improvement on the existing English Poor-law Medical mechanism, or at all intending to discourage the advocates of the introduction of these systems, we still retain our opinion that it would be very unfortunate that the English Poor-law Medical Officers should be unacquainted with the shortcomings and *desagrémens* of the Irish system. It is unnecessary for us to enter into detail of the many and great discomforts and the very inadequate rewards which the Irish Dispensary system devolves on its medical staff. Whether those shortcomings are greater or less than those which notoriously attach to the English system it is not necessary for us now to declare. Suffice it to say the Irish system

is, as far as its medical officers are concerned, very far indeed from being either remunerative, pleasant, or effective, and to publicly represent it as being so is not only an inaccuracy but an injustice to those who have for so many years struggled for its amendment.

The last report of the Registrar General for Ireland affords us an opportunity of showing that, in the public interest, the Irish Registration system, as it at present exists, ought not to be extended. It is, as our readers are aware, in the hands of the Poor-law Medical Officers, and we observe, with much regret, that under their administration it is as unreliable and unsatisfactory as it well can be. The proportions of births and deaths registered in Ireland within the last quarter are respectively 1 in 34 and 1 in 49. Those in England for the same term are respectively 1 in 29 and 1 in 44. This discrepancy between two countries in which we know of no real difference, is easily accounted for by the fact that in some districts the proportion of births registered is as high as 1 in 22, while in others it does not amount to more than 1 in 103—statistics which amply prove that in certain places not more than one fifth of the actual births are ever recorded. In referring to this state of things the Irish Registrar-General says:—"It is evident from the foregoing figures that the registration of births and deaths is very imperfect. The registration of marriages, it is greatly to be regretted, is still more unsatisfactory."

Annihilation of Small-pox in Ireland.

The Irish Poor-law Commissioners in their last report refer in the following terms to the cessation of small-pox in Ireland:—"The number of deaths by small-pox occurring in the workhouses during the fifty-two weeks is seen to have been only one, following upon three in the last year, and five in the preceding year. These facts, taken in connection with the Registrar-General's Quarterly Returns, and the information supplied to us by the medical officers of workhouses and dispensaries, enable us to say with confidence that small-pox is scarcely any longer to be regarded as indigenous in Ireland, and that it exists occasionally only by introduction from beyond sea, for the inoculator appears to have ceased his dangerous trade altogether. The modes of introduction which experience teaches us most to apprehend are sailors arriving in Irish ports from Great Britain or the Continent, soldiers returned from furlough, tramps and vagrants crossing the Channel to change the field of their operations, and lastly, poor persons compulsorily removed to Ireland from British towns, such as London, Liverpool, Glasgow, and others, where small-pox is always present."

Changes of Temperature in Typhoid Fever.

M. Garcin, of Marseilles, has published, on the authority of Professor Fabre, a series of observations of great value and importance on temperature in typhoid fever. There is, it appears, a distinct relation between the temperature and the intestinal lesion. As long as the intestinal glands are infiltrated and swollen, the thermometric rise is constant; whilst they are ulcerated, the thermometer is stationary, and is in a remarkable manner subject to peculiar changes. If the products of the ulceration are in course of elimination, the temperature is uniform. If, on the contrary, the septic products are absorbed, pass into the blood, and cause poisoning, the interstitial combustion takes on new activity, the temperature again rises, and finally the descent of the thermometer indicates the repair of the intestinal lesions.

The Sewing Machine, and its Effect on Health.

It will be recollected how, about a year ago, one of our medical contemporaries, in sequence to its delusion about the gregarines, gravely announced that the use of sewing machines was destructive of health, and more than hinted that those who used them became shortly the subjects of ovarian excitements of an undesirable character. This alarm, being a novelty, was echoed by the daily press, and the sewing machine was in danger of being tabooed, when a reliable authority declared that the alarming predictions were purely chimerical. The matter has been conclusively disposed of in a communication laid before the Paris Academy on the 21st of June by M. Decaisne. His conclusions, from an observation of 661 workwomen, are shortly as follow:—

1. The effects on the locomotor system do not differ from those of excessive muscular exercise of certain limbs to the exclusion of the others. The effects of the fatigue do not exist in women who work only two or three hours a day, and disappear in a short time in the case of those who work longer hours.

2. The digestive disorders common to sixteen out of every twenty artisans of Paris, are not more common in machine sewers than in other trades.

3. Affections of respiration are not more usual in them than in those who use the needle.

4. The influence on the nervous system, supposed to be caused by the noise, is slight; for the workpeople soon become accustomed to it, and it has no effect on their health.

5. Without positively declaring that the sewing machine does not cause genital excitement, I am quite certain that the cases published and the generalisations on them have no value whatever. The result has been found to be very seldom the effect of the machine, and I have almost uniformly found, in previous habits or special physical condition, good reason for the forms of excitement to which I allude.

6. Careful investigation has proved that machinists are not more subject to menorrhagia, miscarriages, peritonitis, or leucorrhea, than other workwomen.

In conclusion, I find that the sewing machine, worked by the foot, when used within reasonable limits, involves no more danger to health than the use of the needle. This is sufficiently testified by the fact, that among twenty-eight women from eighteen to forty years of age, working three to four hours daily, it was impossible to detect any effect attributable to the sewing machine.

Peers and Doctors.

We have a note or two from the House of Peers:—

1. The Earl of Lichfield remarked that the Profession had no voice in the Colleges and Universities, and therefore should have a direct voice in electing the Medical Council. We regret he did not go further and say that a voice ought to be given in Colleges and Universities to the members and graduates. In the case of the latter they do vote for the Member of Parliament. Why not for a representative in the Council?

2. Earl de Grey repeatedly contradicted his own state-

ments, proved himself ignorant of many questions involved, and determined to resist the just claims of the Profession. He is opposed, also, to giving the Council too much power. In fact, it is clear his first proposal expresses his wish, viz., to make the Council the mere tool of the officials of the Privy Council.

3. The Marquis of Clanricarde has defended the right of the Profession to representation, even to the extent of moving the rejection of the Bill. He has thus sown good seed which will be sure to bear fruit.

4. Earl Grey defended the right of the Profession as distinguished from the Corporations, to be represented, and thought Lord de Grey's observation, that the requisite machinery was not forthcoming, a just one. What a pity it did not occur to his Lordship that the machinery already exists in the case of the Universities, and that for the Colleges could be easily made similar!

5. The Marquis of Salisbury said the plan of electing by persons widely scattered had not been applied in any body in the country. Oh! most noble Marquis, were you not lately made Chancellor of the University of Oxford, graduates of which are "widely dispersed," and so forth? The Marquis also said he had not heard "that any of the more eminent members of the Profession were anxious for the proposed change." We beg to inform him that the Government Bill, as a whole, is so defective that no one of any thought in the Profession can care to wish it success; and that, as to the Medical Council, no one, except its own members, has a good word for it, and some of its own members themselves are anxious for a change. Why, the more eminent names may nearly all be found in the 10,000 signatures to a petition to Parliament that has long ago been presented.

The Doctor's Bill.

THERE are few less important subjects that concern our medical brethren than that of the Doctor's Bill. The public exact a great deal from the country practitioner; they expect great attention, and consider it the doctor's duty to cure them in every instance. If the nature of the case renders him unsuccessful, sometimes they are only too ready to attribute it to want of skill, and never consult his feelings in the insinuating remarks which have for their object the calling in of a town consultant who gets as much in a single fee as the whole treatment of the case perhaps amounts to, or in superseding altogether the medical attendant, who has left nothing undone that science could suggest or experience, dictate by bringing to the bedside of his patient the herbalist or the panderer to homœopathy. Again, the doctor with much zeal, anxiety, care, and personal risk may bring a whole family through a serious illness of contagious disease; from his own table and cellar supply them with little luxuries which he may think will tempt the fastidious appetite; or he may sit by the bedside of a woman in parturition hour after hour throughout the weary night, encouraging and helping; or he may perform operations requiring great skill, nerve, and much subsequent attention, and yet find, when his modest bill is forwarded, grumbling and dissatisfaction. In the hour of danger the doctor is a great need; when he has performed his task worthily and successfully, his doings are soon forgotten, once he has restored his patient to health and usefulness. The remark very often made is, "Doctor, come as often as you consider it necessary; never study the expense, we'll pay liberally." This is only too familiar to the hard-working country practitioner, who, invariably to his disappointment, as a rule finds it turn out so much "sounding brass and tinkling cymbal." The doctor's work, we repeat, the doctor's skill, his risk in contracting disease in the deserted chamber of the fever patient, or his personal danger in the self-infliction of an injury in the performance of an operation, are never considered. It is, "Oh, doctor, you charge me heavily; I have only had so many bottles of medicine!" We must freely acknowledge all this is brought about by a certain class of practitioner who reflects little credit upon his profession, and, whilst he lowers himself irremediably, so to speak, injures his brethren. We have seen doctors' accounts sent in like the chemists'—a mixture so much; a packet of powders, a box of pills, or a pot of cerate so much! This is objectionable. A practitioner should furnish a bill for professional attendance, and teach his patient that he does not, it is the chemist who charges for drugs; that his is for professional advice and professional attendance. We write of the general class of patients: there are many exceptions, many truly grateful, and generous patients, unforgetting and thankful for the attention paid them; but "one swallow does not make a summer."

We hope the following recommendations may prove useful to the general practitioner: The doctor's bill should be sent in early after the attendance, or many little circumstances become forgotten by the patient and his relatives. If the account be allowed to hang over, the debtor, again suffering from indisposition and needing professional assistance, may pass the door of his creditor because the account is unsettled, and consult another physician; or he may delay seeking help until his case becomes hazardous, for he is ashamed to meet the doctor whom he has not paid. The account should not be furnished as a chemist's, but the charges made specifically for advice and attendance, leaving medicines aside altogether. All midwifery fees should be expected to be paid at the next visit after delivery, for this is not like an illness; there is ample time to prepare for the event, and the most important individual connected with an accouchement should be the first to be considered, as his time is his living. Circumstances alter cases, but the most successful of practitioners adopt the rules we prescribe for the guidance of others.

A Safe Safe.

LAST week we inspected a new safe of dimensions that would astonish many; for it is a good sized room, in which one can walk about. It is the only one of the kind in the world, and perhaps the largest. It has been built by Messrs. Chatwood and Co., whose safes resisted all efforts to open them at the Paris Exhibition, but is an improvement even on them.

Moreover, it is surrounded by a pneumatic envelope, which is intended, not to resist burglars, but to detect their first effort. This pneumatic envelope consists of galvanized iron tanks, perfectly air-tight and connected with a gauge-index, which betrays in a moment any change in the water-level, and indicates at the same time the particular tank that is being tampered with.

Now, supposing any attempt, this index shows it before the safe can be touched; and as Chatwood's safes would require 70 or 80 hours' work, with every appliance, by a skilled workman, to force them, it is obvious that bur-

glars may give up the notion of penetrating this one. The pneumatic system of detection is the invention of Mr. T. W. Tobin, of the Polytechnic, a very ingenious gentleman, with whose name our readers have for some time been familiar. The safe has been erected for Mr. E. W. Streeter (of 37 Conduit street, London), the well-known introducer of machine-made jewellery, and more recently still of machine-made watches. The safe is intended not merely for his own stock of diamonds and valuables, but, being so large, Mr. Streeter will be able to take charge of the property of others, and he naturally supposes that many will be glad, for a small annual fee, to avail themselves of the chance of placing their jewels, &c., in such a safe.

Access to the safe is obtained by a doorway, 6ft. 3in. by 3ft., and 8in. thick ; the door weighs five tons. It is constructed of, 1st. The outer thickness of best "Dartmoor" iron, the back of which is intersected with thousands of cones, to receive. 2nd. "Speigelised" iron. 3rd The lock and machinery ; and 4th. The inner fire-proof covering. The front door is 18in. in thickness, and, with the substitution of fire-brick for the "Speigelised" iron, constructed much on the same principle.

The term "Speigelised" iron may be new to many, and, as this is not a general article of marketable supply, the following details may not be uninteresting :—

It consists of a hard combination of steel or iron, and silica or flint, possessing all the strength of the cast-iron ; it also resists by virtue of the flint any attempt to penetrate it with edged tools. A chisel tempered to cut the hardest metal is driven aside and burred like lead ; it would be, in fact, labour lost, endeavouring to bore or cut it.

The lock to close the safe is capable of several thousand alterations or combinations, in case the key is surreptitiously obtained possession of ; and, although the lock is of the largest kind, it is opened by a key no larger than that of an ordinary cash box ; with this and this key only can the lock be loosed.

The total weight of the safe, without its surroundings —simply taking the metal—is between 50 and 60 tons. The height is 9ft. 6in. ; width, 9ft. ; depth, 15ft.

The Late Dr. Copland, F.R.S.

We regret to announce the death of another veteran of our Profession. In his 80th year the author of the great "Dictionary of Medicine," with which his name must always be associated, died, last Wednesday, of hæmaturia. He had had a previous attack, but this one was soon followed by uræmia, under which he speedily sunk. His immense literary undertaking is the best proof of his indomitable perseverance and courage, and his almost unequalled learning.

The Friendly Societies Acts Burial Clubs.

A daily contemporary states that the proposed Royal Commission to inquire into the laws relating to Friendly Societies is being hotly opposed by the representatives of these societies on the ground that it will be injurious to the working classes. Just so. The representatives of those societies, with very few exceptions, have revelled for such a very great length of time on the hard earned pence of the poor, appropriating, squandering, and converting to all manner of vile uses, the moneys laudibly intended by the members or contributors for *that time* which sooner or later shall come to each of us (and which well-seasoned experience has taught many an anguished heart it would have been wise to be thriftily prepared for), therefore, they fear exposure and the ignominious rout sure to follow it. Let us hope that the Earl of Lichfield, the proposer of this Commission, and the numerous members of both Houses of Parliament that sympathise with the cheated industrious poor, will see that the Commission be not burked—even for a time—but that justice ample and complete be, even now at the eleventh hour, done them.

In London, lately, conferences of the moving spirits of many of these societies have been held, and a report has been industriously circulated, that in the proceedings of some of those conferences the Earl of Lichfield and other genuine philanthropists took active parts. If there be any truth in the rumour, in the interests of the poor we much regret this, for we really dread to think of the cunning devices that may be employed, and the glowing *water* colours that may be heavily laid on to hoodwink and seduce them.

Our remarks are intended to apply more particularly to the "sick and death benefit" and to the "burial club" sections of Friendly Societies Acts, than other sections of the really well-intentioned measure. Rotten at core as three-fourths of Sick and Burial Societies are, their odour sniffs savoury, compared to that emitted from these miasmatic seats of turbidness—Burial Clubs. There is no question but that the majority of Burial Clubs, *yet alive*, border on bankruptcy. Originally honestly intended to meet the wants of the lowest order of industrious poverty, whenever the great emergency arose for the employment of the sum the "penny a week" entitled the contributors to, they now appear to be sources whence managers, committees, and their agents "draw" from the very heart's blood of poverty the "penny a week" *and live on it.* The facility with which a dismissed policeman, an energetic tailor, a son of Crispin, or any "ne'er do weel' may be metamorphosed into an agent, canvasser, or collector to a "Burial Club," accounts for much of the wrong perpetrated by these "clubs" on the poor as the "sinews of war" are induced and collected by those persons, and finally passed to the hands of the managers of these clubs —*minus* commission for canvassing and collecting.

Until such time as a stringent Government supervision over Burial Club managers, committees, agents, collectors, canvassers, *et hoc genus omne*, be adopted, and the facility to cheat be restricted, by honest codes of rules and tables of benefits, by bi-annual examination of accounts, and seeing (*bona fide*) the securities (if any), and the actual monetary position of each club, and lastly by permitting none but persons of character (and giving ample security for its continuance) to be officially connected with them, the scheme will "pay" the cunning few at the sacrifice of honour, justice, and humanity.

A few days past the wife of a respectable farmer, named Purcell, residing at Feakle, attended by surgeon P. V. McDonough, gave birth to three children, all girls.

The meeting of gentlemen held in London to protest against the late appointment at the Edinburgh University, was largely attended, but many of those present were not graduates of the Edinburgh University.

The Cattle Diseases (Ireland) Bill passed with one or two amendments the third reading in the House of Lords on Thursday.

Out of the three hundred and ten candidates examined last month for the F.R.C.S. and M.R.C.S. of England, it is stated that about half of the number were rejected.

As will be seen on reference to our advertising columns, the subject for competition for the Alexander Memorial Prize for 1872 will be "Pulmonary Consumption as seen among Soldiers." The value of the prize is £50 and a gold medal value £10, and the competition limited to executive Army Medical Officers.

In this season of Continental travel it is worth while calling attention to the two cases narrated in the *Medical Mirror* of July, in which persons who have suffered in general great miseries in crossing the Channel, have been saved from sea-sickness by the use of Dr. Chapman's ice-bags. We intend making the experiment on some of our lady friends this summer. *Fiat experimentum.*

We are glad to see that Sir James Simpson's memorial is to be carried out according to the ideas of the illustrious deceased, and that the maternity institution is to be, as Sir Charles Trevelyan recommended, of the village form.

Sir Thos. Watson has been appointed one of the physicians in ordinary to H. M. the Queen, in consequence of the death of Sir J. Clark. The venerable baronet, as head of the Profession, was very naturally thus selected. If the Government would make him a life peer it would bring on a discussion that might end in a good reform in the House of Lords.

M. Auzias Turenne, the inventor and propagator of syphilization, has died in Paris. The medical journals report that a vast number of cicatrices resulting from chancrous inoculation were found on his body. A clause in his will stipulates that his body shall be dissected and his skeleton given to the Faculty of Medicine at Christiana, where his doctrines have found a firm adherent in the person of Professor Boeck, who is at this moment in America engaged in explaining the heterodox theories of his friend and master.

Dr. Villeneuve, after a lengthened inquiry, has published a long work on "The Proportion which exists between the Size of Children and their Vital Resistance in Normal Parturition." He has established, amongst other interesting facts, that of large children the number of boys is greater than that of girls, that the vital resistance of either boys or girls is in direct ratio to their development, that the deaths of mothers is the more rare in proportion as the children are larger, provided that the pelvis and the presentation are normal. Nothing would seem more reasonable to suppose, than that the larger the children are the greater the obstacles to birth they meet with. This is Simpson's theory, and it is a satisfaction to be assured that the hypothesis is incorrect.

Correspondence.

THE AMERICANS AND THE ETHER DISCOVERY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In the otherwise accurate synopsis of the history of surgical anæsthetics, by my friend, Dr. Hughes Bennett, in your journal of the 25th ult., I think I perceive one or two omissions that he himself would be glad to see supplied. Every man accustomed to large hospitals and large operations, must remember what a hideous thing the agony of such scenes and operations was before 1846, when Morton, for the first time in the history of the world, made anæsthesia a practicable, practical, and desirable fact. (I am afraid we must leave out Jackson.) Ether, a thing portable, old-fashioned, and familiar to everybody at once, like the lamp of Aladdin, was found to possess properties never suspected before, and chloric ether, used by Jacob Bell subsequently, and chloroform itself, recommended to Simpson (I am told by my esteemed friend, Dr. Tyler Smith, then editor of the *Lancet*) directly, by Dr. Formby and Mr. Waldie, and used previously by Flourens, differs, of course, very little from ether.

The great discovery was that of etherisation, by Morton, in 1846; it is scarcely fair to be going back to the mandragon of the classics or the virtues of puff-ball, voltaic narcotism, or even methyl-ethylic ether, in order to lessen the glory of Morton's discovery. The *Times* spreads the alleged fact through Europe that Simpson administered chloroform in 1844, and refuses all correction of the error, and that "a somebody named Morton, in 1846," pretended equal virtues for common ether; but this inversion of the facts is most unfair to America; nor is it correct to say John Bell, because he gave a soap-and-opium pill before an operation, had anticipated Morton, as Dr. Richardson does of late in the *Lancet*. We require very much just at present to have all the facts and dates fairly stated, especially that Dr. Formby and Mr. Waldie directly suggested chloroform to Sir James Simpson, and that it had been previously used by Flourens on animals to destroy sensibility before vivisection.

I am, &c.,

Sackville street, Piccadilly, June 1. Charles Kidd, M.D.

CONTAGIOUS DISEASES ACTS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—I conceive the letter addressed to Dr. Chas. Drysdale, and inserted in your last impression, from the pen of M. L. Lefort, is worthy of being replied to as far as it refers to the Contagious Diseases Act. M. Lefort sets out by asserting that the cause of prostitution in France is to be accounted for by the workman fearing to give up his liberty by entering into the marriage contract; and the woman, he affirms, does not expect it, because the looseness of morality (*relachement des mœurs*) makes no difference between the married and the concubine. So far so good. This we have exemplified at home. Anyone who ever had the misfortune to live in a manufacturing or colliery district of civilized England, can comprehend this remark of M. Lefort's; but when M. Lefort connects the dirty subject with the dogmatic morality Catholic societies teach, and writes about not being sufficiently educated to understand the laws of natural morality, thereby abandoning his religion and following the promptings of instinct, because of the difficulties he experiences in comprehending "*the absurdities of the Catholic religion,*" it is simply absurd. Take Catholic Ireland *par exemple;* the lower class are ignorant enough, God knows, but what is the effect of religion upon them? Is there a more virtuous people in the world? Let us, on the other hand, glance at the condition of certain districts in England, where cant is epidemic, and the piety tea-meeting lecturer, of the Richard Weaver, the converted collier, stamp, is in his youth, and what is the result? What greater insult to morality and *true religion* than connecting prostitution at all with it? It is, as M. Lefort states, *instinct* that leads to illegitimacy, and it is the nature of a certain race to follow it with uncontrolled passions. The illegitimacy, the prostitution, and depraved condition of our own people in manufacturing districts, is truly deplorable; but when preachers, like Richard Weaver, the fondling of old ladies, with a wife of his own, falls back into old habits of immorality, after a long term of conversions and revival demonstra-

tions, we are made to feel that it is our *nature* to be immoral, that facility of divorce can have nothing to do with it, and that if we know more of Catholicity and less of cant, the great evils of the age, abortion-mongers, baby-farmers, and professional murderers, would have no more existence in Protestant England than in Catholic Ireland.

I am, Sir,

Your obedient servant,

Osman House, Sutton, Notts, July 14th, 1870. J. WARING-CURRAN.

Resection of the Entire Scapula, with Preservation of a Useful Arm.

DR. SCHUPPERT records (*New Orleans Journal of Medicine*, Jan. 1870) a very interesting case of this. The subject of it was a stout unmarried German woman, aged thirty-six, who came to New Orleans in 1868, suffering from a large tumour comprising the right scapula, for which she had been twice operated on in Germany, which operations left the scapula intact. When seen by Dr. S., the skin covering the tumour showed many cicatrices from former operations. "The tumour from its posterior margin to the acromion process measured 0·18 metre, the largest extent in a vertical line being 0·21 metre. Active motions of the humerus were nearly arrested, the passive motions very much limited. The extremity could not be further removed from the body than to an angle of 45 degrees. The extensive pain the patient suffered in the arm brought her to me in search of relief. Having given her consent to a proposed removal of the entire bone, the operation was accordingly performed on the 30th of March, 1868, in presence of Drs. Barnes, Gray, Geutebruck, Riley, Schwarzwaelder, and some other medical gentlemen. Patient being in a deep chloroform narcosis, a crucial incision was made through the skin; one cut, beginning at the acromion process and carried over the most protuberant part of the tumour, ended near the spinal column; a second incision over the middle of the tumour bisected the first. The four skin flaps were dissected off and held back by sharp hooks. The acromion process was divided with a small saw, laying bare at the same time the scapulo-humeral articulation. The head of the humerus was then by rotating the arm dislocated inwards, to get at and remove the coracoid process. Lifting up the scapula by its glenoidal cavity, which was found to be involved in the disease, the whole of the scapula was detached from the body by keeping the knife close to the under surface of the tumour. The removal of the tumour left the ribs visible through the cellular tissue, which was all that remained of the subscapularis muscle, lost in the diseased mass.

The bleeding was inconsiderable, the main vessels having probably become obliterated by the former operations; with the exception of a few muscular branches no arteries had to be ligated. The skin flaps were adjusted and united by interrupted pin sutures, leaving an opening at the most dependent part to permit the draining of the secretion. Acetate of morphia, 0·03 gramme, was subcutaneously injected. After patient had perfectly recovered from the anæsthetic condition she was unconscious that the operation had been performed. The arm was bandaged and kept close to the body supported by a sling.

Patient suffered much nausea subsequently and vomited during several days from the effects of chloroform. No unfavourable symptoms happened to require medication. A nourishing diet was ordered from the first day and continued during the convalescent state.

The sutures were removed on the third day. Most of the incisions had healed by first intention. Suppuration was considerable, and notwithstanding the well draining of the wound two abscesses formed in the arm discharging a great quantity of pus. The wound was syringed out daily with glycerine containing ten per cent. of carbolic acid. On the 10th of June, the last secreting opening had closed.

At the present date, eighteen months after the operation, there is no indication of reappearance of the disease in any part of the body. The skin, of which no part had been removed, though after the excision of the tumour it formed a large sac, has so contracted that a part of the cicatrix forms now a portion of the covering of the humerus. Theresa, who enjoys excellent health, has thrown away the sling long ago, the arm has no artificial support, and is a more useful instrument than before the operation. Though its motions are limited, there is sufficient strength in the extremity to lift a weight of thirty pounds and throw it a fair distance.

The tumour weighed nearly six pounds and measured respectively 0·35 and 0·40 metre in circumference. From the original scapula but one third of the spine, a small portion of the coracoid process, and the centre of the glenoidal cavity remained intact; all the rest was involved in the growth. The tumour consisted of hyaline and fibro-cartilage with deposits of carbonate of lime in the interspaces of the cartilaginous tissue. Towards the centre, true ossification had taken place. We have to consider it, therefore, to be an osteochondroma.

Medical News.

University of Dublin.—The following degrees were conferred on the 6th inst:—*Doctor in Medicine:* John Smith Chartres, Henry Fitzgibbon, Henry Fitzsimons, Benjamin Johnston, Rawdon Macnamara (Honoris Causa), Frederick Orton, John Orton.—*Bachelor in Medicine:* Edw. Ebenezer Barrington, Armand Bernard, William Bolton, Sidney Herbert Carter, John Smith Chartres, Jacob Albert Clery, Abraham Colles, William Creery, William Hamilton Elliott, William Robinson Evans, William Jacob Fawcett, Charles Edward Hetherington, Francis Charles M'Nalty, Francis Geo. Mayberry, Jacob Samson Niven, Charles De Montmorency Palmer, Arthur Stopford Underhill, Richard White. — *Master in Surgery:* Edward John Archer, W. Battersby, Jacob Albert Clery, Richard Dane (Honoris Causa), William Jacob Fawcett, Charles Edward Hetherington, Francis Charles M'Nalty, Richard Rainsford, Arthur Stopford Underhill.—*Licentiate in Medicine and Surgery:* Cuthbert H. Huddart.

Sunstroke.—A student of Malvern College, Robert M. Drew, son of the Rev. W. H. Drew, Kings' College, died on the 7th inst., from the effects of sunstroke.

Female Medical Students.—We are informed the lecturers at Surgeons' hall Edinburgh, have adopted the following resolutions.—"1. That it is expedient that lectures in this medical school should be free to lecture to females as well as to male students. 2. That no restrictions be imposed upon lecturers as to the manner in which instruction is to be imparted to women."

Australian Leeches.—We learn from the *Melbourne Argus*, that a large consignment of leeches was forwarded to England in April of this year, per steamship "Somersetshire." We are informed that some parts of Australia abound with leeches, and those frequenting the Murray river have a good repute for biting freely, and leaving no inflammatory wound behind them. They are said quite to rival the speckled leech of Northern Europe. A Melbourne firm have contracted with the fishermen of the Murray district for the conservation of the leeches, and we understand that the contract for last season exceeded half-a-million. The leeches sent to England were packed in boxes of soft clay, made to resemble as much as possible the muddy bottom of the river, which was their resort.

Medical Officers' Poor Law Association.—Last week the annual meeting of this association was held at the Freemasons' Tavern. Dr. Rogers, who presided, read a paper detailing the effects of the amalgamation of this body with that of the Medical Reform Association. He submitted that adequate medical attendance tended more to reduce pauperism than any other plan. He congratulated the association on the signal success which had attended their efforts during the last two years. In July, 1868, there appeared to be absolutely no hope left for the parish doctor, save a life of ill-requited, unrecognised unhonoured toil, too frequently cut short by a premature death from disease contracted. A change from this state of things seemed to be opening up. Their grievances had been ventilated in the House of Commons, and in Mr. Goschen they had at last a president who had shown himself alive to the necessity of a reform of the system. He would be able to carry on the necessary reforms if his hands were duly strengthened by such united expressions of opinion as they and similar bodies were able to excite; but it was necessary that their efforts should be continued and not relaxed. The reader mentioned incidentally that poor-law medical officers were not unfrequently required to attend in their parochial capacity the servants of noblemen. A resolution was passed expressing

gratification at the action of the President of the Poor-law Board in his support of the Medical Officers' Superannuation Bill, and his efforts to establish permanency for parish as well as union medical officers. Thanks to the general officers and local honorary secretaries concluded the meeting.

Metropolitan Railway.—A scientific yet simple and inexpensive invention of Dr. I. McGregor Croft, has been tried on a first and second class carriage this week, by the assistant engineer of the line, for the purpose of rendering the air in the carriages cool and pleasant, and it is reported a complete success. No doubt all the carriages on this railway will be speedily altered in accordance with Dr. Crofts plans. The intense heat from the gas lights, and the oppressive atmosphere in the carriages, is a serious drawback to the company. This will be completely altered, and we congratulate one of the profession, for rendering such a boon to underground travellers, and trust the company will appreciate the inventor in a substantial way.

THE SIMPSON MEMORIAL.

A meeting of the Acting Committee was held on Friday afternoon in 5 St. Andrew Square, Edinburgh, Dr. Andrew Wood presiding. Councillor Colston intimated that the business would henceforth be carried on in No. 12 South Frederick street, as also that several large subscriptions had been received. Some conversation then took place on letters that had appeared in the newspapers and elsewhere, calling in question the propriety of the resolutions unanimously adopted at the last meeting of the Provisional Committee to establish an hospital for the treatment of the diseases of women as an important part of the memorial. The chairman and Dr. Moir, who were in constant attendance on Sir James Simpson during his last illness, bore the strongest testimony to the earnest desire expressed by him that a suitable hospital, where the sufferings of women might be relieved, and where students might have the opportunity of studying the treatment of this important class of diseases, should be open in connection with the Edinburgh Medical School, the want of this having always been felt by him as a great deficiency in its arrangements. It was announced that several of the large subscriptions would be withdrawn if the scheme of an hospital was abandoned. Dr. Alexander Wood, on behalf of the deputation, reported the proceedings which had taken place there, and spoke in strong terms of the cordial co-operation which they had met with.

NOTICES TO CORRESPONDENTS.

ERRATUM.—In Dr. Griffith's letter in our last, on "Entire Loss of Speech," for "*harsh* sentence," read *last* sentence.

DR. (?) NEWTON.—We extract the following admirable remarks from a very long letter of a correspondent, who writes, not in his defence, but in condemnation of the professional and public apathy with regard to quacks, as contrasted with the energy that has been displayed in persecuting this hapless but comparatively harmless individual. He says:—"Let me ask, are there not many really mischievous pretenders at work daily and hourly in this crowded, wealthy, and very virtuous (?) capital of the world, called London. And these quacks, charlatans, and other 'scoundrels' are allowed to go about unmolested, selling their poisonous wares, carrying on their deadly trades, and trapping the innocent and unwary to the imminent risk of body and soul. If inaction is very blameable, it is still more censurable to act as Dr. Newton's persecutors have done, that is, using their energies in one direction, instead of applying them to purposes which are likely to promote the good of their fellow creatures; they should first discriminate what is EVIL, and then let them suppress it with all their might."

J. C. P.—He certainly is not entitled to use the degree unless it be registered. If you will send us the name of the person, we will ascertain, if possible, who and what he really is.

WHAT DISPENSARY PRACTICE IS COMING TO.—An individual, whose address we are unable to find in the "Medical Directory," but who professes to be a qualified medical man, has recently opened a dispensary in London, where he may be consulted, and supplies patients with medicines at the rate of ONE SHILLING for three visits.

A SUBSCRIBER.—You can procure the American books named through Messrs. Trubner, Paternoster row, or your own bookseller will obtain them through that house.

VARICOSE VEINS OF THE LABIA MAJORA.—A Subscriber is desirous of being favoured with any recorded cases of this troublesome affection.

DR. LEARED.—Your paper "On Cancer of the Lung" will appear as soon as space permits.

PRUDENTIA.—Without the exact date we fear we cannot assist you to be copy you desire.

"On the Incubation Period of True Syphilis."—We regret that the article under the above title in our last issue was, by mistake, attributed to Dr. *Henry*, instead of Dr. *William* MacCormac.

VACANCIES.

London Hospital—Medical Clinical Assistant. Salary, £40.

Victoria Hospital for Sick Children—Resident Clinical Assistant.

Windsor Infirmary—House-Surgeon. Salary, £100, with residence, &c.

South Devon Hospital—House-Surgeon. Salary, £80, with board and residence.

Metropolitan Asylum District—Two Assistant Medical Officers, one each for Leavesden and Caterham. Salaries, each at £150, with board and residence.

Middlesex Lunatic Asylum—Assistant Medical Officer. Salary, £150, with board and residence.

Eastern Dispensary, Bath—Medical Officer. Salary, £80 with board and residence.

APPOINTMENTS.

ADAM, J., M.D., Medical Superintendent of the Metropolitan Asylum at Caterham.

ARMSTRONG, L., L.R.C.P., Surgeon to the Newcastle-upon-Tyne Infirmary.

BELL, H. R., F.R.C.S., Assistant-Surgeon to King's College Hospital.

CRESSWELL, T. H., M.R.C.S., Medical Officer for the Clifton District of the Tamworth Union, Staffordshire.

DAWSON, Dr. R., Physician in Ordinary to the Brighton Dispensary.

GIBB, C. J., M.D., Consulting-Surgeon to the Newcastle Infirmary.

HAMMOND, Mr., House-Surgeon to the Retford Dispensary.

HARMAN, E. J., Medical Officer for the Montiaghs Dispensary District of the Lurgan Union.

KERBEY, W. H., M.R.C.S., Medical Officer and Public Vaccinator for the Weobley District of the Weobley Union, Herefordshire.

LE TALL, W. J., M.R.C.S., Medical Officer and Public Vaccinator for the Handsworth District of the Sheffield Union.

WILLIAMS, W., M.D., Surgeon to the County Prison, Mold, Flintshire.

Birth.

REID.—On the 16th inst., at 3 Royal Marine road, Kingstown, the wife of Dr. Reid of a son.

Marriage.

WILLIAMS—SAVOURS.—On the 7th inst., at St. Paul's, Newport, Monmouthshire, Josiah Williams, L.R.C.P., to Rosina Margaret, only daughter of J. Savours, Esq., of Tynyrheol House, Neath, Glamorganshire.

Deaths.

ASPINALL.—On the 2nd inst., R. Aspinall, M.R.C.S.E., of Ebor House, Shipley, Yorkshire, aged 54.

LEE.—On the 10th inst., at Melville crescent, Edinburgh, James Lee, M.D., Surgeon-Major Bengal Army, retired list.

MACHILL.—On the 5th inst., Joseph Machill, M.R.C.S.E., of Pudsey, aged 56.

PHILLIPS.—On the 5th inst., at Adelaide road, N.W., Edward England Phillips, M.R.C.S., late of Bath, in the 56th year of his age.

THE ALEXANDER MEMORIAL FUND.

THE subject for the next PRIZE ESSAY will be "On the Nature and Varieties of Destructive Lung Diseases included under the head of 'PULMONARY CONSUMPTION' as seen among Soldiers, and the Hygienic conditions under which they occur. To be Illustrated as far as possible by Cases drawn from the personal observation of the Author."

CONDITIONS.

1.—A Prize of £50 and a Gold Medal value £10 to be awarded to the best Essay offered without reference to the number of Competitors, provided the Author has complied with the prescribed conditions.

2.—The Essay to be legibly and clearly written, superscribed with a brief Motto, and accompanied by a sealed envelope similarly superscribed, and containing the name and address of the Author.

3.—Essays to be despatched to the President, Alexander Memorial Fund Committee, Army Medical Department, 6 Whitehall Yard, on or before the 31st DECEMBER, 1872.

4.—The competition to be limited to Executive Medical Officers of the Army on full-pay.

5.—The relative merits of the Essays to be determined by Assessors to be selected by the Committee.

ST. PETER'S COLLEGIATE SCHOOL,

EATON SQUARE, S.W.

Head Master:—Rev. B. GIBSONE, M.A., B.Sc., Hon. Fell. King's Coll. Lond.

THE EXAMINATION for the MEDICAL SCHOLARSHIP commenced JULY 14th. The ELECTION and PRIZE DISTRIBUTION commences on JULY 28th, and the next term on SEPTEMBER 15th.

PUBLIC SCHOOL EDUCATION IN IRELAND.

COLLEGE OF ST. COLUMBA,

RATHFARNHAM, COUNTY DUBLIN.

VISITOR—The LORD PRIMATE.

THE COLLEGE IS intended for the EDUCATION of BOYS from the age of nine years and upwards. The Course of Instruction is of the same nature as that of the great Public Schools in England, in which Classical Studies are made the chief foundation. Particular attention is also paid to Mathematics, English, French, German, Drawing, and Vocal Music. Boys are prepared for the Universities of Dublin, Oxford, and Cambridge, and for the Competitive Examinations of the Military and Civil Services.

TERMS: For Boarders, 60 guineas; Younger Brothers are received at 40 guineas. A limited number of Sons of Clergymen will be received at 40 guineas. Terms for Day Boys, 20 guineas. There are no Extras.

There are Two Exhibitions attached to the School, tenable at the University of Dublin, value not less than £20 a year. Lists of the School, and of recent Honours gained by former Pupils, together with the Course of Study, and all other particulars, may be obtained on application to the Rev. ROBERT RICE, M.A., of Christ's Church, Oxford, Warden; or at Messrs. HODGES, FOSTER, & Co., Publishers to the University, 104 Grafton street, Dublin.

The Summer Vacation ends on Wednesday, August 10.

THE LONDON SURGICAL HOME,

FOR DISEASES AND ACCIDENTS OF WOMEN; for the Reception of Gentlewomen and Females of respectability, upon a weekly payment, under the sole management of Mr. BAKER BROWN.

The Private Medical Attendants of the patients are invited to visit them, and to meet in consultation before treatment.

Full particulars can be obtained on application to the LADY SUPERINTENDENT, Osnaburgh place, Regent's Park, London.

DRIFFOLD HOUSE ASYLUM,

SUTTON COLDFIELD, near BIRMINGHAM,

Beautifully situated in a very healthy and bracing climate.

LICENSED FOR PRIVATE PATIENTS OF BOTH SEXES.

For terms and other information, apply to the Proprietor,

G. F. BODINGTON, M.D., M.R.C.P., F.R.C.S. (Exam.)

CHURCH STRETTON PRIVATE ASYLUMS

FOR the UPPER and MIDDLE CLASSES of BOTH SEXES, are situated among the Shropshire Hills, Twelve Miles from Shrewsbury, on the rail to Hereford. Consulting Surgeon—W. J. Clement, Esq. M.P. for Shrewsbury. Physician and Surgeon—J. R. McClintock, Esq., M.D., late Assist.-Physician, Royal Asylum, Perth.

Apply to Wm. Hyslop, Esq., Stretton House, for Gentlemen; Mrs. Bakewell, the Grove, for Ladies. [Church Stretton, Shropshire.

TO INVALIDS.—MAISON DE SANTE,

No. 8 CHARLEMONT-STREET, DUBLIN.

THIS INSTITUTION HAS BEEN OPENED FOR THE reception and treatment of Patients of respectability, labouring under every form of Medical and Surgical Diseases, except Insanity.

No expense has been spared in fitting up for the purpose intended.

Prospectuses and every other information can be obtained from the Matron at the Institution, or any of the Medical attendants:—

Dr. J. F. Duncan, 8 Upper Merrion-street; Dr. Quinan 29 Leeson-street; Dr. Walsh, 89 Harcourt-street; Dr. Ward, 1 Rathmines-road.

The Professional Calendar;

OR, WEEKLY REGISTER

FOR GENTLEMEN REQUIRING ASSISTANTS, AND FOR ASSISTANTS SEEKING APPOINTMENTS.

EACH Announcement of Three Lines—about thirty words—will be charged at the nominal rate of ONE SHILLING *per insertion* (6d. *each additional line*).

As this Calendar *will be for the use of the Readers of this Journal, and from which no pecuniary advantage will accrue to the Proprietor, each Advertisement* MUST *be accompanied by Postage Stamps (Penny) in pre-payment.*

Wanted, a Locum Tenens, to take Charge of a Town Practice during the absence of the principal. He must be a person of experience, and have unexceptionable references and testimonials.—Address, Medicus, 23 St. George's Road, S.E.

Qualified Assistant Wanted (in-doors), in a General Practice ten miles from London. Would suit a Guy's man wishing to attend London two or three times a week.—Address, Surgeon, care of Messrs. Kirkland, 23 Salisbury Street, Strand, W.C.

Assistant Wanted, sine diploma, to dispense, keep the books, visit, and occasionally attend Midwifery. Must be strictly sober.—Address, enclosing carte (to be returned), stating salary required, age, references, &c., Dr. Roberts, Upperthorpe, Sheffield.

Wanted, a Situation as Assistant, by a Gentleman aged 21, who has attended all his lectures, and has the Rotunda Midwifery diploma. Salary no great object.—Address, G. M., Dr. Ellis, Rychill, Newcastle-on-Tyne.

Wanted, by a Gentleman aged 28, married, a Situation as Out-door Assistant.—Address, stating salary, &c., to H. P., Post-office, Lutterworth, Leicestershire.

Wanted, a Gentleman, doubly qualified, for Country Practice, out-door.—Apply to R., care of Gale and Co., 15 Bouverie Street, Fleet Street, E.C.

Wanted, a Situation as Dispenser and Book-keeper to a Medical man. Has had three years' experience both in Surgery and Dispensing.—J. C., 66 George Street, Euston Road.

Wanted, an Out-door Assistant, to visit, dispense, and attend Midwifery. A knowledge of Welsh necessary.—Richard Thomas, Surgeon, Llanelly, Carmarthenshire.

Wanted, by a Gentleman, unqualified, a Situation as ASSISTANT. Is a good Accoucheur, and accustomed to Club and Private practice.—E. B. S., 371 Edgware Road, London.

Wanted, an Engagement as Assistant, to dispense, visit, and attend Midwifery. Has finished Medical curriculum. Unexceptionable references.—A. Z., Post-office, St. Alban's, Herts.

Wanted, an In-door Assistant, to visit, dispense, and attend Midwifery.—Address, enclosing carte, giving all particulars and references, to Dr. Thomas, Church Street, Sheffield.

Wanted, an Assistant, fully qualified, to visit, dispense, and keep books. State age, salary, and reference.—F. J. S. Stafford, Surgeon, Market Place, Great Yarmouth.

Wanted, an Assistantship, to visit, dispense, and attend Midwifery. First-class references. Age 25.—Address, H., Dr. Johnson's, Whitwick, Leicestershire.

McDOUGALLS' MEDICAL CARBOLIC SOAP.

An Antiseptic and Healing Detergent.

FREE FROM ANY INJURIOUS INGREDIENT.

Invaluable as a Wash or Lotion for Cutaneous Affections, Sores or Wounds, and as an Antiseptic and Disinfecting Agent for Internal or External application.

It is a neutral Soap carefully prepared, and provides the best means of conveying Carbolic Acid to the Skin. Its use is pleasant and refreshing, renders the Skin soft and smooth, and is quite harmless even to the tender flesh of Infants. The Antiseptic properties of Carbolic Acid are in no case more apparent than when applied as compounded in this Soap, and are so beneficial in cases of Cutaneous Affections that the use of this Soap is Recommended by many leading members of the Medical Profession. Manufactured only by

McDOUGALL BROTHERS,

London: 11 Arthur Street West, London Bridge, E.C. Manchester: Port Street.

DINNEFORD'S FLUID MAGNESIA

Perfect in purity and strength.

"The Fluid Magnesia I obtained from you corresponds precisely with that of the 'British Pharmacopœia,' 1867, and is what the preparation should be."—Professor Redwood.

Sold in Gallon and Half-Gallon Jars for the use of the Profession *only* by all Wholesale Druggists, and by the Manufacturers,

DINNEFORD & CO., PHARMACEUTICAL CHEMISTS,

172, New Bond street, London.

NITROUS OXIDE, & OXYGEN GAS

FOR INHALATION.

BARTH'S APPARATUS is used at several Metropolitan Hospitals.

A Pamphlet on either of the above with Price List, &c., sent free on application to

LONDON: GEORGE BARTH AND COMPANY,

26 DUKE STREET, BLOOMSBURY, W.C.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JULY 27, 1870.

CONTENTS.

Lecture.

CLINICAL LECTURE ON CASES OF PULMONARY GANGRENE.

By C. Handfield Jones, M.B., Cantab., F.R.S.,
Physician to St. Mary's Hospital.

Case I.—J. S——, æt. 40, gardener, admitted February 28th, 1868. Had always been a weakly man, but continued at his employment until September, 1867, when he had a slight attack of diphtheria. At the same time two of his children died with the same disease, and two other members of his family were also attacked. Two years ago he had sunstroke, was insensible for some time, and ever since his memory has been bad, and he has had occipital pain. His residence is said to have been badly drained—the rooms offensive. His symptoms at first were those of impaired sensory and motor power, all his four limbs at one time being paralysed well nigh completely. This paralysis had quite disappeared by March 23rd, and even some days earlier. His pulse on admission was 74; his urine clear, palish, sp. g. 10·24, non-albuminous; his heart and breath sounds normal.

March 10th.—His pulse was 110, and his temperature 102·5°; he had thirst. On the 12th his temperature was 104°; his urine turbid and highly alkaline. On the 16th his tongue was white, with a median brownish dry streak; his temperature was 103·3; pulse 100; weak; some red papular spots, not however characteristically typhoidal, had appeared on his abdomen; and there was some tenderness at the right iliac fossa and side of abdomen. The bowels were very constipated. He complained also of pain in the right side on deep inspiration; at the right base and side the breath sound was weak, and there was some obscure râle: there was no dulness in either back, and the breathing was normal in both upper parts. Delirium at night had occurred, but the paralysis was much less. 18th. Tongue much more brown and dry; pulse 130, weak; temperature 104·4; several pretty distinct typhoid spots on back, and some more doubtful ones on abdomen; sweats copiously. 20th. Brought up at eleven p.m. last night and several times since a good deal of very offensive darkish muco-purulent matter. Some degree of dulness at mid part of right back, and tolerably well marked bronchial breathing, with absence of vesicular, in most of this back; in the left the resonance and breathing were good; urine loaded with lithates; temperature 103·3°. On the 21st the urinary sediment was mainly dissolved by heat (lithates), but contained also numerous prisms of triple phosphate, as well as small spherules. On the 23rd the urine effervesced copiously with H. Cl., and deposited a copious sediment of small imperfect phosphate prisms. 24th. Cough hard and straining; sputa muco-purulent and extremely offensive. 25th. In lower part of right back the breathing is null, or nearly so; only a little creaking sound is to be heard; higher up some breathing is audible. He gradually declined, and died April 18th; the expectoration remained offensive, though not constantly so, to the last. On April 13th it contained a notable amount of blood; at the same date I noted that there was clear (tympanitic?) percussion sound at the lower part of the right back, but the air entered feebly and imperfectly with harsh tube sound; vesicular breathing was heard distinctly nearly as far as the middle of the back. In the record of the *autopsy* it is stated that all the abdominal organs and the heart were found healthy, but unfortunately the intestines were not opened. The left lung was engorged, œdematous, and very much softened, quite in an early stage of pneumonia; it was large and bulky. The upper lobe of the right lung was inflamed and condensed to some extent; the lower was completely excavated by a foul gangrenous cavity, containing extremely offensive greyish matter.

The treatment employed was mainly supporting and stimulating, consisting of potass. iodid., ammon. carb., quinine in gr. v doses *ter die*, bark with potass. chloras, nitric acid either alone or with quinine, and creasote in pills. The latter seemed to be of some real efficacy in diminishing the fœtor; the patient himself asked to have it again for this purpose when it was discontinued on one

occasion. Carbolic acid was also used in the way of inhalation, but did not produce any noteworthy effect. Perhaps it would have done better in the form of spray.

Case II.—C. W——, æt. 44, labourer, admitted February 15th, 1870. Ill one month. "The stench from his breath has been fearful." Last two years has had winter cough. Has much cough and expectoration; has been expectorating stuff like matter, and bloody. Can't lie down in bed. At present is constantly coughing and expectorating nearly clear mucus; pulse quick and weak; the next day it was 96, and excessively weak and small; temperature, 102·7. The expectoration was very copious, discoloured, mucopurulent and very offensive. There was comparative dulness in the right front, and almost complete absence of breath sound; two days later there was completely cavernous breathing. In the right back the breathing was very weak, and attended with obscure râle, but there was no very marked dulness. On the left side the breathing and resonance were fairly good. He was ordered to inhale steam with turpentine vapour, to have a turpentine stupe to the back, and to take creasote ℥i. + acidi nitrici ℥. iij + infus. gent. Co. ℥i + liq. opii sed. ℥. viij *quater die.*; simple diet; beef-tea; port wine 8oz. 21st. Is said to have spit up a notable amount of blood during the night; the expectoration seen consisted of thick, heavy muco pus; pulse 93, of good force; temperature 102·2. The fœtor of his breath was so great that he had been removed soon after his admission to a separate ward. He was ordered chlorine inhalation, and tannin gr. v, and bals. canad. gr. ij in pil. ij *quater die*, continuing the nitric acid and creasote. On 26th, as he complained of having no rest from cough, he was injected subcutaneously with liq. opii, and slept better the following night. On 28th, the left lung continued to act well; the right front was woodily resonant at its upper part; dull at its lower; breathing in this front was almost null, only some tubular sound could be heard; in the right back there was some imperfect breathing at the upper part, but all the lower half was dull and nearly silent.

March 7th.—Left back continues resonant, but the breathing is very defective, and is replaced by mucous râle at the lower third. The right back is dull throughout, and distinct tubular breathing is heard in all its extent; pulse 96, of good size, and volume; urine loaded with lithates. On 16th it was free from albumen, sp. gr. 101·8. The fœtor by this time had almost quite disappeared; I scarcely perceived any. March 19th. Pulse 87, quiet, weak; expectoration much diminished; free from fœtor; skin cool. Breathing in right back consists of harsh short inspiratory and very harsh loud prolonged expiratory tube sound. In the right front there is woody percussion, cavernous breathing, and pectoriloquy. On April 5th he was in much the same state; pulse 105, soft; temperature 102·5°; he took a meat diet well as he had done for some time. The tannin pills and creasote mixture were replaced by citrate of iron and quinine. On 9th the fœtor which had quite, or almost quite, ceased was again very bad, and his cough was severe. The creasote mixture was ordered again; and on 11th the fœtor was much lessened; he was up and dressed, and proposed leaving the hospital. On the night of the 12th he was very restless, and in the morning the house surgeon noticed how remarkably he was changed; he was quite blue in the face; in the evening he died.

Post-mortem.—Left lung fairly healthy; right lung excavated at upper part by a large irregular cavity, with blackish red walls; the fissure between the upper and middle lobes was occupied by a considerable layer of fibroid induration, a-quarter or a-third of an inch thick. There was a large quantity of fœtid sero-purulent fluid in the pleural cavity at the lower part; the serous membrane was a good deal thickened. The arch of the aorta was much dilated so as to constitute a true aneurism. There were large fibrinous coagula in the aorta and in the right auricle and ventricle; the auricle was filled with decolorised clot, and the ventricle contained a large similar mass. The coagulum in the aorta was very large and solid, but after an inch or two it changed into black clot. One or more of the cervical veins contained at their lower part a completely decolorised coagulum. The brain was small, weighed only 40 ozs. The abdominal organs were fairly healthy, and so I am satisfied were the heart's tissue and valves.

Case III.—G. F——, æt. 55, coachman, admitted outpatient Aug. 15th. He stated that he had been ill seven days; his appetite was lost, his speech was feeble; he had a bad cough, was very weak; his tongue was thickly coated, bowels open, but no diarrhœa; his pulse was very feeble. A dose of calomel gr. ij. + opii, gr. ¼ was ordered for three nights, and acidi nitrici ℥iij. *ter die.* On 22nd he felt very sinking, and his cough was bad and his tongue foul. He was ordered mixt. quinæ ℥i. + strychniæ gr. 1-20th *ter die.* Sept. 1st, he was in quite the same state, very weak. Tongue had got clean, however. The urine was clear, very acid, not albuminous; smelt most abominably of rotten cabbage. His breath had the same putrid odour. No appetite. His cough was rather frequent and caused him to vomit his food. Some sputa I saw consisted of dirty grey mucus, devoid of the putrid odour of the breath and urine. Auscultation detected nothing abnormal in the lungs. The abdominal organs appeared normal. I ordered liq. sodæ chlorinat ℥xx. + aq. ℥i. *ter die.* Sept. 5th, he was very depressed, his breath fœtid as before, his expectoration copious, of a dirty yellow grey. Good breathing was heard in right back, diffused râles in left, together with good breath sound. In the left upper front the breath sound was pretty full, but in the middle and lower it was very weak and imperfect, and attended with crepitations. In the right front the breathing was more free, but crepitations were also heard. He had not the least pain in the chest. 6th. Skin cool, pulse feeble. Brandy four ounces; chlorine inhalation. Morph. acet. gr. ½ o. n. On 10th comparative dulness was observed in the lower left back; the breathing in this part was weak and somewhat tubular. Fine crepitation was heard all through the left front, and towards the side. In both fronts the percussion note was woody; there was tolerably good breathing, with expiratory tube sound in the right front. The fœtor and sputa were as before.

13th.—Pulse exceedingly feeble; skin cold; sputa and fœtor same. Brandy six ounces. He had been taking for four days nitric acid and cascarilla, with pills of tannin and canada balsam; these were now exchanged for ammonia carbon. 16th. Air enters well into right lung posteriorly, but with some crepitation. Air enters pretty well into lower posterior left lung, but at the upper part the breathing is null, and at the middle is replaced very much by crepitations. Air enters the right lung freely in front, but the breath sound is rather coarse. In left front the breathing is very weak and of tubular quality; the percussion note is not dull but woody, and the same in both backs. Sputa and fœtor same. Urine not albuminous. No notable dyspnœa now, or at any former time. Port 10 ozs., tinct. cinchon. ℥i. c mist. He died on 18th.

Post-mortem on 19th.—Right lung emphysematous, inflamed to some extent posteriorly, and showing some small patches of pale exudation. Left lung in a state of grey hepatisation throughout the upper lobe; the lower lobe highly inflamed at the posterior part. In the upper lobe was a very large gangrenous cavity as big as two fists, containing little but blackish loosely floating shreddy pulmonary tissue in a state of slough. The large gangrenous cavity in the left upper lobe was separated by a very thin layer of tissue from the pleura which adhered pretty firmly to the costal pleura over a large extent. In the right lung, at the upper edge of the middle lobe, there was a small round cavity as large as a marble in contact by its periphery with the pleura, quite full of a dark matter. Under the microscope the contents of this cavity showed ramifying vessels, or rather their *débris* mingled with abundant dark-red pigment, and numerous fatty-looking granules or small masses. The lung around this cavity

was condensed for a very limited extent. The heart and all the other organs were normal. In the right apex there were some remnants of cretaceous tubercle.

Case IV.—B. F——, æt. 40, admitted September 14th, 1860. Ill fourteen days, suffering from cough and pain in right side of chest. Her breath, when coughing, is exceedingly offensive, having quite the odour of gangrenous lung, but not so at other times. Breathing rather coarse and harsh, but air enters freely into both lungs. Sputa copious, not offensive. Urine without any peculiar offensive smell. Pulse, normal; strength, good. Mixt. Scill. Co. + spt. æth. chl. ℥x. *quatdr. die.* Creasoti ℥i. in pil. 3 tiis horis. Liq. chlorinii *pro hinalat.* Oct. 6th. She spit up some bloody matter. On 8th there was a considerable amount of dirty grey-looking muco-watery sputa with a decided tinge of blood. In the right front and back the breathing was imperfect and attended with râles, and the existence of a cavity in the upper part of this lung appeared tolerably certain. No marked pyragia. Has bottled stout. 11th. Continues to spit up much mucomatery sputa, tinged with blood; has copious night sweats. 15th. Sputa tenacious, of a dirty greyish-brown colour, verging upon red. Cough distressing. Crepitations through all right lung in front and behind. In left posterior base there is breathing of tolerable quality, but higher up it becomes very weak and bronchial, and attended with râle. In left front the breathing is good. The sputa consist of mucous corpuscles, with numerous masses of pigment here and there. One of my colleagues found an object which he considered to be lung tissue. On 20th the sputa were much improved in appearance, more simply mucous, not blood-tinged, and in smaller quantity. She felt much better. She left the hospital at her own request about the beginning of November. Her improvement coincided with the administration of tinct. ferri muriat., ℥x. + spt. orth. chl. ℥xv. 4 tis h. The fœtor of the breath and urine seems to have gradually subsided, though my notes are not precise on this point.

In none of these cases does any evident cause appear to account satisfactorily for the gangrene. In the first, indeed, there was great impairment of nervous power, the result of the sunstroke and of the diphtheria, but in both these pathemata pulmonary gangrene is a very rare occurrence. Yet it should be mentioned, that, according to Dr. Walshe, gangrene of the lungs is not unfrequently met with in cerebral disease, and he thinks its occurrence "fairly explicable by deficient or perverted nervous influence." Griesinger remarks that gangrene of the lungs is especially frequent in cases of melancholia, where food is refused, though it is not confined to such cases. As it occurs also in stricture of the œsophagus it seems most probable that it is the result of general inanition and exhaustion, rather than of failure of nervous power. That the gangrene depended on embolism or thrombosis does not seem to me very probable, because there was no condition discoverable which would have caused fibrinous particles to have been floating in the blood-stream. Moreover, the communication of the pulmonary plexuses is so free, that blocking of one branch would be easily compensated by the flow from the adjoining vessels. It may also be remarked that the rarity of pulmonary gangrene in cases of endocarditis, and its comparative frequency in typhus fever, are opposed to the view in question. The only point in the treatment worth notice is the action of creosote, which certainly did seem to have the effect, given internally, of removing the fœtor of the breath, and probably, therefore, modified beneficially the morbid process in the lung. The fatal termination of the second case I cannot but think was owing to the formation of fibrinous deposits during life, although a very good authority who was present at the autopsy maintains that they were merely *post-mortem* productions. However, the size of the fibrinous coagula in the right cavities of the heart and in the aorta makes it, to my thinking, utterly improbable that they could have been formed by the mere subsidence of the red particles into the veins, as the volume of blood in these channels and cavities could not have yielded a sufficient amount of fibrine. Moreover, the peculiar symptoms preceding dissolution are exactly accounted for by the view of *ante-mortem* deposits, and quite fail to find an adequate explanation otherwise, as the patient's condition had certainly very materially improved since his admission, and up to within a day or two of his death the improvement was well maintained. Neither did the autopsy disclose any other recent mischief than the fibrinous deposition to account for the fatal event. I believe I have witnessed the same occurrence in two or three instances the last few months, and I think Dr. Richardson's statements in this matter are fully borne out by experience. In the third case there seems to me much reason to believe that the gangrene was primary, and was not the result of the inflammation which was found at the autopsy, and whose physical signs were not discoverable at the outset; when, however, the prostration and the fœtor left little doubt that gangrene was actually in progress. The small round gangrenous cavity in the right lung was clearly in an earlier stage of the process than the large one in the left, and its small size, perfect definition, and spherical shape, seem to me to make it difficult to understand how it could be the result of obstruction of an artery. This would, probably, produce a gangrenous patch of conoidal form. The peculiar fœtor of the urine was remarkable, and must be attributed, I suppose, to the excretion of putrid matter absorbed from the altered lung into the blood. It would indicate, therefore, a more grave condition of blood-poisoning than exists in cases where such fœtor is absent.

In the fourth case also the gangrene seemed to be primary, and to have preceded the occurrence of lung inflammation. The presence of fœtor only during coughing is noteworthy; it probably depends on obstruction of the bronchi leading to the gangrenous part, and on the removal of this obstruction by forcible expirations. In this case, as in I. and II., blood was present in the expectoration to some amount at one time or other. The same occurred also in another instance where the gangrene was succeeded by cirrhosis. I have thus met with hæmoptysis in four out of five cases. Dr. Walshe mentions that the bleeding has occasionally been so profuse as to cause sudden death.

As we have so little control over pulmonary gangrene when it is once established, and as it seems not unfrequently to commence in a gradual manner, it is evident that to be on the watch is of main importance, and that whenever we have to do with cases where the nervous system is gravely involved, or the general power seriously impaired, we should endeavour to guard against its occurrence by using all the means in our power that may obviate exhaustion.

Hospital Reports.

MERCER'S HOSPITAL.

Strangulated hernia in a child nine months old.—Reduction under chloroform.

By Mr. Morgan, F.R.C.S.I.,
Surgeon to the Hospital, &c.

A child of nine months old was brought to me by an intelligent and anxious mother, who stated that the rupture (a right inguinal) had existed for the last three months; that it used occasionally to appear pretty large, and be easily reduced. However, for the last two days it had got down and she now found it immoveable; the child had suffered great pain, and was constantly crying; the belly was swollen, and she had given castor oil freely without effect, as there had been no motion for nearly three days.

On examination, the child was pale and weak, with an extremely small and rapid pulse, and was constantly

making some effort at vomiting, and was verging on collapse; the tumour was tense and resisting. I tried by careful manipulation to reduce the intestine, but, with such moderate force as was considered judicious, no progress was made. I now put the child cautiously under the influence of chloroform, when in about five minutes I effected reduction—the symptoms showing marked alleviation, almost directly. I saw the child next morning, and it was, as the mother remarked, "as well as ever." The bowels had meanwhile been well freed.

The anatomical condition and greater muscularity of the abdominal rings in so young a subject no doubt facilitated the reduction, as being so much more capable of relaxation under the influence of chloroform.

METROPOLITAN FREE HOSPITAL.

Dr. Charles Drysdale speaks very favourably of the use of faradisation and the continuous galvanic current in the treatment of many diseased conditions. In lumbago he has found faradisation by far the best of all treatments. The battery used by him at this hospital—galvano electric—admits of the rapid application by means of wet sponges of the galvanic current to the integument over the dorsal and lumbar muscles. The use of faradisation in cases of stiff joints after rheumatism is much praised by Dr. Drysdale, as also in cases of infantile paralysis. He has treated some cases of amenorrhœa successfully by means of faradisation, one pole being placed over the pubis, and the other either on the cervix uteri or on the back. Involuntary nocturnal emissions are well treated by faradisation of the perineal muscles. Neuralgia and paralysis are better treated by gentle continuous currents, and, when nothing better can be obtained, the bands sold by some galvanists often will cure cases of sciatica, or other neuralgic affections.

UNIVERSITY COLLEGE HOSPITAL.

In a recent visit to University College Hospital we found that Dr. Ringer was making use of faradisation in cases of lumbago and other painful muscular affections apparently with success. He was also in favour of the application of the process of Dr. Richardson for the relief of certain frontal headaches. To this end, Dr. Ringer used the ether spray for some time to the skin of the forehead, until it became frozen in several parts. In the operating theatre we witnessed the extraction of some of the *débris* of a calculus by Mr. Erichsen from the bladder of a male patient of some sixty years of age. Also an attempt which was made by Mr. Berkeley Hill to straighten the foot in a most formidable looking case of contraction of the plantar fascia and tendo achilles, &c., which had caused the pat ent for many years to walk on the back of the foot. Mr. Hill divided the plantar fascia subcutaneously, intending subsequently to do the same with the flexor tendons. The wards of University College are now admirably managed by the nursing sisters, although the dress they wear is rather too suggestive of asceticism for our humble taste.

ARMY HOSPITALS.

Case of Obstruction of the Intestines treated by Opium.

By Staff Assistant-Surgeon Scanlan, M.B.

Private R.E., of the 1st Battalion, 4th (King's Own) Royal Regiment, was admitted into hospital on the 19th May, 1869, complaining of pain in the abdomen and constipation of the bowels. The patient is 36 years of age, and has had 13 years and 7 months' service.

The pain was first felt three days before admission, and came on suddenly after dinner. During the two following days he worked hard, as the regiment were removing to other barracks, and he was employed in carrying baggage. When admitted he was slightly feverish, and his bowels had not been properly moved since the time he felt the pain, three days previous to admission. On the 20th May he passed a little at stool, and first noticed that the abdomen was swollen. The pain continued, but it became of a dull aching character, though at first it was intense. Castor oil and then croton oil were given at first, without moving the bowels, and fomentations were applied to the abdomen.

On the 22nd May, three days after admission, the long tube of the stomach-pump was passed into the large intestine, and a large quantity of warm water and castor oil was thrown up; this was retained for some time, and then passed out, without bringing away any fæcal matter or giving permanent relief. The enema was repeated on the evening of the same day with a like result.

On the 23rd May a cantharidis plaister, four inches by five, was placed on the epigastrium where the pain was felt most severely, and two grains of calomel were given every two hours. Patient was placed on low diet when admitted, and six ounces of wine were ordered daily up to the 23rd.

On the 24th May patient was much weaker, and had little rest the night previous. He had not been able to take any food since the day before admission, with the exception of a little beef tea every day, and he was ordered four ounces of brandy instead of the port wine which he had before. The day previous to this he vomited a quantity of green fluid, and felt for a time much relieved by it, but on this day, although he felt a constant inclination to vomit, he was unable to do so. The urine was high coloured and scanty, and, although he felt a constant thirst, he could not drink much, as he would feel painfully distended. The pulse was normal, tongue very foul, and countenance anxious. The fomentations were continued, and the calomel was given, with the addition of half grain doses of opium every two hours.

On the 25th May patient felt easier, but nothing had been passed per anum. The abdomen was enormously distended, though the pain was less severe, and he was much troubled with hiccough. There was no fever, and the pulse was not rapid. The calomel, opium and fomentations were continued, and the long tube of the stomach-pump was again introduced at his own request, as he felt an inclination to go to stool; but, although a large quantity of warm water, oil and soap was thrown up, and retained for quarter of an hour, no fæcal matter passed out.

On the 26th May he was ordered half a grain of opium every two hours, and beef tea enemata, as he was much reduced through want of nourishment, and could not take it into his stomach. He slept none on the previous night, and was evidently becoming much weaker. On three occasions he passed a small quantity of the secretion of the large intestine.

On the 27th May galvanism was applied to the abdomen, one pole being placed on the lower dorsal vetebra, and the other moved gently over the whole surface of the abdomen. He was then placed in a bath and a stream of cold water was poured from a height down his back, but all these measures failed to relieve the distended state of the intestines. The brandy was increased to eight ounces a day, and the opium continued.

On the 28th May there was no improvement. The beef tea enemata were continued and retained. The pain was still present chiefly in the umbilical region, but the abdomen was not more distended than before. Towards the evening the pain became worse, and he was ordered one grain of opium every hour until he was relieved, and the blistered surface was covered with an extract of aloes. In the morning he passed a great quantity of wind, and felt relieved for a time.

On the 30th May at 3.30 a.m. patient was raised up to the stool and passed about a pint of dark grumous-looking fluid of offensive odour. He had previously been in great pain, and it was at once relieved. At 5 a.m. he passed about

a quart of the same dark matter. The swelling of the abdomen became less, and the pain vanished entirely. During the day he went several times to stool, and the evacuations became gradually more natural and devoid of offensive odour. In the evening he complained of griping pains, which were relieved by hot fomentations.

31*st May.*—During the night he got up to stool several times, and passed altogether about a gallon of light brown semi-fluid matter, with the natural odour of fæces. He then slept well, and felt much relieved in the morning. The opium was discontinued on the 30th.

Yesterday and to-day he has taken spoon diet, with two pots of extract of meat and two eggs each day, and the brandy has been continued.

1*st June.*—There is now no tenderness in the abdomen, though it is still flatulent. He now takes his food, and feels hungry. The tongue is becoming clean, and the countenance is clearer. He went to stool twice to-day. Is put upon low diet.

2*nd June.*—Complained of griping pains in bowels and over liver when he takes a long breath. They were relieved by hot fomentations.

Patient continued to improve, and was discharged to duty on the 19th of June perfectly recovered, though feeling rather weak. He afterwards went on sick furlough for six weeks.

Recapitulation.—The disease began suddenly on the 16th May, with an intense pain in abdomen while patient was at stool, and, although he had several slight motions up to the 20th, the bowels were not moved freely until the morning of the 30th May, an interval of 14 days, and for 10 days nothing whatever passed from the bowels, except the secretation of the intestines.

Literature.

ETUDE SUR LES NEVRALGIES REFLEXES SYMPTOMATIQUES DE L'ORCHI-EPIDIDYMITIS BLENORRHAGIQUE.*

This is a most painstaking and interesting clinical work, written by a gentleman whose position as Physician to the Hôpital du Midi at Paris has placed him in one of the best spots in Europe for calmly studying the diseases accompanying syphilis and gonorrhœa. Dr. Charles Mauriac has already written several interesting treatises; among others, too, a translation of Dr. West's admirable treatise on "Diseases of Women." The conclusions come to by our author will, perhaps, explain better than any other portion of his work, we can cite, the tenour of his opinions. He says: —

1. There exists in blenorrhagic orchi-epididymitis two kinds of pains—*a*, local and direct pains, which are connected with the inflammatory process of the epididymis and of the testicle; *b*, reflex pains, sympathetic or distant, which may be called reflex neuralgias.

2. The reflex neuralgic pains are dull and lancinating, continuous and paroxysmal; they manifest themselves under the form of attacks which return irregularly. Far from being excited and exasperated by the touch, as inflammatory pains are, they are, on the contrary, for the most part calmed by pressure and spontaneously produced. They change about in their place, and in their mobility occupy successively, or simultaneously, not only different parts of the same nerve, but one or several branches of nerves belonging to the same plexus or two different plexuses.

3. They do not present in their progress the regularity of the organic process which has given birth to them. It would seem that they owe to a sort of autonomy they have acquired, in spite of their primitive subordination to a fixed lesion, the power of appearing in their own fashion; that is, irregularly. The morbid impression which gives rise to them commences in the testicle and ends in the spinal cord. This impression is perceived or not perceived at the point from which it sets out. When it comes to the nerve centres, it modifies pathologically the functional working of the nerve cells. Thence result in the course of the nerves of sensation, which are in communication with these nerve cells, painful sensations which are produced in virtue of the law of eccentricity of sensitive phenomena, or of peripherism of sensations.

The laws of motor reflexion laid down by Pfluger are not rigorously applicable to sensitive reflexion. Thus the painful irradiation reflected by the nerve centres may be produced below the point of incidence of the mitral morbid impression; in general it is diffused without any rule. In orchi-epididymitis with reflex neuralgias, the reflexion may be carried by the side of the viscera by means of the spinal cord of ganglia of the sympathetic. The intensity of the pain in such neuralgias has no relation to the intensity of the local pain. When the reflex irradiation aroused by the morbid impression, caused by the diseased condition of the testicle, acts on the sympathetic plexus, there may arise a collection of phenomena much more complicated than simple pain, such as peristaltic movements and antiperistaltic movements of the digestive tube, or gastro hepatitis and feeling of great cold or heat. These neuralgias are usually unilateral. Pain in the spinal column is the most frequent of the reflex irradiations of orchi-epididymitis, and has two foci—one renal, the other sacro-sciatic. Sometimes there are pains in the loins, hypogastrium, or inguinal region; sometimes along the lower limbs, crural, or sciatic. The inflammation of the testicle, or its annexed organs, has, according to Dr. Mauriac, a remarkable property in diminishing the quantity of the red blood globules very rapidly. We advise any of our readers who are interested in reading a careful collection of clinical data, to read Dr. Mauriac's work, as well as the notes to his translation of Dr. West.

* Etude sur les Nevralgies Réflexes Symptomatiques de L'orchi-Epididymitis Blenorrhagique. Par Charles Mauriac, Médecine de l'Hôpital du Midi. Paris: F. Savy, 24, Rue Hautefeuille. 1870. Pp. 111.

LIFE AND THE EQUIVALENCE OF FORCE.*

The author tells us that, on making enquiry into the question of the doctrine of the conservation of force, he could find no compendious and complete history and exposition of the doctrine in the English language adapted to the general run of medical men. Carpenter's seventh edition has a chapter on the balance of the vital economy, in which it is taken for granted that the reader understands the principle. This is taking a good deal for granted. Heat and motion are interchangeable. "By the splendid hypothesis of Meyer (says the author) engrafted on that of La Place, the contraction of the nebular mass of the matter of our solar system is exhibited as a sufficient cause of the original heat of the sun. The fall of this vast mass of matter through such immense distances is competent, according to the calculations of Helmholz, to generate in the sun a heat of 22,000,000 degrees, cent., the far greater portion of which must have been dissipated long before the earth assumed its present state. For it is also a part of the doctrine in question that all forms of force or energy are mutually convertible, but, practically, the final result of all such transformations is into heat or light. These, as is well known, are perpetually radiating into the surrounding medium; and hence, with the exception of such portions as are absorbed by plants and chemical action, the tendency is finally to be dissipated into space. This dissipation of the sun's energy is perpetually going on at an enormous rate, of which we can form some conception by the fact that

* Life and the Equivalence of Force. By J. Drysdale, M.D. London: Turner and Co., Fleet Street. Pp. 74.

the total amount of it intercepted by the earth is equal to only the 2,300,000th part of the whole. Ultimately, a time must arrive when, by the action of the natural forces resulting in the continual dissipation of energy, and the exhaustion of the meteoric system, the final extinction of life, heat and light in our system must ensue, realising the vision of the poet—

'The bright sun was extinguished, and the stars
Did wander darkling in the eternal space.'"

The author seems to think that the discovery of the law of the equivalence of force is only second to that of Newton or Copernicus. "The glory of its discovery belongs to Robert Meyer, of Heilbronn, and Prescott Joule, of Manchester, who arrived at it simultaneously and independently of each other." In 1850, Meyer mentioned how that, in the year 1840, he had been surgeon to a vessel which sailed to Batavia, where an inflammatory disease of the lungs broke out among the crew. The young surgeon bled copiously, and was struck by the bright colour of the blood which issued from the vein in newly-arrived Europeans. The heat generated by a living body through mechanical processes must stand in an immutable quantitative relation to the work expended thereon, and from this it follows that an immutable quantitative relation between heat and work is a postulate of the physiological theory of heat. Reasoning thus, Meyer was driven to investigate what was the mechanical equivalent of heat. By means of various mechanical experiments it has been found that one unit of heat is equal to 772 lbs. raised one foot high.

In 1844, the now illustrious physicist, Joule, who, independently, was working in the same direction as that of Meyer, repeated some of his experiments. According to the dynamic theory of heat, which is now universally adopted, it is supposed to consist in a peculiar oscillatory or vibratory motion of the particles of matter. This motion may be communicated directly from one set of particles to another, which is called conduction; or it may be transferred by undulations in the aether, or medium, which pervades not only the whole interstellar space, but the interstices of ordinary matter: this is termed radiation. As a rule, all the heat communicated to solid and liquid bodies, which is consumed in anterior work, is given up again on cooling by a spontaneous process.

"Meyer made experiments on four pulping cylinders in a paper mill. In each cylinder was contained about eighty pounds of paper pulp and about 1,200 pounds of water. The temperature of the pulp rose steadily from the time of setting in. The surrounding temperature showed 15°, cent.; in thirty-two to forty minutes the heat of the pulp rose from 14° to 16°. The highest temperature observed, which was uniformly maintained for several hours before drawing off, amounted in one cylinder to 30°. If we now reckon that, by one horse-power, about 27,000 pounds are raised one foot high in a minute, then the heating of 1,280 pounds of water 1° in sixteen minutes must be equivalent to 3·16 horse powers, which agrees with sufficient accuracy with the computation of the manufacturer, that a total of about five-horse powers is required for driving one cylinder. How does the mechanical effect yielded by the five horses vanish into nothing in the machine? The fact speaks—*it becomes heat!*"

Such are a few quotations from this very interesting work. Written, as is, not by a professed physicist, but by a practitioner of the healing art, it betokens, in the author, a rare combination of love for abstract science with practical skill. We heartily wish the pamphlet all success, and that it may advance the author's name as a writer on the sciences bearing on medical science.

The Speaker of the House of Commons has given a donation of £100 to the funds of University College Hospital, and £100 to Westminster Hospital. The Mercers' Company have also presented £100 to the latter Institution.

Summary of Science.

By C. R. C. TICHBORNE, F.C.S., M.R.I.A., etc.

On an insoluble dextrine.

M. Musculus has prepared the above substance by heating starch in crystallizable acetic acid. This dextrine seems to be composed of granules of starch, in which, whilst the granules are unbroken, the substance in the interior is changed into dextrine (*est composée de fragments de grains de fécule, dont l'organisation s'est conservée malgré la modification climiquz qu'ils ont subie*). Other methods are described in his papers, vide *Journal de Pharmacie* Juin, which give slightly different dextrines.

The author says that on examining the action of these dextrines upon polarised light they are found to agree amongst themselves as regards their power of rotating. Their specific power of rotating is $[a]=+208°$, which is notably superior to that of ordinary dextrine, which is $[a]=+138°$.

Researches upon lichens.

Dr. Stenhouse (still following up this favourite line of research) we find experimenting with two lichens—*Cladonia rangiferina* and *Usnea barbata*.

The usnic acid is obtained from the last named lichen by macerating it with carbonate of sodium and precipitating with hydrochloric acid. Usnic acid is easily obtained pure by taking advantage of the peculiar property which the acid possesses of forming an insoluble calcium salt, when it is boiled with lime.

The composition of the acid is $C_{18}H_{18}O_7$.

Usnate of sodium crystallizes in pale yellow silky needles, very insoluble in cold water, but more so in spirit. It is decomposed by passing a current of carbonic anhydride through its aqueous solution, and the acid is entirely precipitated.

The *Usnate of calcium* is formed when usnic acid is moistened with spirit, and then, rubbed up with milk of lime, it yields a lemon-coloured solution, which, when heated, becomes turbid, and, after boiling, deposits an insoluble calcium compound in small yellow rhomboidal crystals of uncertain composition. The formation of this insoluble calcium salt is very characteristic of usnic acid, and is an excellent test of its presence. Carbonic anhydride entirely decomposes it; usnic acid appears, therefore, to be a very feeble acid. An attempt was made to form the ethylic usnate, but without success; in this case usnate of silver was treated with iodide of ethyl.

The author in the same paper describes evernic acid and its bromine derivative Tetrabrom-evernic acid ($C_{17}H_{12}Br_4O_7$)—crystallizable compounds obtained from the *Everna prunastri*, also the lichen acid from *Cladonia rangiferina*, having very much the same properties as usnic acid, and agreeing in composition, but having a different fusing point. This "cladonic acid," or B-usnic acid, melts at 175° C; ordinary usnic acid melts at 203° C.

The bromine compounds are formed in the following manner:—Evernic acid was treated in the cold with dry bromine, the acid being finely powdered; the product was again finely powdered and re-treated with bromine, and after allowing it to stand some time to allow the excess of bromine to volatilize, the compound was washed with bisulphide of carbon. Two or three crystallizations from boiling spirits rendered it quite pure.

Patent for heating stoneware vessels to a high temperature.

In manufacturing on the large scale, stoneware vessels are generally used, but great difficulty has been found in their use when even 112° Fah. has been required, as these vessels would not stand the direct action of fire. Mr. Coffey has lately taken out a patent in connection with this subject that promises to be of great practical value. Descriptions of this patent will be found in the *Chemical News* and *Pharmaceutical Journal* of this month. The latter contains a well-executed drawing of the details.

Paraffin oil with a high boiling point is used as the medium for conveying heat to the vessel. By this arrangement earthen pans, or stills, may be worked with perfect safety at any temperature up to 600° Fah., or even higher. The furnace consists of an enclosed fire, over which is a coil of iron pipes. The paraffin oil is heated in this *coil* to any temperature, which temperature is indicated by a pyrometer, and is then conveyed

to the jacketed pans, where it can be turned off or on as required, as is usually done by steam. It circulates through the supply pipes and within the jackets of the pans in a heated state, but not under pressure, its boiling point being above the temperature to which it is subjected. As it cools under the influence of the work done, it falls by gravitation to the lower range of pipes and passes back to the furnace to be heated again. It will be seen that by this method of applying heat the difficulty that had been experienced in heating glass or stoneware vessels with high-pressure steam are entirely obviated. "We believe," says the *Pharmaceutical Journal*, "that in the first instance it was found difficult to prevent the oil from permeating the stoneware, and thus contaminating what was contained within the vessels, but we have been assured that the vessels are now so well glazed that no such effect occurs."

How far danger from fires is to be feared in connection with such a system of heating has yet to be proved; it is self-evident that the oils used must be carefully selected as regards a low boiling point, but if on trial this objection is found practically to be *nil*, Mr. Coffey has unravelled one of the operating chemists' practical difficulties.

TETRA-BROMIDE OF CARBON.

Messrs. Bolas and Groves make this substance by reacting on iodine and sulphide of carbon by bromine. Bromine by itself has no action on the bisulphide of carbon.

Two parts of bisulphide of carbon, 14 parts dry bromide, and 3 parts of iodine are heated together in sealed tubes to a temperature of 150° C for 48 hours; the tube is then emptied into a flask containing an excess of caustic soda in solution, and the mixture is distilled until no more tetra-bromide of carbon comes over with the water. It is then separated from water and crystallized out with hot alcohol. It is necessary to avoid boiling the alcohol, or loss occurs; terbromide of antimony may be used in place of the bromide of iodine.

Tetra-bromide of carbon is a white substance, crystallizing in lustrous plates, and melting at 91° C. It has an etherial odour, somewhat resembling tetra-chloride of carbon, and has a sweetish taste.

TANTALIUM AND NIOBIUM.

Mr. A. Leeds has writen a short notice of these substances, which originally appeared in the Journal of the Frankland Institute, and which also appears in the *Chemical News*. Tantalum and niobium were examined by H. Rose, and this examination occupied him during nearly twenty years of a most industrious life. Rammelsberg in revising these labours, recomputes the formula according to the modern theories of chemistry, and shows that Rose's deductions were wrong, not so much from the analysis, but from the formula he deduced from them thus:—Rose regarded as a chloride what was really an oxy-chloride.

Pure tantalium is unknown up to the present time. H. Rose employed to procure this substance three parts tantaliopotassic fluoride, and one part sodium. He obtained, however, only a heavy black powder, which contained a considerable quantity of bitantalate of sodium. Berezlius and Marignac attempted unsuccessfully to obtain tantalium.

Tantalic chloride was obtained by heating tantalic acid and carbon in an atmosphere of chlorine. It melts, according to Deville, at 241°6 C, and volatilizes entirely, forming a crystalline sublimate. According to the same chemist it fumes in the air, expels H Cl and becomes covered with tantalic acid. Its formula, as viewed from the experiments of Rose, and from the amount of chlorine it contained, was Ta Cl5.

Tantallic acid is white; when heated it is faintly yellow, and has the formula $Ta_2 O_5$. Its numerous salts are arranged by Rammelsberg in five series, corresponding to different stages of the saturation of the acid.

TEST FOR THE PURITY OF OLIVE OIL.

The following appears in the *Chicago Pharmacist* for June. It is said to determine in the most positive manner the presence of any of the seed oils (cotton seed oil in particular) in any given sample of olive oil. The test is a mixture of three parts of pure nitric acid, and one part of water; three grammes of the oil to be tested are mixed with one gramme of the test liquid, and the mixture is heated on a water bath. If the oil be pure the liquid becomes clearer and takes a yellow colour like that of purified olive oil, but if adulterated the transparency will be the same, but the colour red. With five per cent. adulteration the colour is characteristic, and with an adulteration of ten per cent. it is decisive.

DISSECTION OF THE DEAD IN HOSPITALS.

On Thursday afternoon, at the Southwark Police Court, the adjourned summons against Mr. John Charles Steele, M.R.C.S., superintendent of Guy's Hospital, who was charged in the early part of the week, under the Anatomy Act, 2d and 3d William IV., cap. 75, sec.7, with having unlawfully caused the body of Samuel Millbourne to undergo anatomical examination without permission of the person having legal possession of it, came on for hearing.

Mr. Oppenheim appeared for the prosecution; and Mr. Tyers, solicitor to Guy's Hospital, attended for Mr. Steele.

It appeared from the evidence of Carter Millbourne, residing in Bermondsey, that on the 1st of last month he took his father (the deceased) who was suffering from a stricture to Guy's Hospital, where he died on the evening of the 16th in the presence of his family. Complainant wished to remove the remains of his father soon after death, but he was told he could not do so until he had an order from the steward, who would be in attendance at nine o'clock on the following morning. Mr. Millbourne particularly reminded the nurse and the sister that no *post-mortem* examination should take place, but when the corpse was brought home on the following evening the head had been cut and mangled about as well as the other parts of the body. He immediately saw Mr. Steele, who said he was not aware that a *post-mortem* examination had taken place, and that he had given no orders for it, but he said it was usual under the circumstances of death that a *post-mortem* examination should have taken place.

Mr. Oppenheim now said that since the last examination the whole of the facts connected with the case had been carefully considered, and he had come to the conclusion that there was nothing to implicate Mr. Steele in the commission of the offence. When before his worship on the last occasion he considered it a very important case, and thought it ought to be thoroughly investigated. He (Mr. Oppenheim) was prepared to maintain that a *post-mortem* examination took place without consent, and that made it a misdemeanor at common law. He had recently ascertained that the examination was conducted by Dr. Moran and his assistants without the authority of Mr. Steele, and that the hospital authorities were determined to defend the case in the highest tribunals of the realm. It was therefore necessary that his client should consult his relatives and friends before he proceeded any further. What he proposed to do was to withdraw the summons against Mr. Steele, and consider what steps should be taken against other officers of the institution.

Mr. Tyers here observed that they had a complete defence to the case, whether against Mr. Steele, or any other of their officers. They were very anxious indeed that a case of such importance should be settled.

Mr. Benson had no hesitation in stating that there was no evidence against Mr. Steele, as he was not only unconscious of a *post-mortem* examination taking place, but was very much annoyed and offended at its being done, as it should not have been done without his directions. He was convinced from the *ex parte* evidence adduced the other day that a *post-mortem* examination had taken place, and that it was illegal. It was shown that rather indelicate haste was used, as the brains were deposited in the stomach. If done at all, he had come to the conclusion that such must have been the work of some younger gentleman of the profession.

Mr. Tyers informed his worship that the brains were removed to ascertain the seat of the disease, and it was impossible to replace them in the cranium. The medical authorities were compelled to make a perfect examination of the body before a certificate could be granted to the registrar as to the cause of death. However, they were in a position to prove that they had a right to make such an examination for scientific purposes.

Mr. Benson assuming that the evidence as given before him was true, "that the *post-mortem* examination was conducted for scientific purposes after protest from the son," he was of opinion that it was illegal. He acquitted the hospital authorities of the indecency spoken of in the presence of the son, "of the brains being placed in the stomach." That was probably the act of some young assistant, with an extravagant disregard for what was called sentiment. As far as the present case was concerned he believed that the nurse did not convey the proper message from Mr. Millbourne to the medical gentleman, and as there was not any evidence to implicate Mr. Steele, the summons must be dismissed.

Registered for Transmission Abroad.

The Medical Press and Circular *is published simultaneously in London, Edinburgh, and Dublin, every Wednesday morning. Price* 5*d. Stamped* 6*d.*

By Post to Annual Subscribers, £1 2 6
,, *If paid in advance* 1 1 8

*** Post Office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London.
Moffat & Co., 6, D'Olier-street, Dublin.
Maclachlan & Stewart, South Bridge, Edinburgh.
Sole Agents for the United States,
Messrs. Kelly and Piet, Baltimore.
Annual Subscription, *post free,* Ten Dollars.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JULY 27, 1870.

ARMY MEDICAL DEPARTMENT REPORT FOR THE YEAR 1868.

This interesting report has been only a few weeks before the public, and well merits attention from all persons who occupy themselves with questions of public health. In France, as every one acquainted with Paris knows, there are statistical accounts of the mortality in civil hospitals, and hosts of entries have to be made by the medical men connected with these establishments. In this county, however, the Army Medical Report is the only one which can be compared with the elaborate reports of our lively neighbours. Should we ever endeavour to imitate the French nation, in attention to civil medical statistics, we cannot have a better model to work from than the elaborate report now lying on our table. The average annual strength of troops serving in the United Kingdom during the 53 weeks ending 1st January, 1869, appears to have been 78,261 non-commissioned officers and men. These troops seem to have had but a small mortality, only 9·34 per thousand having died during the year 1868. The deaths have been 3·16 per thousand from consumption, 1 per thousand from circulatory disease, and 1·32 per 1,000 from disease of the respiratory organs. The contagious enthetic diseases caused according to the report only one death in 10,000 men in 1868, although no less than 22,082 admissions into hospital occurred from these diseases. The troops in camps seem to have been much more healthy than these stationed in seaport towns, the mortality in camps having been merely 8·90, and in seaport towns 11·42, and as high as 15·27 in large manufacturing towns. In passing, we may remark that these facts point to the necessity, in any scheme for really raising the condition of our permanent fighting population, of following out some such proposal as that of Mr. Gleig, and establishing large military colonies (where the men may be allowed to marry) in some of our large open spaces, such as the New Forest. In this way the health of the troops would be excellent, they might be employed in some kind of productive labour, and the wives and daughters of the soldiers might find ample employment in the manufacture of the clothing and other articles required by the army. In this way, too, we should have the mortality of the troops reduced to a minimum, and they would always be in an efficient state, instead of being, as at present, so crippled by the immense amount of contagious diseases they suffer under and spread abroad in all directions in large manufacturing towns. At present, the soldier at home is perhaps more a curse than a blessing to his native land, as he sets a bad example to the rest of the adult population of "loafing" and other celibate vices, and, at the same time, is a constant seducer of, and infecter of, a large number of women wherever he chances to be stationed.

Under the heading of *miasmatic disease*, we find it stated that eruptive fevers have been more fatal in 1868 than in 1867. Measles and scarlatina were the most fatal. Only two cases of variola terminated fatally. Continued fevers were common at Dublin ; cerebro-spinal meningitis having been of frequent occurrence. Two sporadic cases of cholera are spoken of ; one at Aldershot proved fatal. With regard to *enthetic diseases* about which so much is said at present, it appears in page 7 of this blue book, that they were only 10 per 1,000 of strength below the proportion of 1867. Thus, in Colchester, in 1858, 537 per 1,000 was the ratio of such cases to mean strength of troops ; at Canterbury 407 ; at Dover 376 ; at Portsmouth and Gosport 348 ; at Dublin 333 ; at Manchester 312 ; at Shorncliffe 291 ; at Devonport and Plymouth 280 ; and at Chatham and Sheerness 275. At the Curragh 241 ; at Aldershot, 237 ; at Cork 209 ; at Woolwich 191 ; and at Edinburgh (not under any Contagious Diseases Acts) only 157 in 1,000. There was a marked reduction in the amount of this disease in Manchester, Edinburgh, and Woolwich (only the latter being under the Contagious Diseases Acts) ; the reduction at Devonport, Portsmouth, and Aldershot, all under the Acts, was but slight ; and there was scarcely any alteration in the amount at Chatham and Sheerness, Dublin or Windsor. The Household Cavalry at Windsor had a proportion of 1·33 in 1,000, diseased, and the Foot Guards 343 in 1,008. The increase of disease was marked at Belfast, Shorncliffe, and Winchester. At five of the stations the new fangled Contagious Diseases Acts were in operation during the whole of 1868, and at four of them there was a reduction in the amount of disease ; namely, at Woolwich, Devonport and Plymouth, Portsmouth and Gosport, and Aldershot. At Chatham and Sheerness there was scarcely any difference. We should be very glad to find out why Edinburgh had so little disease among the troops of the contagious or enthetic order. If the causes of this effect could be generalised, it might be of service to the unfortunate men who compose our present rather miserable, because necessarily celibate, army. Those who love the service of their country must deeply regret to see that there is a great chance of our British army becoming most unpopular among the women of the country, because of the infringement of the liberties of the poorer class of women which must ensue in all garrison towns if the Contagious Diseases Acts are to be carried in order to

save our stupid Executive from the trouble of thinking how our poor soldiers may lead a domestic life like the rest of the citizens. The United States, we all know, carried on the greatest and most bloody war the world has ever known by means of citizen soldiers, and we ask, as members of this noble country, why cannot we imitate that free and democratic State? Is it because, as a member of the present Government said, our aristocratic classes desire to maintain a system of out-door relief for their poorer relations at the public expense?

With regard to the details of localities where troops are stationed, it seems that the drainage at Aldershot is good. A lock hospital was in operation during 1868, and at Colchester a similar hospital was opened in January 1869. There occurred 25 cases of small-pox at Woolwich in 1868. None of these cases proved fatal. All recruits and children were vaccinated, and all others not bearing satisfactory evidence of protection. The statistics of venereal diseases at Woolwich show a decrease of about 68 admissions in favour of 1868 compared with '67. In the report concerning the south-western districts by Deputy Inspector-General C. A. Gordon, C.B., he says—"A main feature in the ventilation of barrack-rooms is that of providing a certain area of inlet and outlet communication with the open air, especially applied for ventilation, and irrespective of that by windows and doors." In the winter soldiers will not have the windows open in cold weather. It has been considered that if these special apertures are open and working, they will afford a removal of air twice every hour; that is, if 600 cubic feet of space are given per man in a barrack-room, that 1,200 cubic feet of air will be provided per hour. It has been deemed that with only 600 cubic feet per man with this system of ventilation, the air in winter can be kept sufficiently pure in a barrack-room. It has been advocated that more than twice the amount of air should be supplied—nearly 3,000 cubic feet. It is obvious, says Dr. Gordon, that to provide this amount in a cubic space of 600 feet would be a very difficult problem, as the removal of the air five times an hour would cause such a draught. Numerous experiments have shown that if the initial amount of carbonic acid in the air is 4 in 10,000 parts, the amount in a barrack-room thus ventilated will greatly exceed this; 10 parts of CO_2 in 10,000 of air becomes appreciable to the senses. It is a fact that the greatly improved health of the British army of late years, especially as regards the prevalence of consumption, is largely dependent on the increased space and improved ventilation of barrack-rooms, which may be estimated as fully occupied about nine hours out of the twenty-four. Should the space of 600 cubic feet be increased, asks Dr. Gordon? In well-constructed barracks at home, where this space and ventilation are secured, the air in them does not seem productive of epidemics, or diseases recognised as resulting from over-crowding. Typhus and ophthalmia are now rare among the troops, and phthisis and hæmoptysis, the deaths from which from 1837-46 were 8·7 per 1,000, were in 1867 only 3·3 per 1,000. The provision of a larger space than 600 cubic feet would, of course, be expensive. We have quoted these remarks as they are highly important, not only to army medical officers, but to all physicians and surgeons in this country. The most important element of hygiene is pure air, and the recent St. Pancras Infirmary dispute has made the question doubly interesting to London medical men. Dr. Beatson, in his report from Netley, remarks that the embarkation of the large bulk of invalids from India should be deferred till the departure of the late troop ships in March, and that the assembling of the divisional invaliding Board should be deferred in India until January. Hitherto it has been necessary, in order to get more away from India in January and February, so as to reach England, by the Cape, in May and June, to hold their Board in October, but Dr. Beatson recommends that they be allowed to remain in India during the cool months, after which there would be fewer invalids. Deputy Inspector-General Ferris reports from Devonport and Plymouth, that the health of the troops has been satisfactory in 1868. With regard to the working of the Contagious Diseases Acts, "there are many circumstances which render it difficult, arising in the civil population, and from the importation of disease by sailors from foreign parts, and prostitutes from unprotected districts. Until amended legislation has taken place, no very great results can reasonably be expected. The character of venereal disease has been favourably modified, rather than the number of admissions decreased. Less severe forms of disease are now met than formerly. It is to be remarked that cases have occurred where women have come from adjacent towns with the desire to be admitted into the Lock Hospital. I *regret* to state, however, that there have *not been so many women reclaimed* latterly as when the Act came into operation, *nor do they now contribute so much to their support.*" This latter fact any one with knowledge of the subject could have easily predicted. In Paris, the women are scarcely ever reclaimed since the horrible police system came into vogue, and this will inevitably be the case if we continue to imitate the French and make our standing celibate army an excuse for handing over our poorer women in garrison towns to a life of white slavery as in France.

From peaceable Scotland there is not much news about the army. Only 3,179 troops were stationed in that country in 1868. Not a single case of small-pox or cholera occurred in the course of the year. At Edinburgh the men have 502 cubic feet per man, at other barracks 600 or more. In Ireland during the year, considerable expenditure has arisen from extending the cubic space available for troops. In the districts at a distance from the capital, the proportion of cubic space has usually ranged at from 400 to 500 cubic feet. At the Curragh Camp and district seven school rooms have been converted into recreation rooms, and these offer every inducement to the well-disposed to resort to, instead of to the tap-room. There are books and papers of all kinds supplied, with chess and bagatelle. This is truly a humane provision *at last.*

With regard to re-vaccination, a subject which is pregnant with interest, at a time when our friends in Paris are suffering so terribly from the curse of small-pox, the results of vaccination are given in 2,264 soldiers and 15,183 recruits. In the case of the soldiers not recruits, about one-third gave a perfect vaccine pustule, on re-vaccination (330 in 1,000), 280 in 1,000 a modified pustule, and 389 in 1,000 failed. Of the recruits, 292 in 1,000 gave a perfect pustule, 344 a modified pustule, and 363 in 1,000 vacciuations failed. With regard to the number of men who, on being examined, were found to have marks of vacciuation, in London 915 in 1,000 had been vaccinated, and in Glasgow only 832. In Dublin 968 had been vac-

cinated, and in Belfast only 785 per 1,000. Ireland still continues to furnish the highest ratio of unprotected men.

The influence of age on the mortality of the troops is a very interesting subject. In the civil male population of healthy districts in England and Wales the mortality per 1,000 annually under 20 is 7·41; between 20 and 25, 8·42; between 25 and 30, 9·21; between 30 and 35, 10·23; between 35 and 40, 11·63; and after 40 it is 13·35. In the whole of the troops it is in similar periods 3·68, 6·65, 7·28, 12·77, 17·32, 12·49. Thus, before the age of 30 the life in the army seems to tend to increase the longevity of the citizen; but after this age, to diminish it. With regard to recruiting for the army, 23,543 recruits were primarily inspected during the year 1868, and the numbers rejected were 8·847, or 376 per 1,000. The ratio found unfit for service at primary inspections were, in London 373, in Liverpool 404, in York 103, in Glasgow 501, in Dublin 381, in Belfast 276. The most frequent cause of rejections were diseases of the eyes and eyelids, varicose veins, malformation of chest and spine, diseases of the heart, muscular debility and defects of lower extremities. When we look at the occupations of the recruits we find, that of 1,000, there were rejected 374 in the classes of labourers, husbandmen, and servants; and 414 of the class of mechanics, such as carpenters, smiths, and masons, while only 347 shopmen and clerks out of 1,000 were rejected. It must be remembered, however, that by far the largest proportion of recruits offering themselves came from the classes of labourers, artizans, and mechanics, so that it is difficult to draw any good comparison as to the fitness for active service of the different classes from this Report.

THE CLUB DOCTOR.

The club doctor's position is one of importance to our Profession, and our object in referring to him is in order that we may, if possible, recommend a means of improving his social *status*, not only as regards his position towards the members of society of which he is medical officer, but also with respect to the emoluments he receives for his professional services thereto.

There are few Societies, Lodges, or Clubs subject to the provisions and entitled to the privileges of the Acts relating to Friendly Societies but possess, or have specially retained for them, the services of a duly qualified medical gentleman for the purpose of examining candidates about to join the Lodge, and for attendance upon the sick or injured members. These societies are generally found very useful to the working man and his family in the time of sickness, there being a weekly allowance from the "box" and gratuitous medical attendance, as well as, in case of death, the relations being entitled to claim a specified sum of money in order to cover funeral and other incidental expenses attending it. But, we hold, the doctor's position, according to existing rules, is neither honourable nor lucrative. In the first place, Lodges are generally connected with public houses; their meetings are held there, and the doctor is not unfrequently summoned to attend a meeting for some paltry explanation at a low beer shop, where gentle stimulation from the pewter cup is necessary for transacting the business of the meeting, and it is rather *infra dig.* for an educated gentleman to be mixed up in their proceedings, if we may judge of the disorder which exists at the majority of these club meetings. Of course, there are exceptions where the rector or vicar takes the Village Club under his fostering wing, preaches concord to them, and insists upon their meeting and conducting the business of their society in his school house; but the majority of them do not transact their work in this way. The club is essential to the trade of the beerhouse host, and he supplies the luxuries—what the parson does not look upon in the light of necessaries, but which, nevertheless, are very acceptable to most of lodge members. The chief duty of the medical officer is to carefully examine every candidate for admission into the society, and certify as to his constitution, state of health, and supposed age. To attend upon all sick members in time of illness; to supply them with proper and sufficient medicine; and to give certificates whenever required, either for their weekly allowance from the funds of the society, or to the effect that health is sufficiently restored to enable them to return to their employment; and all this work we find for an average payment of three shillings a member per annum. Some societies pay more, others less, the majority three shillings, and the average amounts to three shillings a member for twelve months, medical attendance and medicine to be supplied in addition—the ordinary fee charged by the general practitioner for a single visit and a bottle of medicine in the provincial districts of England! Now, we are informed by some club doctors that they attend certain clubs at disadvantage and actual loss. Two or three patients suffering from chronic disease swallowed up all the emolument, for they take good care in most instances to be exacting, and remind the doctor that they are not paupers. No, not paupers, but they are worse; they expect great things for a paltry three shillings, and forget that for attendance upon paupers the doctor is paid more, and is not bothered with entrance examinations and the certificate writings expected of him. If a Colliery Company contract with a medical man they never think of offering less than ten shillings for attendance on each man the current twelvemonth, but here throughout the length and the breadth of England we have clubs only paying their doctor three shillings a case! If a club wants to flourish and grow rich as to its funds, the public house is not the place to meet, for many reasons too apparent to be dwelt upon here: and if a club wants to have proper medical attendance, and the sick members properly treated and supplied with medicines—for the interest of the club is, and the object of the doctor ought to be, to restore the sick member to his original usefulness as speedily as possible—they must pay for it. A medical man may take a club, or a number of them, at a low figure, not with the intention of making money out of them, but to keep his patients together and keep out opposition in his practice. He will find the fallacy of this after a time, for his services are valued at the price he puts upon them, and the consequence is, unless he quickly cures his patients, he discovers himself superseded by the nearest gentlemen who knows how to value himself and respect his Profession. Again, young men commencing practice underbid their seniors in order to obtain clubs, with the view of an introduction to practice, and we ask are they respected in the end any more for doing work cheaply? The members of the Profession keep crying out against the small fees paid to them out of clubs. We tell them now the fault lies at their own door: as societies have laws to guide and direct them, so ought club doctors to put their heads together and have an universal system for their guidance—a scale of charges from which no one can deviate; for although a tradesman to oblige his customers may for their convenience keep a certain article from which, or out of whose sale, he obtains no profit, we remind our brethren that a profession is another thing very different indeed, and that it is a very poor excuse for a surgeon to say, "I retain my club at so small a fee merely through charity, or in order to oblige my patients." If through charity, let him do the work for nothing; and, as to obliging patients in such a matter, it's a poor excuse for a mean act. After careful consideration of the subject, we find no man can safely undertake the medical charge of a lodge whose members are less than fifty under at least seven shillings a member; and above fifty and under a

hundred six shillings. In no instance should any medical man take less than five shillings. Should he do so, he must either neglect the case or lose by the transaction. In all clubs we consider the best arrangement would be for no medical man to be regularly appointed, but for each member to choose or select his own doctor. This principle, combined with medical men who hold club appointments agreeing to a fixed scale of fees, would be of great benefit to those of our brethren in the future who may be desirous of obtaining clubs, and this, we predict, would be of equal advantage to the "*Box*," because, as we have said, it is the interest of the Lodge to have no sick, and when a member is ill to have him restored as speedily as possible; and a doctor cannot be expected to devote his time, or bestow upon the case much thought or attention, unless he is paid fairly for the work he has to perform.

Notes on Current Topics.

Honour where Honour is due.

In our uphill struggle and hard battle as physicians it is refreshing at times to find the daily journalist in his act of public duty paying such a tribute as the following to a deceased member of our noble Profession, more particularly at a season when heavy reflections are being cast on certain members of us as yielding to the desires of cruel artifice and infamous stratagem :—

"A Good Man.—It is our melancholy duty to record the death of Dr. William Martin, of Ratcliffe-on-Trent. He died on Monday, the 11th inst., at Buxton, whither he had gone for the benefit of the baths. * * * To say that Dr. Martin was generally esteemed and will be deeply lamented would be only repeating a form of words, which by their frequent use and sometimes inappropriate application have become stale and hackneyed! Yet here they may be used in all their plainness and literalness. He was loved and respected by the rich and poor, but it is the latter who will feel his loss the most keenly; to them he was a friend as well as a doctor—ever ready to attend upon them at all times, both by night and by day, and under all sorts of circumstances; and his generous forbearance and tenderness towards them when times were hard—very often assisting them with money when he himself was as hard, or harder, pressed than they were—will never be forgotten by the many who were the objects of his liberality. He has fought life's battle bravely and honourably! He has done his duty as only earnest and conscientious men do it, and he has fallen whilst in the discharge of that duty; stricken down by the result of a cold caught when out on a long visit amongst his patients! No man in the parish will be so much missed as will the doctor, and they will all feel that he must and will receive from the Master the 'Well done' of the good and faithful servant, for according to his ability and and strength he hath walked uprightly and worked righteousness, and spoken the truth from his heart."

Of how many of our provincial brethren might not the same be written! but to the public their work is veiled, they labour by stealth, and are not appreciated as they deserve.

Miss Nightingale on Small-pox.

There was a meeting of anti-vaccinators at the Town-hall, Manchester, on June 28th, which was presided over by a late distinguished Professor of Latin in University College—Mr. F. W. Newman. Among other things read aloud by the honorary secretary, Mr. Pitman, who seems to mix up good and bad things in an unfortunate way—associating co-operation with anti-vaccination, and such like untenable contests with medical science—there was a letter from a doctor of the name of Garth Wilkinson, whose name we have seen connected with a pamphlet of very bad taste against the Contagious Diseases Acts. This gentlemen in his epistle quotes the honoured name of Florence Nightingale as having said in her "Notes on Nursing"—"I have seen with my own eyes, and smelt with my nose, small-pox growing up in first specimens, either in close rooms or in over-crowded wards, when it could not by any possibility have been caught, but must have begun." We would ask Miss Nightingale, if this be the case, why small-pox did not exist among the Romans, and why it never breaks out in Ireland now-a-days, since vaccination was so commonly carried out there? Crowding is still very common in Dublin and elsewhere. It would scarcely be necessary for us to ask such questions if Mr. Newman, Mr. Pitman, and other philanthropic persons, would but read some medical works such as those of Mapother, Guy, or Cameron, or Parkes on hygiene. Why will they confine their reading to non-scientific literature, or little pamphlets written by some crotchety individual?

The Medical Bill.

The Royal College of Surgeons of Ireland has been represented in London at intervals extending over several weeks by a deputation consisting of Mr. Macnamara, the ex-president, and Mr. Hargrave, representative of the College in the Medical Council. These gentlemen have been charged with the surveillance of the Medical Bill, and as long as the 18th clause of the Bill, as originally introduced, existed, they, by direction of the Council, exerted their influence in its favour. Inasmuch as the removal of this clause, and the introduction of the third subsection of the tenth clause, not only utterly destroys the uniform operation of the measure, and abrogates the principle of universal State supervision, but concedes to Universities most unjust and dangerous facilities to continue the diploma-selling system, the Council have now decided to employ all their influence to reject the Bill, or postpone it until next year. With that view they reappointed the deputation on Saturday last, and, having already petitioned the House and addressed the Irish members on the subject, they are moving most vigorously against the perpetuation of petty monopolies and education downwards which the Bill aims at.

The Reports of Medical Officers.

The following general order has been published in India :—

"It has lately been brought to the notice of the Commander-in-Chief in India, that a medical officer in charge of a regiment has reported matters of discipline connected with the medical subordinates attached to the corps to the superior medical authority on the spot, who is powerless to take action in such cases, and has neglected to make any report of the occurrences to his regimental commanding officer. The Commander-in-Chief desires it to be pointed out that this course must necessarily occasion delay in the final settlement of such cases. It is the duty of a medical officer to bring all matters of this nature, in the first instance, to the notice of his commanding officer, under whose immediate orders the medical subordinates are serving, and who is held responsible for the discipline of all under his command."

Indian Medical Service.

In the House of Commons on Monday week last Col. Sykes asked whether an examination of candidates for the medical service in India would be made in the spring of 1871, as it was understood an examination would not be made in the present autumn—Mr. Grant Duff: "I regret to say that I am unable to answer the first question. It is quite possible that there may not be an examination next spring, as it is understood that the medical service is rather overmanned at present. We have, however, written to India asking for precise information as to immediate requirements, and I can state nothing definite till we have an answer."

The Medical Services.

The *Poona Observer* has it on the most reliable authority that it has been decided to amalgamate the Indian and British medical services, and that the Government of India has been entrusted with the arrangements of details regarding pensions, funds, subscriptions to be paid for those who elect for general service, &c. The deputy-inspector-general of hospitals only will be offered an inducement to retire. No others below that rank will be considered, but those who have reached fifty years of age will have to retire compulsorily. This latter is as it should be, there being few or none of that age that are equal to the duties they have to perform, either in professional efficiency or physical strength and vigour of mind. Considerable difficulty manifests itself at the Horse Guards as to the disposal of all those native or coloured gentlemen who have, to their great credit, qualified themselves for the Army as assistant-surgeons. The Duke will not have them with European regiments at any price. This hardship may be overcome by these gentlemen receiving a *placebo* in the form of a first-class civil surgeoncy each, and so retain them in India. Other difficulties, in the way of medical and military funds, present themselves, which the Government of India is called upon to solve. The head of the department of each presidency will be called upon for opinions on certain matters; and it will give each an opportunity of showing his interest in his department, and the support he intends to give the junior members of the medical service.

Mr. Cæsar Hawkins.

The thanks of the Council of the Royal College of Surgeons of England have been voted to Mr. Hawkins for "his services to the College as its late representative" in the Medical Council. This is what we should have expected. Mr. Hawkins, one of the Council of the College, was appointed by the other Councillors, and so should be thanked by them, if by anybody. The fellows had no voice in the matter, still less the members, though these are supposed to form the College. Surely, it would have been a greater honour to have represented and be thanked by the College, than the small section of it that attain the post of Councillors. Well, the outside fellows and members need only say they have no part in thanking Mr. Hawkins for benefits they have never received.

Mr. Quain.

At the same meeting these Councillors nominated Mr. Quain, as we have already stated, to succeed Mr. Hawkins. He is in a worse position, inasmuch as the question has come prominently forward lately; and, in taking the office in this way, Mr. Quain must be aware that he will act against the feelings of the majority of the Corporation he is to represent.

If the Council had called a meeting of fellows and members, and recommended Mr. Quain, he would have been certainly elected unanimously. No one would have brought forward a more likely representative, simply because they could not do so. Mr. Quain's popularity is as well known as his ability and honesty, and we should have been glad to see him elected by such a constituency. But, we protest again, in the name of the 17,000 members and fellows, that we are unjustly and illegally prevented from having part or lot in this matter.

The Junior Councillors.

Everyone knows the prestige that attaches to seniority in the Councils of most bodies, and in none less than the London College of Surgeons. The members and fellows throughout the country will, however, be pleased to hear that their Junior Councillors have not been wanting, but have already redeemed their promises. Our readers will remember that when Mr. Erichsen was elected we congratulated them that at length the voice of a true liberal would be added, and we are able to say that in the recent election he took the popular side. At that meeting Mr. Henry Lee and Professor Erasmus Wilson took their seats for the first time. Last year and this we spoke up for both these gentlemen, and in some quarters were thought rash in doing so. The event has proved we were right. Mr. Lee spoke as a true man should on the rights of fellows and members—in fact, he carried out thoroughly the policy he promised in the letter he published. We told our readers last year they might trust him for all he said, and all his words could be construed to imply; and we are, therefore, glad to be able so soon to justify our predictions.

Mr. Wilson, too, if he did not go so far as to refuse to vote, did say he felt fellows and members should have a voice in the election of a representative of the College in the Medical Council. We have, therefore, every reason to be satisfied with the conduct of our new Councillors, and to hope they will maintain the independent and liberal spirit they have evinced. For the future, let it be understood that this one test alone shall be applied to every candidate for election, and even for re-election, into the College Council. Let the fellows but be true to themselves, and no one who has not given a pledge on this point will ever again obtain a seat at the Council table.

Mr. Gay's Proposal.

At the same meeting of the London College Council, Mr. Gay gave notice of the following motion he would bring forward:—

"1. That, in the opinion of this Council, the Royal College of Surgeons of England is entitled to a greater number of representatives in the General Council of Medical Education and Registration of the United Kingdom than that which is assigned to it by the Medical Act of 1858. 2. That, in any increase of number, provision should be made that one at least of the representatives of the College should be elected by the Fellows and

Members. 3. And that a copy of the foregoing resolutions be forwarded to the Lord President of the Privy Council."

The last part of this resolution we advise Mr. Gay to drop, as the Lord President might possibly make some unpleasant reply as to the selfishness with which he proposes to keep so much in the hands of the few. As to the other, there is something to be said when the College of Surgeons shall become in fact what we desire it to be. The Council of the College is but a select body of a couple of dozen eminent men. The same may be said of the ruling body of the University of Durham. Each sends a representative to the General Medical Council. But let the members and fellows of the College and the graduates of the University be the constituency, and then the one would be 16,000 or 17,000; the other—how many dozen? This is a strong point in favour of what has been rather improperly called "direct" representation, while it does not tell against what has been more improperly stigmatised as "indirecet" representatiou. We, who have advocated both methods, are not disconcerted, nor would the carrying of Mr. Gay's motion at all astonish us; for we know there is liberal thought enough in the College Council, and there is also the remnant of an unwise distrust of the fellows and members. But such a compromise will not do. The executives of our corporations—not of this College alone, but of all—must show more trust in those who elect them; must be willing to recognise that they are not, and cannot be, the corporations; that the glory of being one consists in the numbers of worthy members of the Profession enrolled in its ranks, and the interest these feel in its welfare. We ask Mr. Gay to study these points before he proceeds.

A COMMITTEE of the British Medical Association have been occupied in objecting to the Bill, unless representation in the General Medical Council be obtained. Dr. Waters, the indefatigble chairman of the committee, has spent several days in London working to this end. A petition, signed by Dr. Waters, has been presented on behalf of the Society. It is carefully and exactly drawn up, and we regret that space is too limited to give it entire, but some parts of it are exactly like others which we formerly published. We gave a paragraph or two of this last petition:—

"That, owing to the medical practitioners having no direct representatives in the Council, the profession evinces but little interest in its proceedings—a disadvantage which has been admitted in the debates of the Council.

"That corporate interests only were considered at the special meeting of the Council held in April and May last to consider the provisions of the Medical Acts Amendment Bill; while the representations and wishes of the profession were disregarded.

"That the Council, as at present constituted, no longer possesses the confidence of the profession.

"That the introduction of representatives elected by the profession would give the profession more confidence in the Council than at present, and would also increase the knowledge of the Council with respect to the needs of the public and of the profession in Medical Education, Sanitary Measures, Medical Jurisprudence, and Poor-law Medical Relief.

"That a Bill has been brought into your honourable House intituled the 'Medical Act, 1858, Amendment Bill,' and that no provision is therein made for the direct representation of the profession in the General Medical Council, although the payment of the representatives of the several universities and corporations, and of the representatives of the Crown, together with the general expenses of the Medical Council, amounting to upwards of £4,000 annually, are defrayed, not by the bodies so represented, but solely by fees exacted from the Medical Practitioners of the United Kingdom on Registration.

"That various medical societies in the large towns of England, as well as branches of the British Medical Association, have passed similar resolutions.

"That the Irish Medical Association, the President and Fellows of the King and Queen's College of Physicians in Ireland, the Royal College of Surgeons in Ireland, have passed resolutions in favour of Direct Representation.

"That the Royal College of Physicians, Edinburgh; the Royal College of Surgeons, Edinburgh; the Faculty of Physicians and Surgeons of Glasgow, and various medical societies in Scotland, have petitioned for Direct Representation.

"That the election of direct representatives by the registered members of the profession can now be readily effected for each of the three divisions of the kingdom by means of voting papers."

Baby-Farming.

IN the course of our remarks upon baby-farming, we drew attention to the fact of London not being the only nest for the cormorant who eked out existence by trading in the destruction of children. We spoke of the old woman in country places, who "cares the love child and neglects it," and we recommended the police to be communicated with by those who knew the existence of any farm in their neighbourhood. We admire, accordingly, the manly step taken by the Rev. Mr. R. Thorpe, the incumbent of Christ Church, Camberwell, who applied on Thursday last at the Lambeth Police Court to Mr. Elliott, in order to solicit his advice and assistance respecting the existence of two baby-farming establishments in his district. Being unable to prove actual ill-usage, although the reverend gentleman has alleviated the condition of the children (if carefully tended or nursed, why require alleviation?), the presiding magistrate could not advise him further than for him to communicate with the police. We think the most advisable course to be adopted will be for these farms to be placed under the jurisdiction of the Poor-law medical officer of the district wherein they exist, and that this gentleman visit these children as he does the imbecile and parish lunatic, for which he is paid 2s. 6d. per quarter; that, if he suspect unfair treatment, or neglect, he send them into the workhouse; and that he send in a return of all such children in his district to the Board of Guardians each quarter day, being remunerated, of course, per case, as for pauper lunatics. The licensing system raised by a contemporary would never work in country districts; and the parish doctor we conceive to be the proper official to visit these farms, and, if he find anything suspicious, order the children to the house, and hand over the superintendent of the farm to the police.

The Faculty of Imitation.

WE believe those who have the faculty of *imitation* highly developed are fond of taking advantage of the general doings of others. Last week we were treated to a leading article in the *Lancet*, which indisputably proves the writer has been reading our recent remarks in the MEDICAL PRESS upon "Spermatorrhœa," and other papers on the same subject lately published by Mr. Teevan and Dr. Waring-Curran. When the editor of the *Lancet* merely recapitulates the practical views of other men, we think that he should acknowledge them; but since he winds up with the remark—"We know with certainty very little about the actual prevalence or those direct effects of

self-abuse," we pity him, whilst we object to the pompous tone of second-hand effusions built upon the labours of others, and with the *Lancet's wonted* generosity and self-sufficiency unrecognised.

Cucumbers.

The cucumber is the favourite luxury of the working-class; consumed with great gusto, regardless of consequences, and chiefly eaten at tea or supper by them. The cucumber found in the market is generally obtained from plants *forced* in a warm damp atmosphere. When the heat of the day is greatest the plants are watered, and then the windows of the frame lid closed, and the action of solar light prevented by covering the panes with a blind. A kind of steam is thus generated in the interior of the bed, and the fruit forced to grow with great rapidity. This is generally the variety known as the black spined long prickly, a contrast to the sandy cucumber grown in the open fields of Bedfordshire. Our object here is to remind lovers of this vegetable that, in addition to the saccharine and nutritious elements entering into the composition of the cucumber, we have also acrid and purgative principles, found not unfrequently in a state of concentration, hence accounting for the great suffering and alarming train of symptoms induced after a surfeit of this fruit. We have known last season, many cases, at one time dangerous, which we had no hesitation in pronouncing to be dependent upon cucumber poisoning, and entirely owing to utter carelessness and incaution in dressing and eating this vegetable. We consider before using the cucumber it should in every instance be sliced and purged of the preponderance of its acrid and purgative elements by treating with a little salt and then saturated with vinegar for some hours previously—never eaten without, in fact—otherwise it is very apt to produce an active and severe form of purgation, accompanied by intense pain and constituting the so-called *choleraic diarrhœa*.

Vital Statistics of Salford.

At a meeting of the General Health Committee, March 3rd, 1870, the Officer of Health for Salford submitted the vital statistics for 1869. The death rate has been 26·64 per 1,000, a high one. The birth rate was 39·35. This is generally the case—whenever birth rates are high the people are poor, uncivilized, and die early. Salford, it seems, had in 1869 the fourth highest birth rate and the sixth highest death rate of fourteen towns mentioned by the Registrar-General. In 1868 it was even worse. Salford had then the second highest death rate and the third highest birth rate. The citizens of Salford have, therefore, the great lesson to learn that, if they propagate so fast, they will live miserably, and die young.

Scotch Medical Celebrities.

It is somewhat remarkable that the four very distinguished members of the Profession who have recently departed from among us—Drs. Simpson, Clark, Copland, and Mr. Syme—were all of them citizens of the modern Greece, as it has been called by some recent author—Scotland. No one can doubt that Scotland is far in advance of the rest of the Kingdom in its philosophy; and without sound philosophy no character is ever complete. The two heads of the modern school of philosophy, Mill and Alexander Bain, have both received their prophet's mantle from Scotch philosophers. If positive thought is soon to be dominant among English-speaking nations, it will be mainly owing to the thinkers of Scotland; and medicine, being a science essentially positive in its aims, has gained incalculably by the Edinburgh School which retains the traditions of Reid and Hume.

Iodide of Potassium.

This important drug appears usually to be sold in a state of great purity, although it is very dear, being sold at two shillings an ounce by most druggists, or 3d. per drachm. It would be of importance if it could be sold at half the price, as it is admitted in large doses in modern practice in syphilis.

Mr. Cock.

Mr. Cock, stimulated by the paragraphist who sends college trifles to the *Times*, has informed that journal that he is not the first president to throw open the College doors to the fellows and members; but that the late meetings have been held under regulations established by the Council. As Mr. Cock's period of office is now over, and Sir Wm. Fergusson has succeeded him, it is, perhaps, not too much to say, that there is a general impression abroad that the president possesses very great influence, and that in Mr. Cock's case that influence was thrown on the side of liberal conduct towards members and fellows. We may add, that seldom has the College had a president so zealous in the discharge of all his duties and who devoted so much time to College matters. For this reason we deeply regret that he was not able to call the meeting, so gracefully asked, to discuss the question that now is foremost in medical politics, during his term of office. We can now only appeal to Sir W. Fergusson to call such a meeting, and thus honour his predecessor by doing that which he would himself no doubt have done, after the respectful request he received at the last meeting.

Free Medical Education.

M. N. Pascal, in a letter to the *Mouvement Medicale*, says:—"A professor well known by the treasurers who paid him, and better known in the learned world on account of the twelve places he occupied undes Louis Philippe, than by the services he has rendered to science, said, with the princely contempt which belonged to him, 'You men of free education are but dried fruits:' to which one of the professors of the free school replied before his pupils, 'Dry fruits are always more valuable than rotten fruit.' The 'dried fruits' are content to teach what they know, and they only tell us to-day what they know. This Velpeau, when he was a free professor, dedicated his principal work to medical students, because they made him the most sought after of all professors, and to his father-in-law, M. Quesneville, 'author of his domestic happiness,' showing by this that between pupils and teachers, and between children and parents, the relation is similar. It is true that when the garment of Nessus touched his shoulders he suppressed this dedication. Was, perhaps, his teaching more valuable after than before? And Pajot, who for twenty years has taught midwifery to ten thousand pupils, and has not denied liberty, and who would to-morrow have more

pupils than all of the faculty if the Grand Amphitheatre were closed. Do you call these men 'dried fruits?' Let us hasten to say that the demonstration of the inferiority of the official instruction has no longer any need of being made, except to first year's students. Advanced students, and foreign medical men who visit our cliniques, quickly make up their minds about some of our faculty, and do not hide their sentiments." Decidedly the Parisians are a revolutionary people.

Signs of Death.

It will be remembered that a bequest has been recently made to the Academy of Medicine of Paris for the purpose of enabling the Academy to award annually a valuable prize for the best means of unfailingly demonstrating the existence of death and thus guarding against premature sepulture. M. Bonchut has suggested that the contraction and dilatation of the pupil by calabar bean and atropine is a reliable test and one capable of being employed without suffering or danger to the patient.

Tubercular Meningitis.

Dr. Vogel, in his work on Diseases of Children, denies that it is possible to prove the absence of inherited taint in this fatal disease, and, from several years of large practice in a poor district, he concludes that tuberculosis is far less common than it would be if external conditions had much influence in its production. He regards the arachnoid as the seat of tubercles in this disease. He observes that in this disease it is always to be remarked that an older, larger, yellow tubercle exists somewhere else in the body. He condemns the use of mercury in this disease.

Croup.

Dr. Vogel, of Dorpat, Russia, says that both emetics and tracheotomy are useless in croup, which in well declared cases may be set down as a fatal disease. He believes that the reason why Trousseau succeeded so often in his tracheotomy cases was because diphtheria is common in that country and that croup is often confounded with catarrhal laryngitis.

Lady Doctors.

M. Nelaton, M. Milne Edwards, and M. Duruy, are anxious to found a school of medicine especially for women. The Parisians don't marry much now-a-days, so it does seem fair that the girls should be allowed to compete with them for the good things of this life, as well as to go into nunneries, which have been called clubs for spinsters.

Female Doctors in France.

The female medical agitation is assuming important dimensions in France. Already the proposal to erect a free medical school for women has been submitted to the Empress by Messrs. Duruy, Nelaton, Husson, and Milne Edwards. Probably France will soon rival America in the movement, and it is not only there that American ideas are taking root. In London a royal decree has authorised women to practise medicine after they have undergone the usual tests of efficiency, and a special course is about to be created for them in the Caroline Institute. In Vienna, also, the Professors of the University have decided that women shall be admitted to follow out the curriculum and attend hospital.

The Vienna University has decided to admit women to its curriculum, and two ladies are studying there.

Scarlatina, measles, and diarrhœa have been recently very fatal in Marylebone.

Mr. Gladstone is said to be in excellent health again.

Already £1,740 has been raised for the Syme Testimonial.

The will of Sir James Forbes Clark, M.D., F.R.S., has just been proved under the personalty of £25,000.

War fever rages in Paris at present. Its symptoms are delirium, belief in murder, and an insane desire to kill and be killed by some person.

The culprit John Jones, who murdered the family of seven in such an atrocious manner at Uxbridge in May, received sentence of death on Friday last.

Fever unfortunately continues to increase at Liverpool. In the Workhouse Fever Hospital last week there were 229 cases, as against 186 in the preceding week.

Dr. Thomas Reade, of Belfast, asserts that he was one of the first observers who published cases of syphilitic disorders of the brain and its membranes in 1851 and 1852.

The Committee for Hospital Organisation is progressing favourably, and holds frequent meetings. The programme, we hear, is Provident Dispensaries and Consultations at Hospitals. We wish them all success.

Mr. John Hilton, F.R.S., surgeon extraordinary to the Queen, after holding the office of surgeon to Guy's Hospital during more than twenty years, was unanimously elected consulting surgeon to that institution. Sir Astley Cooper, Bart., was the last surgeon elected to this same office at Guy's.

Dr. Broadbent reports that a large number of cases of typhus fever have occurred in London during the past week or two, immediately following in the wake of the relapsing fever epidemic, which had assumed somewhat alarming proportions.

The election of a head master of the Royal Medical College at Epsom, in the room of the Rev. Dr. Robinson Thornton, presented to the wardership of Trinity College, Glenalmond, will take place in the course of the present week. The stipend is £700 a year, with a furnished house.

Mr. J. G. Brough has been appointed Librarian of the London Institution. Mr. Brough for ten years edited the *Chemist and Druggist*. We are glad to hear our contemporary will still obtain some original contributions from his pen, although it loses his services as actual editor.

The meeting of the British Medical Association, at Newcastle-on-Tyne, on the 9th, 10th, 11th, and 12th of August, promises to be interesting. The annual Museum originally instituted by Mr. Jonathan Hutchinson will be repeated, and books are also to be exhibited.

The Committee at work on the out-patient department of our London hospitals seems anxious to do what is right. Another meeting has been held, and one more takes place to-morrow. The work is difficult and full of questions that may excite impatience. We therefore ask for the extra indulgence to which it is entitled, and which we know will be cheerfully given to any of its suggestions.

We have been examining carefully the list of gentlemen nominated for the Fellowship of the London College of Physicians. Some of them well deserve the honour; and, if others would not have occurred to us as those who ought to be promoted at present, we do not think it worth while to mention names, especially as the election does not take place until to-morrow.

Dr. Russell, of Birmingham Hospital, has related a case of large aneurism of the basilar artery, with local disease of the arteries, and superficial softening of the pons varolii, giving rise to two distinct and protracted attacks of hemiplegia, each followed by recovery, and then followed by paraplegia. All of these occurred in a male, aged twenty-six, who had contracted syphilitic contagion six years previously.

Mr. Haviland last week gave a descriptive lecture, on the Geographical Distribution of Disease, at the rooms of the Social Science Association. It was illustrated by a series of coloured maps showing, according to the Registrar-General's returns, in what localities certain diseases prevail. Mr. Haviland has devoted much time to this subject, and, whatever may be the theories propounded, the accumulation of facts cannot but furnish material for investigation.

Small-pox in Paris continues to be very fatal, although there is some decrease in the mortality—225 instead of 267 in the week. Altogether 3,674 people have been swept away in this epidemic. Mr. Newman and other vaccino-phobiacs think this is a trifle compared with their allegations (never proved), that here and there inconvenience or danger may result from vaccination. Mr. Newman may have taught Latin well, but Heaven save us from his logic, which consists in one single phrase—*post hoc, ergo propter hoc*—the natural motto of quacks and fanatics.

SCOTLAND.

Dr. John Wylie, Edinburgh, is to begin a course of lectures on Pathology in November in connection with the Royal Colleges of Physicians and Surgeons.

Relapsing fever has not altogether disappeared from Edinburgh, several cases having recently been admitted into the Royal Infirmary.

SPECIAL CORRESPONDENCE.

PROSTITUTION IN MADRID.

FROM OUR OWN CORRESPONDENT.

Madrid, July 22th, 1870.

As for some time there has been so much discussion of the question of the Government regulation of prostitution going on in your pages, I may perhaps be permitted to say a few words about what is thought of such measures in Spain, notwithstanding that rumours of war are at present of more stormy interest than any sanitary question, however important.

Dr. Machucho, an esteemed physician, has recently written advising the application of the French police system to Madrid, and it may be as well to let some of your readers hear what reasons he assigns for his desire to make such an innovation. He truly remarks, in the words of the Abbé Constant, that prostitution is not a crime, but rather a condition of suffering, to the majority of women who are obliged to have recourse to it from poverty or other causes. He is, as most medical men are, a foe to the prohibitory theory of Catholic countries, but is in favour rather of liberal measures. He observes that he does not belong to the class of austere moralists who in this matter carry their opposition so far as not to accept authorised prostitution, under the pretext that it will thus become an industry protected by the State. Such an argument, he observes, would come well from the mouth of Philip IV., who made the tolerated houses to be shut up and the prostitutes put in prison. In all nations, says Dr. Machucho, when any attention is paid to public health, in all free, just, and illustrious States, Governments have thought it right to regulate and watch over prostitution, in place of absolutely prohibiting it—a measure which would be equivalent to consent that it should be privately carried on.

Belgium has made, especially in Brussels, a kind of law concerning prostitution, which is superior to the Parisian law, which latter has established a special service known under the appellation of "office of morals." This Parisian system, though incomplete, has opposed a salutary barrier against the progress and the propagation of syphilis. Italy has adopted for Turin and Florence the regulations of Brussels. In Prussia the tolerated houses, which were at one time suppressed and then re-established, have been in the height of their vigour since 1855 under a similar "office of morals." In Holland, the municipal authority has established, since 1856, a very regular and severe inspection, instituting a communion to restrain the propagation of the syphilitic contagion, and forming registers for the inscription of young women.

But, precisely because we consider prostitution as a necessary evil, in populous cities and in seaport towns, and because we object to its being abandoned to itself, do we desire that governmental and municipal authorities should lessen the consequences of this social plague by causing sanitary laws to be scrupulously fulfilled, and by chastising severely the abuse into which women giving themselves up to this sad trade run.

Dr. Machucho, therefore, begs the attention of the civil governors of the province to reform immediately the interior rules of the tolerated houses in Spain. The tolerated houses in Madrid are in the greatest state of disorder, and are a constant menace to the health of the incautious and the morality of families. Cases of syphilis are very frequent, and offences against morality become multiplied. Scarcely can we walk a step at certain hours in the most central streets, without being detained by infected and impure women. These abuses should not be permitted in a city like Madrid. Modern societies authorise prostitution in tolerated houses, in order to avoid the scandal of the street. In Madrid there are numerous prostitutes before the age of puberty. The civil magistrate ought severely to punish abuses such as these, which, besides degenerating the human race, are a constant danger to

morality and public hygiene. To correct so many evils, it is indispensable, says Dr. Machucho, to establish a law, in which the following bases shall be adopted, and which have been advised by the most eminent physicians and hygienists: 1st. To inscribe in all parts of the kingdom of Spain women who give themselves up publicly to prostitution. 2. To visit them twice a week, using the speculum in every examination. 3. To admit venereal patients into general hospitals. 4. To establish public dispensaries for poor persons with venereal disease. 5. To prohibit in an absolute manner all provocation in the public streets. Under no pretext ought prostitutes to be permitted to use words, actions, gestures, openly provocative of prostitution.

Dr. Machucho adds that in spite of the salutary and profound respect for individual liberty entertained in England, that country has not feared to restrict liberty in so far as prostitutes are concerned. By a law promulgated in September 13th, 1866, England has conceded the right to submit to medical visitation during a year, all women accused of giving themselves up notoriously and habitually to prostitution. He adds that the said law is applied merely to ports and cities with garrison towns; but it is probable that it will be extended to all England, since it has gained the appliance of the scientific English press, from its having produced such excellent results. In Plymouth, for instance, the proportion of venereal disease in the English marine has fallen from the proportion of 7 per 100 to 2 per 100.

Vaccination.

A physician of Alencon, M. Damviseau, proposes with regard to the important question of revaccination, as a better guarantee of preservation, after vaccinating children to revaccinate them the week following with lymph from their own pustules. He asserts that the second vaccination has frequently given results, whilst the third has failed. He acts in the same way with adults when he revaccinates them.

Correspondence.

BABY FARMING AND LADY WRITERS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—The long communication of a lady signed A. B. (All Balderdash?—) inserted in *The Times* is so unreal that no one would pay attention to it, were it not that A. B. casts a reflection upon our profession which demands remedying if real, and further explanation in any case if imaginary. A. B. writes of a medical man with an obtrusive brass-plate on his door, who takes his chance of practice with his brother Medicos, upon whom she called, and who "cheerfully" agreed to alleviate the lady's troubles, or have her taken care of, when the time of parturition arrives, and the child *adopted*. The fee, A. B. tells us, required, was some £50 or £60. "As he was a public practitioner, I *fancy* he was *duly qualified* by a degree from some college, *and very possibly holds a respectable position in his neighbourhood*." Again: "But it is not a pleasant thing to think that a regular doctor could not only lend himself to such lucrative wickedness, but actually court it by advertisements in a daily paper." I ask A. B. in all seriousness, to name this gentleman, and send you in confidence his address, that you may judge of the reality of her letter. As it is I believe A. B. to have merely written that which is the effusion of a fertile imagination, and I will not believe that any *qualified* member of our noble profession would stoop to such wickedness and dangerous infamy, or lend himself to becoming an abortion-monger for a paltry £50. If A. B. gets her little kitchen maid, after great persuasion, to do dirtier work than is to be done in her scullery, and gets her own worthy self up in a style only to be equalled by the men, Park and Boulton, to simulate pregnancy, I sympathise with her in not recording her experiences, until the subject becomes sensational and well nigh exhausted, and fashionable. I allow Baby Farming to be one of the disgraces of the age, but would not permit A. B. to traduce our profession, without asking that the name of the medical man alluded to be divulged; if guilty he must be removed off the *Register*, but if he be no more than an imaginary character, I demand explanation for our brethren's sake.

W. C. D.

Medical News.

Royal College of Physicians, London.—At an Extraordinary Meeting of the College on Monday, the 18th inst., the following Gentlemen, having conformed to the by-laws and regulations and passed the required examinations, were granted licences to practise physic, including therein the practice of medicine, surgery, and midwifery:—Thomas Allen, King's College Hospital, W.C.; John Bateley, M.R.C.S., Southtown, Great Yarmouth; William Frederick Butt, M.R.C.S., 12 South street, Park lane, W.; William Bowen Davies, M.R.C.S., 15 Edmund Terrace, Cornwall road, W.; David Henry Goodsall, M.R.C.S., St. Mark's Hospital, City road, E.C.; William Hodges, M.R.C.S., 12 Ashley road, Bristol; George Millson, Donington, Spalding; William Price, M.R.C.S., University College Hospital, W.C.; Arthur Raynor, M.R.C.S., 16 Warden road, Kentish Town, N.W.; Tom Robinson, M.R.C.S., London Hospital, E.; Wm. Wilberforce Smith, M.R.C.S., 20 Bishop's road, W.; Henry Banks Spencer, M.D. St. And., High street, Oxford; William Bezley Thorne, M.R.C.S., 38 Upper Baker street, N.W.; Peter Vincent Timothy, M.R.C.S., 72 Worship street, E.C.; Edward Willis Way, M.R.C.S., Adelaide, South Australia.— The following candidate, having passed in medicine and midwifery, will receive the College Licence on his obtaining a qualification in surgery recognized by the College:— Charles Holmes, 46 Ogden street, Ardwick, Manchester.

Charing Cross Hospital.—The annual distribution of prizes to the Students of the Medical School attached to this hospital took place on Monday afternoon in the Board-room of the hospital. Dr. Stanley, Dean of Westminster, presided. The prizemen were as follows: — Llewellyn Scholarship, Mr. Noakes; Golding Scholarship, Mr. Chittenden; Gold Medal, Mr. Noakes; Senior Anatomy, Silver Medal, Mr. Lea; Certificates of Honour, Mr. Taylor and Mr. Crouch; Junior Anatomy, Bronze Medal, Mr. Hartley; Certificates, Mr. Orwin and Mr. Stephens; Senior Physiology, Silver Medal, Mr. Lea; Certificate, Mr. Chittenden. Junior Physiology, Bronze Medal, Mr. Gray; Chemistry, Silver Medal, Mr. Leeds; Certificate, Mr. Couldrey; Senior Medicine, Silver Medal, Mr. Walkers; Certificate, Mr. Noakes; Junior Medicine, Bronze Medal, Mr. Routh; Certificate, Mr. Lea; Senior Surgery, Silver Medal, Mr. Noakes; Certificate, Mr. Burroughs; Junior Surgery, Bronze Medal, Mr. Routh; Certificate, Mr. Lea; Botany, Silver Medal, Mr. Whitelam; Certificate, Mr. Taylor; Materia Medica, Silver Medal, Mr. Lea; Certificates, Mr. Whitelam and Mr. Chittenden; Midwifery, Silver Medal, Mr. Burroughs; Certificates, Mr. Noakes and Mr. Leigh; Forensic Medicine, Silver Medal, Mr. Leigh; Certificate, Mr. Weston; Pathology, Silver Medal, Mr. Leigh; Certificate, Mr. Hanson; Practical Chemistry, Silver Medal, Mr. Lea; Certificate, Mr. Champneys.

The Opponents of the Contagious Diseases Acts.—Whatever opinions may be held as to the policy of the Contagious Diseases Acts, there can be very little difference as to the justice of Lord Henry Lennox's denunciation of the style in which the opposition to them has been carried on. Never, perhaps, during the present century has a mass of literature so utterly obscene been forced upon decent people as the mountains of tracts, memorials, and handbills thrust into the hands of women and unmarried girls by the opponents of the Acts. Mr. Gladstone having intimated the willingness of the Government to grant an inquiry into the working of these laws, it is difficult to understand in what way the circulation of these handbills and memorials by the Anti-Contagious Diseases Acts Association can be justified. The credit or discredit, whichever it may be, of passing these Acts, belongs to no one party or class of persons; and they have indubitably effected some valuable sanitary and moral results in the districts where they have been enforced. But the cost of any such reforms may be too great; and, if the objections are valid, they can be best urged before the impartial and skilled tribunal of a Royal Commission. The present appeals to fear, or to worse feelings, deserve unqualified condemnation.—*The Standard*.

Parliamentary Intelligence.

HOUSE OF COMMONS.—July 20th.

CONTAGIOUS DISEASES ACTS REPEAL (1866 1869).

When Mr. Jacob Bright moved the repeal of these Acts last Wednesday, the house was cleared as on a former occasion. A good deal of what passed never, however, transpired, and the following is a condensed summary of the main features of the debate.

Mr. Jacob Bright said, the Contagious Diseases Acts had been smuggled through the House without an opportunity having been given to hon. members to discuss the measure. The same course had not been taken in the other House of Parliament. The Press had not criticised the Act with all materials necessary for doing so, and some papers had refused to insert replies to articles they had published on the subject. No witness had been called for the Crown that was not a paid official and a tool of the Act. Bishops had supported it, and now there was an association whose object was to extend the Act to all the women of England. It was to the interest of the police employed under the Act to prove cases. The association to which he had alluded had its objects to serve, and the Chancellor of the Exchequer was required to expend money to protect British husbands in the commission of adultery. That as regarded the army, we had never suffered from the physical weakness of our men, though we had sometimes suffered from the mental weakness of our commanders. He would not argue the question on sanitary results. A voice was heard from the country against the Bill in spite of the conspiracy of the Press. By what process did the law work? By that of spies, who dogged the steps of poor ruined women, and who entered poor men's houses and insulted the women. Class legislation had never been so put in force. The women taken up under this Act had not even a chance before the magistrate, for they were induced by fraud and cajolery to sign a voluntary submission. The fraud and cajolery were sanctioned by the War Office. He made that statement with deliberation. If a woman refused to place herself in the power of the police, she was bullied. We locked up those persons in order that they might have the ministrations of the gaol chaplain. Better to lock up some of those who defended the Acts. Prostitution had been legalized in England. The law had changed sides, and we were in partnership with houses of ill-fame, and, by sanitary care, prostitution was made attractive.

Lord Henry Lennox said, having listened to the speech of the hon. member for Manchester, especially to that part of it which related to the results of the Albert Hospital at Devonport, he could not remain wholly silent, seeing that, while acting as Secretary to the Admiralty, he had personal knowledge of the details of the working of that institution. The hon. member for Manchester had challenged the House on two points—first of all he had denied the beneficial working of the Acts, and, secondly, he had denied the moral benefits flowing from them; but he hoped to give a categorical answer to the hon. member on both of those questions. He declared that, so far from there having been any insufficiency in the degree of publicity given to those views, on the contrary, he deeply regretted the extent to which their publication had been carried, and also the manner in which and the means by which it had been accomplished. (Hear, hear.) For the last few months every day and every hour respectable households had been invaded by pamphlets and statements couched in the most filthy language and containing the most indecent details. Talk, indeed, of the want of publicity—he knew as a fact that in the county in which he himself lived, the drawing-rooms and breakfast tables of the wives and even the maiden sisters of the most respectable families had been deluged with publications which deserved no other fate than to be brought under the provisions of Lord Campbell's Act. Another complaint of the hon. member, to which he had listened with equal astonishment, was that those Acts had been passed without any debate in that House. Whose fault, he would ask, was that? When those Acts were introduced they went regularly through all the various stages through which all other legislative measures passed in the ordinary course. As to the beneficial working of the Acts, which the hon. member for Manchester had denied, quoting some figures given by Mr. Wolferston, the house-surgeon, to prove that during a certain period the number of women admitted to the Albert Hospital at Devonport had increased, and from that, forsooth, the hon. gentleman proceeded to argue that prostitution in that town had increased. He begged to assure the hon. member for Manchester that he had taken an entirely erroneous view of the inference to be drawn from those figures, the truth being that the increased number of admissions was owing to the increased knowledge spread among those unhappy women of the great benefits which would accrue to them from being treated in that hospital. The hon. gentleman also denied that those Acts had any result. Now, having himself, when Secretary to the Admiralty, moved for a vote of money for the erection of the Admiralty wing of the Albert Hospital, he told the hon. member, from an official experience of three years, that the reason why the results of those Acts had not been more satisfactory and complete was the limited area over which they operated, and the comparatively limited sums which had been expended in carrying them out. The really beneficial effect of those Acts, the noble Lord contended, could not be properly appreciated from the present system of partial treatment, as that disease required, like all other diseases of the same kind, a policy, so to speak, of stamping out to be applied to it. He also mentioned that at Sheerness, in the year 1867, the Admiralty received official intimation that the disease had then been all but completely stamped out. The hon. member for Manchester, referring to the Devonport Hospital, had stated that 500 women were annually driven up, forced, bullied, and compelled even by fraud in high places to enter those institutions. Now, he begged leave, speaking from official knowledge, to give his most positive contradiction to that statement, and to say that, so far from force, bullying, or official fraud being required, those wretched women flocked up, anxious to enjoy the benefits of the hospital, and fearful of nothing but the jeers of the companions whom they had left outside.

In that hospital at Devonport those unfortunate women were not only cured of a loathsome disease, but during their cure received the ministrations of the chaplain, were taught those first principles of religion of which when admitted they were supremely ignorant, and were practised in all those kinds of domestic and household work which when they left the institution would enable them to earn their living without returning to their former career of degradation. In conclusion, he really could not allow the erroneous statements of the hon. member for Manchester to pass without rising to implore the House to pause in its condemnation of a measure which he believed was calculated to promote the best social and moral interests of the country. (Cheers)

Mr. Whitbread thought there was nothing morally wrong in contributing to the maintenance of hospitals for contagious diseases. Measures ought to be taken to diminish the evil as much as possible, but he thought that severity on the part of the police would not conduce to that result.

Captain Vivian did not think that the opponents of the Acts had adopted a wise course. Mr. Garth Wilkinson's pamphlet, which had been distributed that morning at the houses of hon. members, was a filthy production, and contained a letter purporting to have been written by a lady which he would not characterize. He denied that the Contagious Diseases Acts had been smuggled through that House. There had been committees of that House on the Bills in 1864 and 1866. The voluntary system had entirely failed. Objections had been taken to every sanitary measure passed by the Legislature. How was it that so many of the clergy were in favour of the Acts now so much condemned by those who had got up the agitation against them?

He then proceeded to read a number of extracts from reports of persons who had seen the working of the Acts and believed them to be beneficial.

The debate was adjourned.

HOUSE OF COMMONS.—Thursday.

BRITISH MILITARY SURGEONS.

Major Anson asked the Secretary of State for War whether he intended to request permission for a British military surgeon of experience to be attached to the head quarters of the French and Prussian armies for the purpose of studying and reporting upon the effects of the more recent inventions of modern warfare, and the most approved methods of transporting sick and wounded men during rapid movements of troops.

Mr. Secretary Cardwell replied that the Army Medical Department attached great importance to the suggestion of

his hon. friend. He also recognised its importance, and should be glad to have the opportunity of carrying it into effect. In answer to a question of which he had received private notice, he might state that in laying down a general rule that military officers should not be permitted to attend the armies of foreign powers as correspondents or otherwise, her Majesty's government adhered to the course which had been pursued on former occasions. He was aware that exceptions had sometimes been made, but in the present case the government had resolved to adhere to the general rule.

HOUSE OF COMMONS.—Monday, July 25.

MEDICAL ACTS AMENDMENT BILL.

This Bill was to have been brought forward on Thursday last but the pressure of other business in consequence of the alarming state of affairs on the Continent compelled the Government to postpone it until Monday last. During that interval much extra pressure was brought to bear on the Government in reference to the 18th Clause and the constitution of the Medical Council. The representatives of the British Medical Association and of several colleges were occupied the whole of the time in urging their views, and Dr. Waters, as chairman of the Representation Committee, was particularly active.

The Bill we lately announced as to be brought forward, was held over in order to unite the whole forces of the Opposition, all parties being determined, if the Government would not yield, to support Dr. Lush, who had given notice that he would move that the Bill be read again that day three months. It then became evident to many that the Bill must be postponed, and when on Monday morning the *Times* published a project of treaty between France and Prussia, those who know the work of Parliament felt assured that the Government would have no time on their hands to force on a reluctant and indignant Profession a Bill in which the public had never manifested the least interest.

Accordingly, those who were present, in case of any such attempt, had the pleasure of hearing Mr. Forster state that he was under the necessity of withdrawing the Bill, as it was impossible, at this period, and under present circumstances, to deal with the constitution of the General Medical Council.

Having kept open our columns to a late hour in order to chronicle the debate, should any take place, we rejoice to be able simply to record the failure of the Privy Council to inflict a great injury on the Profession, and to congratulate the consistent opponents of the worst Medical Bill ever framed on the success of their unwearied efforts to secure its rejection.

THE CONTAGIOUS DISEASES ACTS.

Our Parliamentary Intelligence contains a full summary of the debate in the House of Commons on this subject. As our own columns have lately contained many letters upon one side, we were much gratified in inserting Dr. Waring-Curran's on the other. At a late hour we have received the following remarks in reply by Dr. Drysdale :—

It always gives me great pleasure to hear Dr. Waring-Curran's opinion on such subjects as the above. The boldness and originality of his views on many medical topics is well known to most of the readers of your enlightened and most liberal of all medical journals in this country. I understand Dr. Curran to say that the Irish people are "the most virtuous people in the world." Now, I do not venture to dispute such an assertion, or, indeed, to give any opinion on such a difficult matter ; but, in scientific journals I sometimes wish we had the power of arguing before hand upon the definition of a term we are about to make use of. Some persons, known as *utilitarians*, or followers of the School of Bentham, define virtue, or morality, that conduct which tends to make mankind happy. I fear that if that definition were adhered to Dr. W. Curran would have to prove to me that a country I have so much respect for—Ireland—has, during this century, been more happy than France, where, according to his standard (whatever that may be), the people are not so virtuous as the inhabitants of Ireland. Does Dr. Curran mean by virtue, perhaps, chastity ? Are the words synonymous in his opinion ? If so, I dare say many would say yes to his query—"Is there a more virtuous people in the world." Alas ! Mr. Editor, human nature is such a puzzle to us all, that we find that even the ideal chastity of Ireland has not prevented an amount of human misery and suffering in that country, perhaps unequalled in any European State in the 19th century. Prudence in the matter of numbers is, in the opinion of many, a *sine qua non* of virtue, and this element, virtue, and prudence, is common in France, although M. Lefort's letter startles us by his disclosures as to the practice of the Parisian working men and women. I saw it stated in a journal the other day that the French peasants "habitually limited their families to two children." They are either virtuous or not virtuous in such customs ; but in so far as they are virtuous in this, according to the standard of the utilitarians, or of the modern school of philosophy, there clearly must be something wanting in the ideal of the country which Dr. W. Curran calls the most virtuous in the world, if that ideal leads so frequently to overcrowding and difficulties of all kinds. I have long been rather inclined to look upon the French as in some respects (except in their love of war) the most civilized of all modern nations, and I merely write this note in reply to Dr. Curran's most admirable remarks, to show that I am not quite sure that I hold the same standard of right and wrong with him, unless, indeed, he will explain to me what his is. Dogmatic standards of morality, whether derived from one body of men or another, are rarely satisfactory to medical thinkers. No body of men are so likely to see what is true to nature in a question of right and wrong, and whatever they may be obliged, by the *res augusta domi*, to profess outwardly as to their tenets of morality, there is in my experience, no body of men so able to see to the bottom of such questions as that of Contagious Diseases Acts, or other intricate problems as our medical fraternity.

For my part I am entirely opposed to the English or French Contagious Diseases Acts, or anything approaching to them, because they are nostrums put forward to cure an inveterate disease, arising out of our backward state of theory in the matter of sex-contracts. They have done very little good in France (in my experience) in a sanitary point of view. That country is still full of venereal contagion, and I cannot help thinking that the carelessness of the working classes of Paris, spoken of by M. Lefort, with regard to their parental duties are, partly, at any rate, due to the unsensible teaching of the police Acts. Already in our garrison towns we find young men and faithless married ones, asking what day the women have been examined, and making use of this knowledge as a means of using what they would otherwise have refrained from—prostitution.

These were the points I suggested to our learned French professor, M. Lefort, and I added that it seemed to me that the irrevocable contracts, alone sanctioned by the French Church, were apt to add to the amount of prostitution, by encouraging, as they do, the life-long slavery of many persons in cases even of adultery and cruelty in their partners. Nothing that either he or your esteemed correspondent, Dr. Curran, has said, *as yet*, has changed my opinion. Besides, I hear from very high authority that greater facility for divorce worked very well indeed in Paris when it existed, and that it does so now in America in some States, in which States prostitution is almost unknown, although divorce is by no means common, notwithstanding its facility.

Gleanings.

Active principles of Gelseminum Sempervirens, with a Case of Fœtal Poisoning by three drachms of the Fluid Extract of the Plant.

Dr. Theodore G. Wormley, Prof. of Toxicology in Starling Medical College, Ohio, having been solicited to make an examination of the contents of the stomach of a woman who had died after taking the fluid extract of gelseminum, thought it necessary as a preliminary to institute a series of experiments in order to ascertain whether that substance, as prepared by Tilden & Co., contained any principle or principles by which its presence could be certainly determined. These experiments are detailed in the *American Journal of Pharmacy* for January, 1870, and they show according to Dr. G. that the fluid extract of gelseminum prepared by the above firm contains a new organic acid, which he names gelseminic acid, and a strongly basic or alkaloid principle, which, being the active principle of the drug, he names *gelseminine*, *gelsceminia*, or *gelsemia*.

The case of poisoning which instigated these investigations was as follows:—

"On the 30th of January, 1869, three teaspoonfuls of the fluid extract were administered to a young healthy married woman several weeks advanced in pregnancy, who at the time complained of no serious illness. In two hours after taking the dose, the patient complained of pain in the stomach, nausea, and dimness of vision. These symptoms were soon succeeded with great restlessness, ineffectual efforts to vomit, and free perspiration over the body. At the expiration of about five hours the pulse was found feeble, irregular, and sometimes intermittent; there was great prostration, with irregular breathing and slow respiration. The skin was dry; extremities cold; the pupils expanded and insensible to light; the eyes fixed and inability to raise the eyelids. The vital powers rapidly gave way, and, without convulsions, death occurred in about seven hours and a half after the poison had been taken.

"It will be observed that in this case, only three teaspoonfuls of the fluid extract were taken. Presuming it to have had about the same strength as the preparation we examined, the quantity of the alkaloid contained in this amount could not have much exceeded the sixth part of a grain. This would seem to indicate the alkaloid to be one of the most potent poisons at present known.

"*Post-mortem appearances.*—Eight days after death the body presented the following appearances, as described by Dr. J. H. Stephenson, who made the autopsy and to whom I am indebted for the account. Countenance natural as in sleep. No emaciation, and body in a perfect state of preservation. Cadaveric rigidity very slight. The back of the neck and between the shoulders, extending the full length of the spine, as also the depending parts of the thighs, and arm to the elbows, presented a congested appearance. The membranes and substances of the brain and medulla oblongata were normal. The adipose tissue remarkably thick, and highly tinged throughout with bilious matter. Lungs slightly collapsed, natural in appearance, and superficial veins congested. Heart normal in size, superficial veins injected, and the cavities greatly distended with dark grumous blood, inside of which was found a well-defined membrane, identical in appearance with that found in diphtheria and pseudo-membranous croup. The abdomen presented no tympanitic distension. Stomach slightly distended with gas, and contained a small quantity of ingesta. Peritoneum and intestines in a healthy condition. Liver and investing membrane normal; left kidney congested. The uterus was slightly enlarged and contained a fœtus of about five weeks' development.

"A small quantity of the contents of the stomach having escaped from the organ at the time of the dissection, was collected separately in a small bottle; the stomach with the balance of its contents was placed in a larger bottle. These bottles, with their contents, were carefully sealed and remained undisturbed until the 17th of May. At this time the contents of the bottle containing the stomach were found to have undergone considerable decomposition. A little pure alcohol was added to the decomposing mass, and it was then allowed to remain until the 13th of June, when the chemical examination of the contents of both bottles was commenced.

"*Chemical analysis.*—The contents of the *small bottle*, consisting of about two fluidrachms of liquid with a small amount of solid matter, were digested with about one ounce of strong alcohol, the liquid then decanted, and the solids washed with fresh alcohol, which was collected with that first employed. The alcoholic liquid was now concentrated at a moderate temperature to about one-half its volume, then filtered, and the filtrate concentrated to about one drachm of fluid. This concentration caused the separation of some oily globules, and also of some apparently vegetable solid matter, and the mixture exhaled a very marked vegetable odour, very similar to that of the extract of gelseminum under similar conditions.

"The concentrated liquid thus obtained was again treated with alcohol, filtered, and the concentrated filtrate treated with about half an ounce of pure water, which left considerable matter undissolved, and furnished, when filtered, a clear slightly yellowish solution. This aqueous solution was concentrated to a small volume, filtered, the filtrate acidulated with a few drops of acetic acid and then extracted with two volumes of pure commercial ether. On allowing the ethereal liquid to evaporate spontaneously, it left a nearly colourless residue containing several groups of crystals, similar in appearance to those of gelseminic acid.

"A portion of this residue, when examined in its solid state by nitric acid and ammonia, and another portion when dissolved by the aid of an alkali and the solution tested by several reagents, presented the chemical and fluorescent properties of gelseminic acid in a degree indicating the presence of a very notable quantity of the acid. The contents of the small bottle were not examined for the alkaloid.

"The contents of the *stomach* were treated and purified after the general method described above, and the final aqueous solution acidulated with acetic acid and extracted with ether, for the purpose of recovering the organic acid, if present; the solution thus extracted was then rendered slightly alkaline and extracted by chloroform, for the purpose of recovering the alkaloid. The purified ether extract revealed very satisfactory evidence of the presence of the organic acid, both in regard to its fluorescent and chemical properties. So, also, the chloroform extract, when purified and the final aqueous solution concentrated to a very small volume and examined by several reagents, furnished undoubted evidence of the presence of the base, indicating it, however, to be present only in very minute quantity."

On comparing the intensities of the reactions of the several reagents applied with those obtained by the same reagents from solutions of the alkaloid of known strength, it was inferred that the quantity of the base recovered in this case did not much, if any, exceed the fiftieth part of a grain. The quantity of the alkaloid originally taken, as we have already seen, did not probably much exceed the sixth of a grain.

The fact that the stomach with its contents had undergone considerable decomposition, and also that the chemical examination was not made until some months after death, would seem to indicate that the poison is not readily destroyed by decomposition, and that it may be recovered after comparatively long periods, even when taken only in small quantity.

Pleasant Item for Smokers.

A correspondent in New York writes us (*New York Medical Reporter*) of a young man who has been for three years the victim of constitutional syphilis of aggravated character. His lips and tongue are covered with mucous patches; a most offensive odour emanates from his whole body, especially from his breath, and a caries seems about attacking the bones of the nose, &c.

He is a cigar-maker by trade, and he has daily been making cigars since he was first attacked. No cigar is made without moistening the leaf with saliva, as every one knows who has ever seen a cigar made. Is it not more than probable that many who have smoked cigars of his make, and others similarly situated, have imbibed syphilitic poison, and then wondered how they got the disease?

Bromide of Potassium in Tetanus.

Dr. W. B. Fletcher, of Indianapolis, relates (*Indiana Journal of Medicine*) two cases of tetanus nascentium in which recovery followed the administration of bromide of potassium in half-grain doses after each convulsion. In one case forty grains were taken altogether, and in the other twenty grains in the course of forty hours. In both, the symptoms came on within twenty-six hours after birth, and in neither was there any abnormal appearance about the umbilicus; which circumstances militate against Vogel's view of the disease.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 3, 1870.

CONTENTS.

EXPERIENCES OF A REGIMENTAL SURGEON IN INDIA.

By G. A. Gordon, M.D., C.B.,

Deputy Inspector-General of Hospitals.

(Continued.)

It will be in the recollection of some readers of these notes, that when, about 1850, barracks according to a new and improved plan were erected at Mean Meer, near Lahore, a system of cess-pit privies was at the same time instituted in connection with that portion of the station occupied by the infantry.

These pits were carried down to the water-bearing strata, and were about fifty-eight feet deep, the intention having been to permit their contents to accumulate. Two of them were only 118 feet from a well, and others not much more distant. The stratum at that depth consisted for the most part of a bed of sand through which water seemed to percolate readily, and when in 1853–4 the 10th Foot occupied the station, contamination of the water of those wells was suspected. The presence of the pits had also become objectionable from the offensive emanations which arose from them, and became disseminated along the barracks. I at that time protested strongly against them; but not until eight years afterwards was any notice taken of my report on the subject, and then only when some of the evils I had predicted had actually happened; thus in the Report of the Commission appointed to inquire into the circumstances attending the terrible epidemic of cholera by which that place and others were devastated in 1861, opinions and views that had long previously been expressed by me were quoted by the Commissioners. They noted my remark with regard to these pits full of abominations, that "the stench from them was at times perfectly overpowering." They then add, that "in their Annual Report for 1853–4, the Medical Board quoted the opinion of Dr. Gordon, of Her Majesty's 10th Foot, to the effect that this abominable system 'was calculated, in the course of a few years, to induce epidemics of cholera and fever.'" Two years afterwards, namely, in 1856, a severe attack of cholera occurred among the troops there, there having on that occasion been 495 cases and 265 deaths in a strength of 1,592 British soldiers. On the last named occasion, namely, in 1861, the water from the wells in question was examined by the chemist at Lahore, who expressed his opinion that "in some instances, at least, contamination had actually taken place;" but in illustration of the remarks already made, it should be stated that although on the occasion of the great epidemic at Mean Meer the ravages of cholera were greatest in the 94th Regiment which occupied the barracks nearest to the cess-pits, and to the contaminated wells, yet the first outbreak of the disease did not take place there, but in the 51st Regiment, then occupying a part of the Artillery lines at the opposite end of the station, and at such a distance as to put all possibility of the water there being affected out of the question.

To summarise as briefly as possible some of the conditions under which cholera may occur, I would enumerate the following, namely:—

1. It may take place in isolated cases or localities.
2. In a succession of partial or local outbreaks.
3. In bursts of epidemic, devastating stations and districts in a definite course.
4. As similar bursts; but to spring, as it were, over places to attack those at a distance.
5. As affecting the occupants of certain parts of a town, station, or building, while others, apparently precisely similarly situated, escape.
6. From the operation of certain medicines, more especially drastic or saline purgatives, and from violent emetics.
7. In intermittent fevers, in some cases of dysentery, and in some other diseases.
8. In localities where it most constantly prevails endemically it less frequently occurs as an epidemic than it does in such as are at certain seasons completely exempt from it.
9. The presence of decomposing animal matter, more especially in the soil, as in cesspools, drains, cemeteries,

&c., undoubtedly act under certain other conditions and at times as sources whence cholera may reasonably be believed to arise. At other times, and under other conditions, no such results occur from the presence of such matters.

10. Doubtless, water containing matter of cholera dijection, and that containing decomposing animal matters, frequently produces cholera in those who use it. It does not, however, do so invariably, or *necessarily;* and, as epidemics of the disease travel more frequently upwards along the course of the Ganges than downwards, the theory of water contamination is not sufficient by itself to account for the occurrence of the disease.

That cholera, in very many cases, utterly defies all treatment must, unfortunately be acknowledged; and, perhaps, this fact taken in connection with the terrible virulence with which, in the majority of instances, the first onslaught of the disease in epidemic form takes place may, in part, account for the little confidence felt by many persons in medicine in such cases, as well as the unscientific and empirical nostrums to which recourse has, in too many instances, been had, to the neglect of those principles of physiology and therapeutics according to which members of the medical profession usually treat maladies they are called upon to combat.

Of this want of success in the treatment of cholera non-professional men are not slow to take advantage, to the discredit of the science of medicine generally. This remark is simply illustrated in the report of the Commission regarding cholera in Northern India in 1861. In that report (page 251) we read that "almost every report of every medical officer tells the same story of hopeless failure in the attempt to combat the disease in its advanced stages;" that "not only did every remedy appear useless, but we have found a strong doubt prevailing in the minds of some of the most thoroughly competent of the medical officers whether the practical result of the existing systems of treatment has not sometimes been a positive aggravation of the mortality;" and again,—"In many instances (page 252) I imagine that the patient dies of the doctor rather than of the disease so long as we know nothing of the nature of the disease, and so long as we have the most opposite modes of treatment vaunted in their turns—how can it be otherwise?" and then they quote, exultingly, the remarks by Dr. Elliotson when treating of the disease in England. "If," said he, "all the patients had been left alone, the mortality would have been much the same as it has been."

It must, I fear, with deep regret, be acknowledged that these remarks have very considerable foundation. I could enumerate a variety of so called systems of treatment, and of individual empirical remedies, the *modus operandi* of which put all ordinary principles at defiance. For examples I would allude to such measures as the injection of saline mixtures into the veins of persons affected with this painful malady to the neglect of all other means; to the application of cauteries along each side of the spine from the nape to the sacrum, at the same time that the cravings of the patient for cold drinks were tantalised by the occasional exhibition of spoonsful of warm water gruel. We next find that a plan was recommended of aggravating the vomiting, which is one of the most painful accompaniments of the disease, by the administration of large quantities of mustard: while some persons, acting apparently according to still more dangerous views, prescribed tartar emetic, as if with the object of accelerating the vital depression which the disease by itself was sufficient to lower to the utmost, or completely destroy. Space will not permit me to enumerate all various methods of *treatment* that have been from time to time adopted in this disease. I may, however, mention the administration of Epsom salts and tartar emetic combined; the free use of water internally, sometimes hot, sometimes cold; the affusion of cold water, partially or to the whole body; the complete withholding of all fluids; the administration of such agents as carbonate of soda in five-grain doses at long intervals; the employment of *jactitation* so as almost literally to *shake the life out* of the patient; and, perhaps, most horrible of all, the application of mechanical means to prevent discharge of the intestinal flux. As a further illustration I would mention the following case which came under my notice so lately as 1866 in Calcutta:—

A soldier of the Rifle Brigade, then in Fort William, having been admitted into hospital suffering from intermittent fever, he, during accession of the cold stage of that disease, passed into decided cholera, and was treated by a recently arrived assistant-surgeon, whose scientific acquirements were described as being of a very high order. On visiting the patient some time afterwards I found him approaching a state of collapse, *notwithstanding* that he had received the following treatment:—A scruple of calomel had been administered on the accession of the choleraic symptoms; a bottle of champagne had then been given, after which he was treated by solution of permanganate of potass in frequently repeated doses. I remonstrated, but was informed that the object was to supply oxygen to the blood, that the solution, when vomited by the patient, was quite *brown*, indicating thereby that it had parted with a portion of its oxygen, which must thus have been supplied to the system. The method of treatment was changed on the spot, and the patient subsequently recovered; but I look upon the case as illustrating the theoretical views according to which this formidable disease is, it is to be feared in too many instances, trifled with.

In alluding to some remedies used in accordance with more scientific principles than those above enumerated, I would specially refer to venesection, calomel, and opium.

At one time the employment of venesection, when practicable, was in common use, and in some cases advantage seemed to be obtained from it; as a rule, however, it was impossible to abstract blood, partly from the circumstance of the circulation being so much enfeebled, and partly from the condition of the blood itself, so that this method of treatment was set aside as untrustworthy. Calomel, it is almost needless to observe, was given alone as well as combined with opium, sometimes in large doses, sometimes in small, but always with the double object of acting as a sedative and stimulating the flow of bile. How far either effect was ever produced was doubtful many years ago, although probably medical officers hesitated much before abandoning what was then the *orthodox* treatment, and more recent researches into the action of mercury tend to indicate that their doubts were well founded. So with opium: the necessity for, as well as benefit to be derived from, its employment had been questioned. In 1843-4 it was found that among the men of the *Buffs* at Allahabad, *secondary* fever or, in other words, cerebral affection supervened in every case in which it had been administered largely, the mortality from that complication being larger in proportion than during the primary attack. The use of opium was accordingly abandoned in the hospital under my charge, and with favourable results, nor was it again used by me in subsequent regimental practice in India.

In briefly narrating the treatment adopted for cholera in the *Buffs* and in the 10th Foot, it may be well to allude to the theory according to which our remedial measures were directed. Whatever may have been the nature of the influence upon which the disease ultimately depended, the tendency of that influence acting upon the human body was to produce death; but practical experience had shown that in those cases where the vital powers were maintained sufficiently long by the employment of artificial stimulants or other means, those powers recovered their natural condition—slowly, and probably with interruptions, yet to such an extent as to constitute recovery. Bearing the above indications in view, then the following routine was that pursued, namely:—

1. To relieve the nausea, vomiting, and sense of sinking which characterised the first onslaught of the attack, carminatives, stimulants, and antispasmodics were ad-

ministered, as for example, a combination of the ethers, aromatic ammonia, tinctures of capsicums, ginger, and so on; sinapisms being, meantime, applied to the epigastrium. It is almost needless to observe that the earlier in the attack these remedies were employed the greater was the chance of success; and that whenever the disease was prevalent, arrangements existed by which soldiers attacked in barracks might immediately obtain medicine of this description.

2. The intestinal flux being looked upon as a flow of serum, dependent upon causes affecting the system generally, we considered that this indication should best be met by remedies directed to supporting the general powers instead by those of a more special nature, such as direct astringents. Those, therefore, which were applicable to the indications first enumerated were held to be so to this.

3. In those cases, and they are numerous, in which vomiting is persistent, notwithstanding the use of remedies ordinarily employed, diluted prussic acid in combination with the medicines already mentioned, was followed by such favourable results as to justify a further trial being made of it. As an adjuvant, counter-irritation was employed to the epigastrium, either by means of a blister, or by the instantaneous application of a cloth dipped in sufficiently hot water to produce vesication.

4. To maintain warmth of the body as far as practicable, hot bottles, protected by flannel, were applied wherever most required. The surface was wiped with soft cloths, and kept warm as far as possible; but, as is well known, the coldness of the body and limbs of a patient affected with cholera, and which seems to have no reference to the season of the year, or state of atmospheric temperature, is only checked when circulation begins to be re-established.

5. The spasms which pervade the limbs were usually met by frictions, or by "kneading" the parts most severely affected.

6. The intense thirst which attends the disease is perhaps best moderated by the administration of ice; by brandy and water, alone or in effervescence; while the same stimulant in sago, whether hot or cold, was in many instances relished by the patients.

7. Regarding the suppression of urine which attends the disease, it was customary to look upon the cessation of that symptom as an indication that the functions of the organs were being restored by the treatment already mentioned.

I would further observe in this place that, after experience in the treatment of the disease had been gained, we learned that although, as already stated, secondary fever almost to a certainty followed, after opium in large quantities had been administered, provided the patient survived the first onslaught of the malady, this complication, under certain conditions, also happened where no opium had been given. In either case, the affection was preceded by the occurrence of constipation, and was most surely averted by the employment of carminative laxatives, more especially in the form of tincture.

It need hardly be repeated that my purpose is not to give a systematic treatise on cholera. All I aim at is to communicate such of the results of my own experience of the disease as are likely to be useful to other medical officers; and with this view I would submit the following cases:—

Hally, 10th Foot, admitted at Dinapore on 22nd August, 1857, suffering from the ordinary symptoms of cholera, attributed by him to exposure and the *use of bad water* while employed against the rebel sepoys in the jungles of Jugdespore. The symptoms were of an aggravated kind, but had not passed into the stage of collapse. A draught, composed of aromatic spirit of ammonia and sulphuric ether, of each twenty drops, and ten drops of tincture of capsicum was administered, and repeated every half-hour. Vomiting being obstinate after several doses of the mixture had been given, three drops of medicinal hydrocyanic acid were added, and the whole given in ℥jss. of camphor mixture. Mustard was applied to the epigastrium, and hot sago with brandy given. This treatment was continued throughout the 23rd, during the night of which all the symptoms moderated except the vomiting, and it still continued obstinate. According to the morning report of the 24th, natural warmth of the body had been restored. On the 25th the report stated that the choleraic symptoms were disappearing; but that the patient experienced a feeling of "fulness in the head," for which a draught was administered, consisting of ℥j. of tincture of jalap, ℥ss. of confection of senna, carminatives being continued at intervals. The improvement in his condition continued until the night of the 27th, during which he began to become cold again. Stimuli were immediately given, and hot bottles applied to the hands and feet. Under this treatment the temperature became re-established, and improvement was steadily progressive, no further treatment being administered beyond tonics of gentian and quinine; the bowels being regulated by the laxative as above. On September 7th he was discharged to duty, having been sixteen days in hospital.

(To be continued.)

CANCER OF THE LUNG.

By Arthur Leared, M.D., M.R.I.A.,
Senior Physician to the Great Northern Hospital.

Cancer of the lung is a disease of sufficiently rare occurrence to make the following case worth recording:—

An agricultural labourer, sixty-eight years of age, was admitted into the Great Northern Hospital, May 29th, 1869. He was a man of spare build, and stated that he had been always healthy until about two months previously, when he began to suffer from cough and oppression at the chest and to expectorate blood. Before coming to the hospital he had been under the care of Dr. Barrington of Bexley Heath, and he had also been for some time an out-patient at St. Bartholomew's Hospital.

His state on admission was as follows:—He was thin and feeble, voice very weak, aspect that of hectic fever, rather than of malignant disease, pulse quickened, decubitus on the left side. He complained of pain in the right side of the chest, and had a troublesome cough. The sputa were copious, viscid, blood tinged and had an offensive smell.

On the right side in the space between the clavicle and the lower edge of the second rib tenderness on pressure, complete dulness on percussion, and absence of respiratory sounds were observed. Vocal fremitus was not affected. Below the second rib the breath and percussion sounds were normal. Posteriorly on the same side a tumour which had been first noticed a week previously, of the size of half a goose's egg was seen bulging from under the scapula. The long axis of the tumour which encroached upon the edge of the axilla was perpendicular and extended two inches lower than the dulness anteriorly. The tumour was slightly tender on pressure, of firm consistence and perfectly dull on percussion. The intercostal spaces below the tumour were normal. No enlarged glands could be detected anywhere. The patient attributed the tumour to having strained himself by working at a straw-cutting machine. The diagnosis was cancer of the lung with continuity of growth between the cancerous organ and the tumour.

On June 4th the anterior dulness extended downwards to the upper edge of the third rib, and hæmoptysis was increased. Three days later the dulness on percussion extended downwards to the lower edge of the third rib. Cough more troublesome, but less hæmoptysis. Six days afterwards the anterior dulness had made no progress. The patient had of late been obliged to sleep well propped up, and he was failing in strength. Three days from this

date hæmoptysis to a considerable extent occurred, and his right hand and arm were œdematous. The anterior dulness was unaltered. Eight days still later he was in every respect worse ; the anterior dulness extended to the upper margin of the fourth rib, and the tumour was considerably enlarged. On the fourth day afterwards he died from exhaustion.

Post-mortem Examination—The body was emaciated, while the right arm and forearm were very œdematous. The skin over the tumour, which was the size of half a cocoa nut, was of natural colour, and no dilated veins were anywhere noticed. The external edge of the right scapula was raised from its proper position by the tumour. By firm pressure near the anterior margin of the axilla, the ends of the second and third ribs were felt projecting as if broken off.

The right pleural sac was found to contain much serum. The lung bulged forward, and it was seen that two-thirds of the lung superiorly had been transformed into an encephaloid mass, which, from its intimate union with surrounding parts, it was impossible to remove from the body without disruption. The external tumour was ascertained to be formed by an extension of this mass, into which portions of the first, second, third, and fourth ribs had been, as it were, fused. The ends of the ribs, both anteriorly and posteriorly, were jagged at the points of severance, and irregular with regard to each other. The posterior end of the third rib in particular was not more than two inches from the spinal column.

The cancerous mass was white and pultaceous, breaking down very easily on handling. Under the microscope it was found to be mainly composed of small nucleated cells. It is worth notice that, while examination of the sputa during life yielded cells of the same character, they were considerably larger in size and their contents were of a darker colour, a circumstance probably to be attributed to the passage of the cells from the more saline fluid of the cancerous mass into the less saline fluid of the bronchial tubes. In the left lung nothing abnormal was discovered with the exception of a single deposit of a chalk-like substance, the size of a pea, on the external part of its inferior lobe. The heart, kidneys and the liver were normal, and no cancerous glands could be discovered.

Remarks.—The progress of the malignant growth was rapid, although intermittent. This was shown by the increased breadth of the zone on the anterior part of the chest, marked by dulness on percussion, and absence of breath sounds, and also by the enlargement of the tumour. In six days from the patient's admission this zone progressed from the lower edge of the second to the lower edge of the third rib. No progress was then made in this direction for several days, after which the growth was again active. Œdema of the right arm was plainly caused by obstruction of the axillary veins by the tumour. Pain was not an urgent symptom, but this is not unusual in visceral cancer. The absence of glandular enlargement and of dilated veins is worthy of notice. In some of its features, such as emaciation, night sweats and hæmoptysis, the case resembled phthisis. But the rapid infiltration of the lung, the pain, the side upon which the disease was developed—since cancer attacks the right more frequently than the left lung *—and above all the tumour pointed to malignant disease.

We are sorry to see that a member of the Profession in London has been summoned for an assault said to have originated in a refusal of medicine to a patient at a special hospital, who had paid five shillings for a ticket. Though the summons was dismissed with costs, it shows one evil that may arise from a system of taking money at special institutions. There are other evils besides, and the Profession will never like such charities ?

* Intra-thoracic Cancer. By J. Cockle, M.D. Churchill, 1865. Page 68.

Hospital Reports.

EVACUATION OF FORTY-SIX OUNCES OF MATTER FROM AN ABSCESS WITHIN THE ABDOMEN, BY MEANS OF THE "ASPIRATEUR."

By Mr. Morgan, F.R.C.S.I., &c.,

Surgeon to Mercer's and the Westmoreland Lock Hospitals, Dublin. Professor of Surgical and Descriptive Anatomy R.C.S.I.

A girl, aged nineteen, unusually diminutive in her appearance, and not intemperate in her habits, who had previously been healthy, and had no previous evidence of any hepatic derangement after her admission to hospital, suffered for five weeks from all the symptoms of deep-seated inflammation of the right side of the liver, and finally became extremely exhausted and reduced in strength.

On July 18th, after careful examination, I found some slight evidences of fluctuation over the front of the liver, corresponding probably to the interspace between the two holes. The viscus itself was considerably enlarged, and extended to about midway to the umbilicus. The antero posterior enlargement was very striking and remarkable. The veins on the surface of the abdomen were enlarged, the blood current indicating an upward flow. As the evidence was still obscure, although the symptoms were tolerably urgent, I determined to wait a few days, to observe the further course of the abscess, as I was satisfied it was.

On the 21st July I found the fluctuation more evident, though deep-seated, and, as the patient was in an extremely critical condition, I determined on its evacuation, and passed for 2½ inches in depth into the abdomen and about 2 inches below, and the same distance to the right side of the xiphoid cartilage, the second largest sized trocar tube of the "aspirateur," and withdrew four ounces of thick, creamy, and fœtid pus. No more would then come away, and, under the circumstances, I did not like to push the instrument down its full length. The patient felt relieved.

On the 23rd I introduced the next sized tube, and withdrew ten ounces of the same kind of purulent matter, affording great relief to the patient, who slept, for the first time for some weeks, comfortably for the whole night.

On July 26th the evidence of matter in quantity being pretty well established, and finding the patient a little stronger, I introduced the second largest sized trocar and canula of the "aspirateur," and removed the enormous quantity of forty-six ounces of thickish, healthy-coloured, but fearfully fœtid, pus ; so intensely so, that three surgeons who were present, were obliged hastily to retreat. The fœtor was most intense, and was such as would be connected with an intestinal abscess. The pus was not tinged by blood, or bile, while the drawing away of the matter was followed by most marked relief—the patient sleeping well, and being free from pain, particularly that of distension and weight which was very distressing previous to the operation.

The ultimate success of the case it would be premature to regard as certain, but the relief afforded by surgical interference, and the evacuation of so large a quantity as forty-six ounces of pus from the abdominal cavity, were most remarkable; and would leave every hope that deep-seated abscesses in important viscera may be safely reached, much suffering saved, and valuable lives preserved, by this means of evacuation.

ARMY HOSPITALS.

Case of Abscess of the Abdominal Wall.

Reported by Surgeon Cullen, 71st Regiment, Curragh.

The history of this case, an abscess of the abdominal wall, the result of gonorrhœal buboes, opening into the

bladder, and discharging by the urethra for three weeks; then, the mode of exit proving insufficient, requiring external incisions for its relief; and, ultimately, a perfect recovery being afforded after prolonged treatment, appears, from its rarity, worthy of being recorded.

The patient, a robust-looking Scotch recruit, of dark complexion and healthy appearance, contracted gonorrhœa at the Curragh, 14th September, 1868, for which he was seven days under treatment. He was discharged apparently well, but on arrival at Gibraltar in October he was re-admitted for ten days to hospital with a return of his complaint. He was again discharged 1st November, and again made his appearance 8th November with suppurating buboes in both groins, and the urethral discharge as bad as ever.

He denied having exposed himself to any fresh infection from the time of his original admission at the Curragh.

The buboes were incised, but deep sinuses formed, especially in the right groin, and he was 118 days in hospital and 10 days convalescent before he was returned fit for duty with sound cicatrices.

During this prolonged treatment of six months his general health suffered very little.

He now went to drill for a fortnight, but came back to hospital 1st April, 1869, complaining of constipation in his bowels, not having had a motion for eight days, and describing a great difficulty in making water from pain in the right iliac and pubic regions.

There was distinct circumscribed swelling and hardness there, and over the bladder a tumour could be felt hard and resistent, much as if a turkey's egg were embedded in the deep tissues. The right groin again showed an open sinus, but this did not extend to any depth, nor was there any surrounding inflammation.

A catheter was passed without difficulty, and clean limpid urine, containing urates and phosphates, was withdrawn.

Fomentation was applied to the pubic region, repeated doses of castor oil and turpentine were administered, an enema was thrown into the rectum, and after a time a mass of dark hard lumpy fæces came away followed by more natural stools. The following day a dose of calomel, followed by castor oil, brought away more hardened fæces, and, to allay the tendency to flatulency which he exhibited, a few doses of soda and peppermint-water were given.

On the 3rd fomentation by spongio-piline was applied over the vesical region, and on the 4th the bowels were again acted on by means of black draught.

Up to the 15th the fomentation was continued, and the bowels and kidneys acted regularly, microscopic examination of the urine showing urates and phosphates as before. He took a bitter tonic, with acid hydrochloric dil., part of the time.

A blister was applied on the 15th over the region of the tumour, which occupied the right pelvic and adjacent vesical region, and had become denser and more circumscribed. On the evening of the 15th while straining to make water, he noticed that the clean stream of urine changed into a thick whitish turbid one, and that afterwards the prominence of the tumour had materially diminished.

Four ounces of urine were put aside, and this was found to deposit half-an-ounce of a white flocculent-looking sediment, which under the microscope proved to be entirely pus.

Up to the end of April the discharge of pus continued, averaging from one to two drachms in four ounces, and it was observed that the superficial and deeper connective tissues forming the walls of the abscess became gradually matted together. The bowels continued to require a purgative every third day.

On 4th May very few pus cells were observed in the urine, but the abscess had become tenser and fuller. It was punctured with a small trocar and one and half ounce of pus removed. No air was allowed to enter. The site of the puncture was about two inches above the pubes, and one inch to right of the middle line. Poultices were applied to the abscess, and he was ordered infusion of quassia with hydrochloric acid.

On the 5th and 6th the puncture was repeated; on the 7th, as the abscess was approaching the surface, an incision was made into it, and two and half ounces of thin pus removed. He was feverish on this date, but it passed off on taking an alterative of quinine and hydrarg. c. creta.

A pad and bandage were now adjusted over the abscess, which admitted a probe into its cavity for several inches laterally. He was allowed a liberal diet with malt, and in the course of three weeks the amount of discharge had diminished to half an ounce daily. The urine exhibited an extensive deposit of ammoniaco-magnesian phosphates, but no more pus cells were observed after the 7th May.

The closing of the abscess was very gradual, but all the tissues appeared thoroughly consolidated on his discharge 31st July, though some induration still exists in the track of the last open sinus, and there is fulness in the right abdominal wall extending up to the level of the umbilicus.

Case of Amputation through Shoulder-Joint, under the Care of Surgeon Porter, 97th Regiment.

Reported by Assistant-Surgeon R. E. Bredon, 97th Regiment.

Drummer J. S., 1st Battalion, 4th (King's Own) Royal Regiment, came to hospital on the 7th of July, 1869, complaining of pain and tenderness around the left shoulder-joint, and inability to use the arm. He stated that he had not received any blow or other violence to account for it. He received some local treatment, and was discharged in the evening apparently quite well. On the 9th he returned, with the symptoms he previously presented somewhat aggravated. He again was questioned as to any violence having occurred, and again denied it. A most careful examination for fracture or dislocation was made, but with negative results. The disease was then looked on as of rheumatic origin, a supposition supported by the fact that he complained of some pain in the præcardial region, though there were no stethoscopic signs to indicate the existence of any cardiac disease.

On the 11th the following was noted:—"Very much worse. There is high fever, rapid pulse, tongue furred, much thirst, restlessness, and some depression. The upper arm is extensively, and the forearm considerably, swollen, tense and red. The former is at least four times its natural size. The pain is very great, and is increased on pressure. It is most marked on the front of the shoulders. There is very much the appearance of deep-seated inflammation around the joint and bone." Small doses of calomel were prescribed, and the arm, after being scarified freely with a lancet, was wrapped up in a large poultice.

For the next few days the arm remained in pretty much the same state, though the constitutional symptoms became less decided. About the 13th a very erysipelatous-looking blush came over the forearm. A couple of free incisions skin-deep gave him considerable relief, and, under a more generous diet and the use of ammonia and bark, he seemed to be progressing fairly, though the arm continued swollen, and the hand became œdematous in a very marked degree. There was some puffiness of the feet.

On the 20th he is reported "not quite so well." There was much "bogginess" on pressure around the forearm, and in this situation on the radial aspect an incision was made which laid open a long sinus from which some thick pus exuded.

The shoulder was at this time much swollen, and apparently the joint contained a good deal of fluid, but no pain or uneasiness was referred to this situation.

21st.—The joint was swollen and very puffy looking. An incision was made with a lancet at a point a little

above the insertion of the deltoid, and from some depth in the tissues there came out a quantity—ten ounces at least—of thin purulent matter, mixed with cheesy agglomeration. A probe passed through the opening struck bare bone, which was believed to be the neck of the humerus. When the cavity had collapsed after the removal of the fluid, the head of the bone appeared to have passed out of its normal position, and the shoulder had all the appearance of one in which a dislocation of the humerus, downwards, forwards, and inwards, had occurred. It was also supposed that complete disorganisation of the joint had taken place. In the course of the evening at least twice as much more of the same sort of matter exuded from the opening.

On this day he complained also of some pain and swelling in the right knee-joint, to which accordingly strips of blistering-plaister were applied. There was still a good deal of œdema of the feet, but no albuminaria could be detected.

Late in the evening of this day (21st) it was decided to expose the head of the bone, and to decide the subsequent steps of the operation according to the condition in which it might be found.

On the 22nd, the patient having been placed under chloroform, the joint was examined with a bullet probe, and, as the humerus was found denuded of periosteum for some distance downwards, it was decided that amputation was necessary and excision impracticable.

A flap was made by transfixion from the outer part of the arm, consisting mainly of the deltoid muscle. The bone was then pressed outwards, and the internal flap formed in the usual way. There was no pressure made on the artery during the operation; but the principal assistant, when it was exposed, followed down the knife with his thumb and compressed it immediately above the point of section. It was then tied immediately. It was now found that only the lower part of the bone had been removed, and that the upper epiphysis still remained attached to the joint. It was then grasped with the lion-tooth forceps and dissected out. Seven arteries in all were tied, and the stump thoroughly washed with cold water. The edges were brought together with silver-wire sutures in the usual way.

After the operation the case proceeded much more favourably than his delicate appearance and low condition at the time of operation led one to expect.

Two ligatures came away on the 28th, three on the 30th, one on the 31st, and the last on the 5th of August. Up to the present date he is progressing most favourably.

A bed-sore on the sacrum has been a most unpleasant complication, but the use of Surgeon Porter's bed-sling prevented its becoming of any great size, and now that he is able to sit up it is healing admirably.

When the arm had been removed it was found that the abscess extended at least 4½ inches down the shaft of the bone, which was quite denuded of periosteum, and was, as stated above, separated from its upper epiphysis. The shoulder-joint was healthy. A considerable abscess had formed around, but did not involve the elbow-joint. The whole limb was œdematous, and suppurating sinuses existed in several parts both of the upper and lower arm.

The knee, which at one time gave some grounds for alarm, lest it should take on a similar action to that which manifested itself in the arm, is now much better, though not quite recovered. There is no sign of inflammation or swelling around it.

The subject of *post-mortem* examinations has again come forward. On this occasion the officers of the London Hospital declined to give a certificate of the cause of death of a patient who died soon after admission without making a *post-mortem*, which the friends refused to allow. A coroner's inquest was the result.

Literature.

THE STATE OF THE MEDICAL PROFESSION IN GREAT BRITAIN AND IRELAND.*

Pressure upon our overcrowded space has prevented us being able to refer earlier to Dr. Dale's Essay on "The State of the Medical Profession in Great Britain and Ireland." It will be in the remembrance of our readers that Dr. Dale was one of the unsuccessful competitors for the Carmichael Prize. The essay before us was written in competition for it, and, owing to a dispute respecting the award, was published without alterations. The nature of the subject presenting a valuable theme for the essayist, we do not wonder at several essays being written; but we are astonished at the manner or way with which the subject has been treated by the different authors. Our duty now is simply to confine ourselves to Dr. Dale's Essay, the opening chapter of which is an investigation into the curriculum of our licensing bodies. Dr. Dale quotes from the Medical Press respecting the rivalship in the different licensing bodies, the underselling and facility by which diplomas are given, &c. But very brief space is allowed to the all important and existing evil of our Profession—the constitution of the Medical Council. However, *representation of the whole Profession* in it is advocated, whilst the originality and paternity of the scheme is withheld after the manner of some of our jealous-minded contemporaries, whom we now perceive work week after week upon the subject-matter of medical representation first enunciated in these pages.

Part II. of Dr. Dale's Essay is devoted to *the general and moral training* of medical students, which is made up of a theological discourse equally applicable to the students of other professions. Part III. surveys *the state of the hospitals and schools of medicine, surgery, and pharmacy*, wherein the subjects of clinical instruction, lectures, *post-mortem* examinations, dissections, supply of subjects, and operations are considered with a very superficial pen to the neglect of more important detail. However, to none of Dr. Dale's remarks can we take direct exception, because they are mere recapitulations of well known facts, or established essentials which no serious-minded student entering upon his Second Session is unlearned in, or foolish enough to ignore. Part IV. enters upon, cursorily, *the state and mode of testing the qualifications of candidates of the different licensing Colleges or Corporations in medicine, surgery, and pharmacy*, a mere synopsis of the information to be obtained, and no doubt gathered, from the Calendars of the several corporate bodies. An appendix on Homœopathy concludes a pamphlet of seventy-six pages. We must candidly acknowledge after we have waded over every page of this unsuccessful prize essay—allowing that we have been unable to note a single original remark of value, or an observation that we could consider worthy of attention, or a suggestion which would convey the notion, or impress upon us, that Dr. Dale either devoted much time in preparing or writing, or reflecting over the subject matter of the essay before us—that there is much information contained in it in a compact form, gathered from various sources, which will, doubtless, be useful to any gentlemen contemplating joining the Medical Profession; but that it is an essay original in suggestions, or exhaustive of the present state of the Medical Profession in Great Britain and Ireland, we deny. In justice to Dr. Dale, we honestly allow, writing with an unbiassed and disinterested spirit, that after careful perusal of all the Carmichael Prize Essays, our astonishment has been aroused to the fact that more thought and more reflection were not devoted to the subject, and greater research practised by those writing upon so important a theme, with so extensive a field open before them; and our remark applies to the successful, as well as unsuccessful, Essayists. C. W.

* The State of the Medical Profession in Great Britain and Ireland. By William Dale, M.D. Lond., M.R.C.S., &c. Dublin: Fannin and Co. London: Longmans.

THE LAWS OF VITAL FORCE IN HEALTH AND DISEASE.*

The author of this little work says he has no ambition to assist in the formation of a new and exclusive medical sect. On the contrary, he conceives that the exercise of the right of private judgment is not more the privilege than the duty of everyone who undertakes the responsibilities of medical practice. The admittedly unsatisfactory state of therapeutics is his apology for endeavouring to apply the doctrine of conservation of force to practical therapeutics. He quotes from Sir T. Watson's late address to the Clinical Society—"Our Profession is continually fluctuating on a sea of doubts about questions of the gravest importance. This uncertainty is a standing reproach to the calling we profess. It has shaken the faith of many men, both able and thoughtful, and driven to ask themselves whether any kind of medication, other than the vis medicatrix natural, is of any real efficacy or value." The object of our author in his work, he says, "is to promote unity, defend liberty, and inculcate charity."

We may notice in this work a rather too great proclivity to lug in words such as "Creator," &c.; also "Mosaic account of Creation when God made the world." Now-a-days this is not considered good taste in scientific matters, in which causation has to be explained, and supernaturalism is not wanted. For instance, it immediately vitiates our idea of Dr. Haughton's philosophy when we hear in a work on vital force that his belief is, that there is but one kind of force in existence—the volition (will?) of God. He has no need to bring in the *Deus ex machinâ*, since he observes that the main idea he seeks to enunciate is that, in the building up of organisms, the ordinary physical forces are made use of, and that almost the whole of hygiene and therapeutics consists in a knowledge of how these forces operate on the body, and how remedies can be best applied in accordance with its natural constitution. Dr. Haughton says that perhaps the lowest organisms merely represent force in combination with inorganic matter; and the nobler ones complicated reservoirs of force in continuation with *highly organised* matter. For instance, "The power of generating nerve force, or that vital energy which the nervous system stores distributes, and conducts, exists in the human body as the result of the assimilation of organised food and the presence of a circulating fluid constantly renewed." He adds with great truth, "Although the metaphysician may shrink from considering the human body in the light of a machine, it is capable of the most complete demonstration that even the human will is not a generator of force." On this point Professor Bain's "Emotions and the Will" may be read with profit. According to Dr. Haughton, then, "All vital action depends upon power acting through an organism; and life is the condition which determines whether the external forces shall produce physical or vital changes. When this action is sufficient in amount, equably distributed, and regular in its periodic intervals of action and repose, the condition is a healthy life. When the amount of force is insufficient, the intervals become irregular; and *vice versâ*, when this irregularity is interfered with, the power of appropriating force diminishes. The result is diseased life. From this we see that disease is really a minor degree of life, and death is the total absence of life. The whole art of curing disease, then, consists in increasing the working power of the human machine, and preserving the equability and regularity of its action." He goes on to say that, "Nothing can be more certain than that none of the medical systems that the world has ever witnessed are based on any such foundation. The above principle allows of the use of every remedy; and, according to it, the action of a therapeutic remedy may sometimes be antipathic, sometimes counter-irritant, and sometimes re-active, or homœopathic; whilst it fully acknowledges the depurative properties of the vapour bath, and the therapeutic efficacy of the water cure. It does not, however, accord with the employment of infinitesimal doses of medicine, inasmuch as, were the human organism sufficiently sensitive to be acted on by them, it would be in hourly danger from morbific agents which float in the atmosphere in far more appreciable quantities." Most of this is very much to our taste, and we therefore can recommend the perusal of this little work. D. C.

* The Laws of Vital Force in Health and Disease. By E. Haughton, A.B., M.D., &c. 2nd edition. Churchill, 1869. Pp. 88.

SPECIAL CORRESPONDENCE.

DR. CHARCOT'S CLINIQUE.

[FROM OUR OWN CORRESPONDENT.]

Paris, July 28.

Some time ago M. Charcot made some interesting observations on the question of the "Lesions of Nutrition" which ensue upon diseases of the nervous system. "One of the first points," observed M. Charcot in a lecture at the Hospice de la Salpétrière, "to be considered regards that which takes place when the sciatic nerve is cut." Schroeder Van der Kolk, who was the first to make this experiment, attributed the disturbance of nutrition which ensued rapidly in such cases in the corresponding limb, to the absence of the nervous action; but Brown-Séquard repeated this experiment in 1849, and showed that this disturbance of the nutrition only takes place because the animal is unable to remove from the influence of external influences the limb which has been deprived of sensibility by cutting the nerve. When the animal which is operated on was surrounded with all necessary precautions, they no longer perceived any modification of the nutrition in the paralysed limb. Section of the trifacial nerve gives analogous results. The alteration observed subsequently to this in the eye, which at first was considered as the effect of a perversion of the nutrition resulting from division of the nerve, has been, since the experiments of H. Snellen, placed to the account of the anæsthesia which exposes the animal to shocks of all kinds. Again, the destruction even of a large part of the spinal cord, is not followed by immediate disturbance in the nutrition of the paralysed limbs. Thus the posterior limbs of a kitten, which survived three months after vivisection, developed themselves normally, and the electric sensibility of the muscles remained intact. If, in like circumstances, eschars ensue, this is because the animal remains soiled by urine.

According to these facts, experimental physiology shows that the absence of the nervous system does not bring to the anatomical elements any other disorder of nutrition than what are developed in these same elements under the influence of prolonged inactivity.

The discovery of the vaso-motor nerves and of the effects which cause the palsy of those nerves ought not to modify this formula essentially. In the first place, in healthy animals, the hyperæmia which they produce is not sufficient, in general, to occasion by itself an alteration of the nutrition of the tissues. Again, in diseased animals, there may occur spontaneously, or after the slightest excitement, some modifications of nutrition to be compared to those found in man, in cases of disease of the nerve centres. The same thing, however, does not hold good with regard to the lesions which take place when there is an irritation or inflammation of the nerves. According to the experiments of Snellen, anæsthesia of the fifth pair of nerves is considered necessary for the production of opacity of the cornea; but in man, in some affections of the fifth pair, accompanied with hyperæsthesia, we see arise in the eye disturbances of the nutrition, because in this case there is irritation of the nerves—an irritative inflammation of the nerves. Such are, in particular, the observations of Bock, of Friederich, in which the nerves were compressed and irritated by tumours; Samuel, by irritating the fifth pair of nerves within the cranium, produced very rapidly derangement of nutrition in the eye. This experimenter

placed two needles on the Gasserian ganglion and passed a current of electricity through them. He saw the vessels of the eye become rapidly injected; at the end of twenty-four hours the injection was replaced by a sharp inflammation which lasted two or three days. In these conditions there was not anæsthesia, but hyperæsthesia, in the parts supplied by the fifth nerve.

Here again are some experiments relative to the fifth pair. Meissner and Schiff saw alteration of the nutrition arise in an eye, without anæsthesia occurring along with it, after incomplete division of the trifacial in the cranium. Are not such incomplete sections of nerves favourable to inflammations of the nerves? We know that among experimenters some say that they are certain to obtain grave lesions in the nutrition of the kidneys on destroying the nerves supplying these organs, whilst others, when they have repeated this experiment, have had only negative results. Benedict has observed in man a fact we may cite here:—Having excited with a galvanic current the great sympathetic in the neck, he saw arise under the influence all the symptoms of a sub-acute arthritis in the joints of the corresponding upper extremity. If the lesions attack the spinal cord, what do we see? The experiments of M. Brown-Séquard teach us what they do. When a part of the spinal cord is divided or destroyed without any inflammation of the parts, we find only, besides the paraplegia, effects caused by the reaction of the parts. What a difference between this and cases where there is myelitis produced experimentally! Then the muscular atrophy is very rapid, and eschars appear rapidly in spite of the greatest care. In what way, by what mechanism, does this irritation of the nerve centres come to influence peripheric parts, and produce in them the lesions of nutrition, of which we have given examples? Are the latter due to irritation, or paralysis of the vaso-motor nerves? Or do they, again, depend on an irritation of the hypothetic nerves, which anatomy does not as yet recognise, and which are sometimes spoken of under the name of trophic nerves.

Among the traumatic lesions of the nerves there is a fundamental distinction to be made: sometimes the lesions consist in a clear and complete section, and then the effects are simply, at least in general, those of absence of nervous action; sometimes resulting from wounds or contusions, they are of irritative nature, and in this case we see arise those derangements of nutrition to which I call your attention. The traumatic lesions of the nerves may give rise to phenomena of a morbid character affecting the skin, the sub-cutaneous cellular tissue, muscles, and articulations, and bones. The late American war has been, you know, the occasion of very important studies upon this subject. These have been presented by W. Mitchell, G. R. Morehouse, and W. Keen, in a very interesting work. With regard to the skin, the accidents which the traumatic lesions of the nerves are apt to occasion in the integuments are of two kinds. The first consist in eruptions of a variable kind, but especially vesicular or bullous. We shall cite in the first place zona, which is observed frequently in like cases, and which on this account might be named traumatic zona. Under the name of eczematous eruptions, the American surgeons, too, have described an affection of the skin which it appears to me might be attached to the preceding variety.

In the second place we have pemphigoid eruptions. I saw a case where bullæ and pemphigus developed themselves very rapidly on different parts of the integument, corresponding to the wounded nerve, and left behind them indelible marks. In the third place we may cite a redness of the skin which reminds us of *erythemapernio*, and a certain tumefaction of the skin and subcutaneous cellular tissue which simulates phlegmon. Then comes the affection called *glossy skin*. The skin is glossy, pale, anæmic; the sudoriparous glands are atrophied, and their secretion diminished; the epidermis is cleft, and the nails split and curved in a curious way.

The muscles often become rapidly atrophied, and lose in part, sometimes wholly, their electric contractility. The joints, when there are traumatic lesions of the nerves, have symptoms which remind us in a remarkable manner of the physiognomy of acute articular rheumatism. These affections of the joints very speedily bring on anchylosis. Periostitis often followed by necrosis may occur. The American authors we have spoken of say, that these connective affections are almost always preceded by a burning pain, in proportion to the state of irritation of the wounded nerve. They make the remark that there are developed habitually, often continuous, pricks, or incomplete sections of the nerves, that is, after these traumatic causes most likely to produce inflammation of the nerves, or at least a condition of neuralgia. On the other hand we don't find them in cases of complete section of the nerves.

Disturbances of nutrition are also observed in cases where the nerve lesions are spontaneous. In cancer of the vertebral column, which brings on softening of the vertebræ, a destruction of the vertebral laminæ, and, consequently, a constriction in the conjoined foramina, may compress the nerves and sometimes inflame them. In such a case I have seen an eruption of zona occupy all the regions where the branches of the cervical plexus are distributed to, in consequence of the compression which the nervous trunks underwent in the foramina. And in certain cases of meningitis of the spinal cord, with hypertrophy of the dura mater, the irritation of the nerves in their passage through the membranes may be followed by accidents of the same kind.

It is, however, above all, in anæsthetic leprosy that we find, in all their development, the lesions of nutrition which we have studied *àpropos* of the traumatic lesions of the nerves. The initial morbid process consists, as Virchow has so well pointed out, in a leprous perinervitis, characterised by a special cellular proliferation in the middle of the nerve tubes which it slowly destroys. The nerves then frequently present in their course a fusiform swelling, which sometimes may easily be recognised during life in the regions where it is superficial, as the elbow when the ulnar nerve is affected. These alterations produce at the beginning symptoms of hyperæsthesia, and later of anæsthesia.

SIMPSON.

The *Family Friend* in its August number, being the 8th number of a New Series, contains a portrait and brief life of the late Sir J. Y. Simpson. In the biographical notice, we find three anecdotes said to have been supplied by a lady, who knew the deceased baronet intimately, and which we extract.

"I have sent to old Mr. T. to make sure of *correctness*. Professor Simpson worked with his father, a baker, at Bathgate. It was through his brother's kindness, and a bursary—(a bursary is a grant of a certain sum for a year or number of years to young students, who have given proof of their abilities, to maintain them and aid them in prosecuting their studies while at college)—that he was enabled to attend the University of Edinburgh. I have no way of ascertaining whether he was regularly apprenticed to his father or not; but undoubtedly he was intended for his father's trade.

"Whilst residing with his brother at Stockbridge, Mrs. T.—(since dead, wife of old Mr. T.)—was seized with cramp of a violent nature during the night, and, knowing of the medical student that lived near, sent for him. From that time till he became a great man they were on intimate terms. He confided his sorrows to her, and asked her advice on various points. Amongst other points she told him that in his particular department he need not expect to get much practice as an unmarried man. He thought he could soon qualify himself in that respect, as there were several daughters in a *genteel* family, either in Dean terrace, or one of the streets leading off it—(then, and still, a genteel neighbourhood)—I forget which, any of whom would accept him, he supposed, as all had been so kind to him, and made him welcome as a guest at all times. He went—proposed—and, was dismissed the house for over on account of his presumption; but he took the

repulse so coolly, that Mrs. T. did not credit him with warm affection.—(He displayed the warmest affection to the lady he afterwards married, and that affection was reciprocated.)

"When he was a candidate for the chair in the medical department, which he made specially his study, Mr. T. and Mr. Young, both butchers in Stockbridge market, went to all the members of the Town Council, in whom, along with the patrons, lay the appointment of a professor for the vacant chair, soliciting their votes in his favour. Simpson was named after Mr. Young's father—James Young. The late Mrs. R. told me she took him to each of the patrons and introduced him, after having begged their votes in his favour; and on their way to one of them—a consequential body—she advised him to be as much as possible on his P's and Q's, as the gentleman expected great deference from all asking favours. To her horror, when the patron asked what his occupation had been to fit him for the position he aspired to, he answered, 'Eight years previously he had been chiefly employed in driving a bread-cart; since then his testimonials would show how he had been employed.'"

REGISTERED FOR TRANSMISSION ABROAD.

THE MEDICAL PRESS AND CIRCULAR *is published simultaneously in London, Edinburgh, and Dublin, every Wednesday morning. Price 5d. Stamped 6d.*

By Post to Annual Subscribers, £1 2 6
,, *If paid in advance* 1 1 8

*** Post Office Orders and Cheques to be drawn in favour of
A. A. TINDALL, 20, King William-street, Strand, London.
MOFFAT & Co., 6, D'Olier-street, Dublin.
MACLACHLAN & STEWART, South Bridge, Edinburgh.
Sole Agents for the United States,
MESSRS. KELLY and PIET, Baltimore.
Annual Subscription, *post free,* Ten Dollars.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 3, 1870.

ARMY MEDICAL REPORT.

II.—THE BRITISH ARMY ABROAD.

IN our last notice of this valuable Blue Book we spoke of the health of the troops within the precincts of the British Islands. We now proceed to examine the condition of those inhabiting the dependencies of this great Empire. At Gibraltar in 1868 there were habitually about 4,631 troops, and they seem to have been very healthy, as only 8·43 per 1,000 deaths took place; about 224 per 1,000 admission for venereal disease occurred. In Malta the average strength of troops in 1868 was 5,377, and the mortality was very high, as much as 18·97 per 1,000. Malta is very free from venereal disease among soldiers—only 70 admissions per 1,000 took place in 1868. Sir H. Storks, we believe, was the cause of this immunity in the Maltese Army. Continued fevers raged in 1868, and were the cause of the great mortality. In Canada, the average strength of troops in 1868 was 9,582. The deaths were 10·33 per 1,000—not far, it will be noticed, from the average at home. Enthetic or venereal disease occasioned 192·6 admissions into hospital per 1,000; but not a single death. In Nova Scotia there were about 3,519 troops in 1868, and the mortality 9·65 per 1,000. Venereal diseases unfrequent—only 122·5 admissions per 1,000 into hospital, and no deaths. Foggy Newfoundland had 300 troops stationed in it, and Bermuda, with an average of 1,649 troops, had a very high death rate, 24·86 per 1,000, chiefly from continued fever. In the West Indies, again, in what is called the Windward and Leeward command, there were 806 white troops in 1868, who were very healthy, only about 9·92 deaths per 1,000 having occurred. Venereal diseases were very prevalent; no less than 342·4 cases per 1,000 having been admitted into hospital in 1868. In Jamaica, the white troops in 1867 were 778 in number, and they were exceedingly healthy, only 7·70 deaths per 1,000 having occurred. Venereal diseases were very unfrequent, only 108·0 per 1,000, with no deaths. We believe that the soldiers in Jamaica live maritally with the native women, and hence the rarity of contagious disease. The black troops were by no means so healthy. No less than 19·37 per 1,000 died out of 878 men, and it appears chiefly of tubercular diseases, which destroyed no less than 10·25 per 1,000 of them. Venereal diseases were rife among them, and no less than 375·9 admissions on this account occurred among them. The Bahamas are kept almost solely by black troops, of whom there were 337, and the mortality among them was on the ratio of 14·64 per 1,000. Venereal diseases prevailed—no less than 599 per 1,000 troops were admitted into hospital on this account. Tubercular diseases carried off no less than 11·87 per 1,000 of the black troops. This is the more remarkable because at Honduras, out of 270 black troops, with the same mortality, 14·11 per 1,000, not a single death is said to have occured from tuberculosis, miasmatic diseases prevailing, and accidents and suicide being common.

In Western Africa there are only 15 white troops, but about 924 black men, among whom the mortality was very high, 22·12 per 1,000 in 1868. The highest mortality, 31·96, was at Sierra Leone; the next, 30·11, at Gambia; and the lowest, 25·00, at Lagos. Enthetic diseases were not very prevalent; only 296·8 at Sierra Leone were admitted per 1,000 from these diseases, and there were hardly any deaths. It seems almost incredible that no less than 15·98 per 1,000 poor black troops died of tuberculosis at Sierra Leone in 1868. We suspect that the barracks are exceedingly crowded, and that no care is given to ensure sufficiency of cubic space; but this is not spoken of in the report. Black troops are probably not sufficiently important to our rulers.

St. Helena has always been a healthy station. In 1868, 421 troops were quartered there, and only 4·75 per 1,000 died. It ought to be used as a sanitarium for invalids and consumptives. Enthetic disease prevailed, and there were 337·3 admissions per 1,000 in 1868 from this cause, although it is stated that the "Prevention of Diseases Acts is in force." The increase has been nearly alike in syphilis and gonorrhœa.

We now come to the Cape of Good Hope, at which about 3,630 troops dwelt in 1868, with a death rate of 12·11 per 1,000. Venereal diseases were very frequent in the Cape, as many as 368·6 admissions per 1,000 having occurred from this cause. Tuberculosis killed 3·03 per 1,000. In the island of Mauritius in 1868 there were about 1,318 troops, with the high mortality of 27·41 per 1,000. Mias-

mata caused a great slaughter in that dangerous island, namely, of 16·69 per 1,000. Enthetic disease is very little spread among the troops, as only 90 per 1,000 were admitted into hospital from this cause in 1868. "Port Louis will always be an unhealthy station."

We come now to the island of Ceylon, where the average number of the troops in 1868 was 923, and the mortality 21·89 per 1,000. There was not much enthetic disease in that year, only 154·3 per 1,000 admissions having taken place; but no less than 12·15 per 1,000 were killed by miasmata, dysentery, and diarrhœa. The black troops, of whom there were 1,028, had about an equal mortality, 21·40 per 1,000. They were almost free from venereal disease. Why? We wish the report had given us a reason why only 26·3 per 1,000 were admitted for venereal disease in 1868. Are the troops married?

In Australia and Tasmania there were 1,690 troops in 1868, with a death rate of 13·02 per 1,000; of these 3·55 per 1,000 died from tuberculosis, showing that Australia is by no means free from this disease; 238·5 admissions per 1,000 occurred from venereal disease. In New Zealand there were 841 troops who were very healthy, 8·32 per 1,000 having died in 1868. Here again, venereal diseases are uncommon, only 65·4 per 1,000 having been admitted for this cause; and it is added that this was greatly above the average. Why is this? Are the soldiers married?

Turning to China, we find 668 white troops there in 1868, with a mortality of 14·97 per 1,000. There was not much venereal disease, only 182·6 per 1,000; but tubercular disease carried off 4·48 per 1,000. There were 691 Asiatic troops, with the high mortality of 24·60 per 1,000, chiefly from miasmatic disease and disease of the lungs. Venereal disease is very unfrequent among these troops; only 42·2 per 1,000 were admitted in 1868. "The low ratio of these cases is attributed by the medical officers to the manner in which the Prevention of Contagious Diseases Ordinance, passed in 1867, has been carried into operation. A reference, however, to the prevalence of these diseases among European troops shows that no such benefit was derived by them, and even among the Asiatic troops the Gun Lancers had 15 cases on an average of 71 men. In Japan there were about 785 troops in 1868, with an average death rate of 14·01 per 1,000. It is curious to observe how high the amount of venereal disease is in Japan, no less than 554·1 per 1,000 admissions per 1,000 having occurred during the year 1868, with no death from this cause. There is a note in the report to the effect that "enthetic diseases were nearly one-third under the proportion of 1867, though still a little above the average, the admission amounting to more than half the strength. The reduction is attributed by the medical officer in charge to the intervention of the native authorities at the suggestion of our Minister. The reduction has taken place almost entirely in the syphilitic group of these diseases." Singapore and Penang had about 183 troops in 1868, with a high mortality of 21·84 per 1,000. Venereal disease prevailed among them, 377 per 1,000 having been admitted into hospital; but no deaths occurred. Nearly half of the deaths, however, were from accidents, so that the troops were really very healthy. The daily rations for the soldiers there is mentioned as being 1¼ lb. bread, 1¼ lb. beef, 14 ozs. fresh vegetables, 2 ozs. rice, 5-7th oz. tea, or 1¾ oz. coffee, 2½ ozs. sugar, 1 oz. salt, and one ration of fuel—*i.e.*, 3 lbs. wood to each man.

We come now to the great empire of India, where in 1868 there were about 52,887 troops, with a death rate of about 21·70 per 1,000. Bengal had a death rate of 22·93; Madras, of 23·92; and Bombay, of 15·48. In Bengal there were 32,909 troops in 1868. The chief disease was miasmatic, and this killed 7·29 per 1,000; then dietic disease killed 3·96 per 1,000, tuberculosis killed 2·40 per 1,000; enthetic diseases caused 188 per 1,000 admissions into hospital in 1868. Spasmodic cholera did not prevail as an epidemic during the year at any of the stations, except Chinsurah and Jubbulpore. "Enthetic diseases were more prevalent than in 1867 in all the Military Divisions, except the Meerut Division, in which there was a considerable decrease; and the Serhurd, in which the results for the two years were identical. So far, therefore, as the prevalence of these diseases in the Army may be taken as an index, the establishment of Lock Hospitals does not seem, as yet, to have produced satisfactory results. The regiments in which primary syphilis caused the greatest number of admissions were the Second Battalion 25th, in the Presidency and Rohilcund Division, the 36th in the Peshawur, the 107th in the Allahabad, and the 105th in the Meerut Division. The latter corps had the largest number of cases of secondary syphilis." There were 84 cases of sunstroke or heat apoplexy fatal. In Madras, with 10,158 troops, 5·41 per 1,000 died of miasmatic diseases, 2·56 per 1,000 of diseases of the nerves, and 7·19 per 1,000 of diseases of the digestive organs. There were 258·5 per 1,000 admissions into hospital for venereal diseases, and three men died of these diseases in 1868. Inflammation of the liver prevailed, and heat apoplexy. There was no epidemic of spasmodic cholera, and only 7 deaths occurred from it in the whole command. In Bombay there were 9,820 men in 1868, of whom 3·97 per 1,000 perished from miasmatic, 2·14 per 1,000 from tuberculous, and 3·25 from diseases of the digestive organs. There were 197·6 per 1,000 admissions into hospital for venereal diseases. More than half of the accidents were from sunstroke or heat apoplexy. Spasmodic cholera did not prevail at any of the stations in 1868. There were 8 deaths from it at Poona. Enthetic diseases were more prevalent than in 1867 in the Mhow, Northern, and Aden Divisions. During the year an Act came into operation under which supervision of prostitutes and the establishment of Lock Hospitals at the principal stations was authorised; but it has not been in operation for a sufficient period to have yet produced any material effect on the prevalence of this class of diseases. One curious fact is, that at Aden there were only 86 per 1,000 admissions for venereal disease in 1868. How is this to be accounted for? Were the men married? During 1868, 2,382 invalids were sent home from India, or 45·04 per 1,000, of these 1,097 were discharged at Netley. Rheumatism caused the discharge of 57, venereal disease 958, tuberculosis of 141, disease of the nerves 113, and of the heart 211; disease of the digestive organs caused the discharge of 147, and disease of nutrition of 180. There were 52·96 per 1,000 troops daily sick in Bengal. In Abyssinia in 1868 it seems that ten deaths occurred from sunstroke. There was no death from war casualties. The men daily sick were only 17·11 per 1,000. The mortality in 1868 was considerable on board ships returning from India *viâ* Egypt; three deaths occurring from dysentery, two from hepatic disease, &c.

The admissions into hospital were rather high among the troops returning by the Cape, chiefly from the occurrence

of venereal disease among the men from Yokohama, Japan, where the diseases were very prevalent.

There is an interesting table at the end of the report showing the sickness, mortality, &c., comparatively. We there find that white troops in the United Kingdom have an annual death rate of 9·34 per 1,000, and 49·20 per 1,000 are constantly non-effective from sickness. In Ceylon, again, the death rate being 23·20 per 1,000, the constant sickness is 69·60 per 1,000 ; and in China and Japan, with a death rate of 54·94 per 1,000 from 1860-67, there was constantly sick no less than 77·11 per 1,000. In India, with an average death rate of 27·64 per 1,000, there were an average sick list of 63·86 per 1,000. Such facts prove but too strongly that the notion of our section of the human race colonising the whole of the habitable globe is irrational and anti-hygienic in the extreme, and that it would be infinitely more rational on our part to withdraw gradually from all tropical climates, except in so far as they are proved to be compatible with the longevity and health of our troops.

THE DEFEAT OF THE MEDICAL BILL.

Last week we were able to congratulate our readers on the defeat of the Bill which the Privy Council were so anxious to force on the Profession. It is not worth while, now the danger is happily over for a time, to repeat our criticisms of its details. Still, as next year the question of Medical Reform must come on again, we think it well to state that no Bill, destitute, as this was, of all consideration for the wishes of the Profession, has any chance of passing. We ask two things—1st. A single State examination for a licence to practise. 2nd. Representation in the Council supported by our money. These two things are as much for the good of the public as the Profession, and but for the obstinacy of Lord de Grey might have been attained. Let it never be forgotten that in the House of Peers, when pressed on the subject of representation, Lord de Grey spoke decisively against any such measure of justice, and otherwise evinced a disposition to treat with indifference, if not with insult, the wishes of the Profession. We predicted, at the time, that his Bill would never pass the Commons, and the Government has been compelled to withdraw it. Now that the Profession is roused to a sense of what is its due, we hope it will not sink again into its wonted apathy, for a further attempt on its dignity is certain to be prepared in the recess. We have, however, good reason to hope that no future Bill will be manipulated through the Lords, as this was, without representation being granted. Besides, medical reformers are now awake. They see how far the Privy Council dare go, and being thus forewarned will be forearmed. Measures will be introduced into the House of Commons, that will at least be likely to influence the course of legislation. Dr. Brady, for instance, has given notice of a Bill, and so also has Dr. Brewer. The former will probably be the spokesman of the Royal College of Surgeons in Ireland, a body that has evinced its zeal and sincerity by keeping Dr. Hargraves and Dr. Macnamara in London to combat the pernicious provisions of the Bill, and by the really self-sacrificing tone of its just demands. Dr. Brewer's success in other measures points him out as a most suitable member to take up the question. Indeed, as already is known to our readers, he had a Bill prepared which he was ready to introduce this year, but joined the other medical members to secure the rejection of that of the Privy Council. His Bill provided for representation of the Profession in the General Council, and it was because the Government refused to grant that one demand that all parties combined to reject their measure. We may, therefore, with confidence, look forward to the future, feeling that perseverance will end in speedy success.

Notes on Current Topics.

A New Thing in Journalism.

The *Pharmaceutical Journal*, as our readers know, is now a weekly. It has obtained a new editor, and the person selected by the Council of the Society for that office has certainly signalised his accession to the editorship by an unprecedented act. We were never more surprised than when we took up a recent number which did not fall into our hands till rather late. Then we observed that a series of notes were appended to one of the Original Communications. It seems that the late editor, aware, no doubt, of its extreme value, had commenced the publication of Dr. Letheby's paper on the "Prospects of the Sewage Question," which has already appeared in our columns. Considering the great interest of the question just now, we are glad to see such a paper so extensively circulated, and were not surprised at the late editor finding it a place in the columns of the *Pharmaceutical Journal*. But it was not completed in his term of office, and so the latter part of it had to be issued under the new editor's auspices. But it appears the new editor does not agree with Dr. Letheby, and so takes the opportunity of adding foot-notes to his paper, controverting his conclusions. A finer specimen of impudence we never remember, and it augurs ill for the tone the journal seems likely to take under its new management. But this is not all : the notes, being unsigned, would give the idea that they were the author's, and so he might at first sight appear to contradict himself, while many would not read a paper so overladen with foot notes, as if the writer could not or would not write clearly. In fact, we should ourselves have passed over this paper altogether, having already carefully digested it when it appeared in the Medical Press, but were struck by the number of notes of which we had no recollection, and began to read them to see whether Dr. Letheby had added them since our publication, and whether he had therein modified his opinions. We soon discovered the trick, and, as soon as we partially recovered our surprise at this editorial novelty, began to ask why in each case the words *Ed. Pharm. Journ.* had not been added to the notes. Could it be that the editor would not allow them as he did not really write them ? Judging from internal evidence we should say decidedly they are not his own production. But surely it would have been more in consonance with editorial usage to permit the person who wished to controvert Dr. Letheby, to write a paper in his own name, than to drag the organ of the Pharmaceutical Society into a controversy so acrimonious as that on sewage is becoming, and rashly to commit such a periodical to one side of a difficult chemical question that lies outside the bounds of pharmacy ; and, above all, to rush headlong into this obstrusive discussion, against such a leviathan of debate as Dr. Letheby. It would really appear that the sewage question, while it grows more

and more important has been overlaid with so much personal or interested writing, so much determination to bear down all differences of opinion by any and every means, that men are being led by foregone conclusions to lengths that independent journals may well protest against. We shall have more to say on the general question in a future issue. Meanwhile we cannot refrain from saying that the Pharmaceutical Society ought not to be made a means of disseminating such notes as these we again protest against.

Our Sick Poor.—A Warning.

It has been our experience that no profession is so unfairly tampered with by amateur experimentalists as that of medicine. But what surprises us most is the fact that men educated in other respects, and apparently possessing good sense, should be so foolish and indiscreet as to tamper with drugs, whose therapeutical effect and applicability of exhibition they are entirely ignorant of. In country districts we find the priest, or parson, as the case may be, advising and prescribing with a recklessness which a little consideration on their part should deter them from doing; and in some instances where a medical man is in actual attendance, not only advising the taking of certain drugs, but actually providing them. This is in nearly every instance done *sub rosa*—the medical attendant being ignorant of their interference. Doubtless, the sick poor, who pander to the parson for the sake of his shilling, or old coat, encourage the practice by expressing their thankfulness for the relief the parson's dose has bestowed. But an educated man should know better than plunge into using medicines whose effect he cannot foresee, and remember that "a little knowledge is a dangerous thing," and that he has no more right to trespass upon the domain of the doctor, than the doctor has to get into his pulpit and preach to his congregation.

These remarks are forced upon us owing to an occurrence which happened to a medical gentlemen, whose name is familiar to the readers of our pages, at the commencement of the present week. He was summoned to visit a patient whom he found suffering from acute nephritis. The man had been mowing grass, became heated, drank freely of beer, and in the evening exposed himself to cold. The usual remedies were resorted to by our contributor, and the more pressing symptoms were yielding to a scientific treatment, when the parson who came to the rescue, not satisfied with confining himself to the salvation of souls, and finding the man did not pass water, thought he would compel him at least to secrete it, so he compounded several doses of acetate of potass, spirits of nitre, and decoction of broom, which, he had the presumption afterwards to tell the doctor, when an explanation was demanded, "was the finest thing in the world for the water." The patient died, of course, from uræmic poisoning. It is not likely that this individual conscience-stricken pastor will trifle again with human beings' lives, but we record the case and make the comments we do that others may take warning; for although there is no law to punish such erroneous behaviour, there is "a still small voice within" to remind the wrong doer. Well may the sick poor in the time of suffering ask to be saved from their friends, and well may the doctor pray for the dawning of the day when wiser legislators will protect him in his all important duty to ward off disease and relieve human suffering, by a code of law which will have for its object the punishment of amateur experimentalists with drugs and all those who trifle with human beings' lives.

A Humane Board of Guardians.

The following letter has been sent to us by a correspondent :—

"Sir,—I am desired by the Board to call your attention to the following memorandum inserted in my application book by the chairman of the relief committee at the last meeting of the board—

"'The guardians are surprised at the order being given for brandy and meat for a man in dying circumstances.'

"I am, sir, yours truly,

"G. A., Relieving Officer.

"July 23rd, 1870."

The idea of ordering brandy and meat to make beef-tea for a dying man!!! Our correspondent tells us the deceased was dying of phthisis, accompanied by diarrhœa; that each week he received three pounds of meat from the parish; the day of his decease was the time to order the week's allowance, and finding him suffer from diarrhœa, and in a deplorable state, with a family in abject poverty, the humane doctor ordered in addition half-a-pint of brandy, with we see how humiliating a result. We pity the parish doctor who is subservient to the petty huckster or small farmer, but our humanity carries us further, to the bed of the dying pauper; and we ask what philanthropy means, and if paupers seriously ill are to be allowed to die for the want of necessaries because of the inhumanity and ignorance of Poor-law guardians?

Tight Boots and Weak Eyes.

There is something after all in the notion and belief of our old lady friends that tight boots produce weak eyes. Since the new-fashioned boot made for and worn by ladies has come into use, we have been consulted in various instance for a weakness of vision, and a stiffness about the ocular apparatus, which we found at first difficulty in accounting for, since we were unable to detect any abnormal condition of the eye to cause this disordered vision, or to trace any constitutional disturbance likely to provoke functional phenomena. A mother, wise in her generation, given to bestowing roses to Harpocrates, the god of silence, asked us if the tight boots worn by her daughter might not produce the distressing symptoms of *asthenopia* complained of. To this we assented, and, upon the tight boots being dispensed with, discovered that the cause of the mischief must have been removed, for the injurious effect upon the eyes ceased—*sublata causa, tollitur effectus.* However disposed our fashionable ladies may be to wear the high built, conical-shaped heeled boot of the period, with narrow toes and light top soles, which throws the foot so prominently forward, and tends to compress it in a space which the boot-closer narrowly limits, and however anxious they may be to imitate the Lady Hester Stanhope, whose foot, it is stated, betrayed a royal race, for water flowed beneath the instep,—this we tell them in the hour of splendour and fashion, that the localised pain suffered from compression of the foot, and the consequent production of corns and bunions and distorted toes, so patiently endured in the self-sacrifice to outward, show are nothing compared to other symptoms which undue and

persistent pressure provokes, and which may be readily recognised in the unsteady bashful look about the eyes, the perpetually winking of the lids, and the contracted brow, so pathognomic of approaching weakness of sight—the asthenopia of the oculist—whilst we must remind them Propertius has written *oculi sunt in amore duces*, and we now teach them that at the expense of a neat foot they must not injure their eyesight.

The Bone-setter.

Few districts can boast being without a bone-setter, and some of them obtain a very wide notoriety for a reputed skill in discovering a dislocation, or an alleged tact in bringing to light what was hidden to the qualified surgeon's professional eye, or what his educated fingers failed to detect. The bone-setter is generally one of the lower class who follows some humble employment between the hours devoted to attendance upon patients. We regret to find in a few instances there are men possessing the College of Surgeons' diploma who specially practise this department, and are sure to work out the existence of a dislocation which does not exist. In the neighbourhood of Rochdale, there is one such. A correspondent tells us of a patient who went to bed apparently in good health, and awoke in the morning with a paralysed arm. For some weeks he remained under our correspondent's treatment and steadily improved in health and progressed towards recovering the use of his arm, when he was induced to consult this qualified bone-setter, who cast at once serious reflection upon the gentleman in attendance for overlooking an existing fracture, which he induced his patient to believe was done by injury during sleep. The hand and arm was at once placed in splints, neatly bandaged, and at the end of three weeks taken down, and "oils" provided for rubbing in to perfect the case. Of course this description of bone-setter, however ignorant he may be—for they are, as a rule, men who have failed in the Profession—never prove so dangerous to society as the common charlatan. He it is who does the irreparable injury. The history of the following case conveys all that we could well write on the subject. Last Christmas the son of a well-known clergyman at a public school, was thrown down by other boys and his knee injured. Placed at once in the infirmary under surgical treatment for synovitis, the boy rallied, and was able again to resume his school duties and join in the games. Unfortunately, again the knee was injured, when his parents removed him from the school and consulted their own medical attendant. Being of a scrofulous habit the case became complicated, and the mischief spread to the heads of the bone forming the articulation. However, under suitable treatment, the boy steadily progressed and was able again to walk upon the limb, when some way or other his father was induced to show the joint to a parishioner who practised the art of bone-setting. This party at once made out a dislocation—and the usual practice followed by them—there and then, in the presence of an educated clergyman, commenced pulling and twisting the joint about. Of course he sent home father and son in high glee—the dislocation was reduced and the joint cured! The doctors were maligned and abused by all for their ignorance, and the only regret was that the bone-setter was not consulted earlier! The result may be readily guessed; in a few hours violent inflammation succeeded all this pulling about; in six days there was no doubt about suppuration of the joint, and in three weeks amputation was necessary to save the boy's life. These things only happen too often, and the question follows how are we to remedy so great a grievance, and how are we to protect ourselves against the ignorant bone-setter?

The "Echo."

We correct the terms with which our respected and much-admired contemporary—the *Echo*—takes us to task for our note on mushrooms. We regret to find the editor objects to our using technical language, while he displays deplorable ignorance of the subject he touches upon. In the first place we do not write for children, and in the next he will find science *is* taught in national schools. We pity him for living in ignorance of this fact; few national school scholars who have learned the rudiments of botany but could understand all we wrote on the subject of mushrooms. Is there no such scholar on the staff of the *Echo*?

Panary Fermentation.

In some of our provincial hospitals and infirmaries wherein they bake their own bread, we have recently heard complaints made of the quality of it during the warm weather, and, when inquiry was made respecting the description of the flour used, nothing could be discovered to account for the bitterness complained about by consumers. In one or two instances we have been able to show that the disagreeable flavour was owing to the tedious process of fermentation practised by some, in others to the *yeast* used being unfit for baking purposes, and in a few rare instances to the baker adding sugar to the dough, whereby a too strong fermentation was produced. Setting aside the subject of baking powders, in which we have no confidence, and which are, in our opinion, inapplicable for baking bread for large institutions, we recommend German yeast to be used, after water at a temperature of blood-heat is mixed with the flour (and some salt added) to form the dough. After thus *setting the sponge*, and the process of fermentation manifested, and the confined gas escaped, we must take care that further fermentation does not take place, particularly during weather such as the present, or the bread will be spoiled. Kneading should be commenced and the dough perfected by the further addition of the remaining flour, salt, and water. We find much bread spoiled and rendered disagreeably bitter by the injudicious use of sugar. We believe the quantity of saccharine matter contained in flour ample, and any further addition of sugar not only superfluous but injurious to the quality of the bread.

Baboo Gopaul Chunder Roy.

This learned Indian gentleman will lecture at the Hunterian Society's Room in the London Institution, Finsbury Circus, this evening (Wednesday), at eight o'clock. Subject: "The History of Medicine in India." Members of the Profession admitted, with their friends, on presenting a card.

The Indian religious reformer, Baboo Keshub Chunder Sen, is a cousin of the lecturer, and is expected to address the meeting also.

British Medical Association.

The annual meeting is to be held at Newcastle-on-Tyne on the 9th, 10th, 11th, and 12th—Tuesday to Friday next. A room in the new Town Hall is set apart as a reception room, where members should apply as soon as they arrive. Arrangements for postage, telegraphic communication, information about lodgings, tickets, and other things all centre here. Dr. Phillipson, hon. local sec., will be glad to receive in advance names of members intending to be present. Some interesting practical papers are announced. Dr. Chadwick will resign his presidency on Tuesday, when Dr. Charlton, who succeeds, will deliver his inaugural address, and much general business will be transacted. Dr. Sibson, F.R.S., will deliver the address in Medicine on Wednesday, the 11th, at noon. The address in Surgery by Dr. Heath will be at 11 a.m. on Thursday. In the evening is the public dinner at the Town Hall.

On Friday, the 12th, at 2 p.m., there is to be a special convocation of the University of Durham to confer honorary degrees.

The New Insect Plague.

It has been announced by some of our contemporaries that mosquitoes have appeared in Woolwich. Some cases have come under our notice in the aristocratic neighbourhoods of Belgravia and Kensington, where these insects have been very annoying. Last year ladybirds came in thousands, we know not whence, nor is our object to guess whence the new plague comes. We prefer to correct a popular error about the bites. Vinegar is constantly recommended as an application; but from personal experience in our foreign travels we can declare that an alkali is far better. A strong solution of carbonate of soda will allay the pain and itching set up by the mosquito poison, sooner than anything.

The most effectual lotions sold in the localities where those insects abound all contain an alkali.

Marshall Hall Fund.

The subscribers met last Wednesday, and resolved to have a medal bestowed, together with the title of "Marshall Hall Scholar" every five years. The Medico-Chirurgical Society is to be entrusted with the duty of carrying out the scheme. It was at first thought that the Royal Society would undertake it, but that body seems to be unable to see its way clearly to accept the trust. The Medico-Chirurgical Society will be equal to the occasion.

Albrecht von Graefe.

The great master is dead. Europe—the world—has lost the greatest oculist in the prime of his life, struck down by phthisis, that destroyer of so many of the great and noble. We have, it is true, in England many of his pupils, while France and other countries have also learned from the great German, and all are proud to acknowledge themselves his disciples, as they all lament the loss of one to them personally attached, as he was to so many thousands whose sight he has been the means of restoring.

The Sanitary Act (1866) passed the third reading in the House of Commons on Wednesday last.

Tests of Death.

M. Laborde has read before the Academy of Science a communication on a new means of determining the existence of death. He points out that when a finely polished steel needle is plunged sufficiently deep into the tissues of living animals, at the end of a variable but usually short period, the needle loses its metallic tissue to a greater or lesser extent and becomes oxidised. If, on the other hand, such a needle is introduced into the muscular tissues of a dead body and left there for twenty minutes or an hour it remains perfectly untarnished. The oxidation of the needle and the themic and electric conditions to which it is subjected constitute, according to M. Laborde, a constant and reliable sign that the death is only apparent.

Variations in Maternal Milk.

M. Louis Sourdat has addressed to the Paris Academy of Sciences an observation on the unequal production and differing composition of the milk from two breasts of the same woman.

Having noticed the very remarkable preference manifested by the infant for the right breast of its mother—a preference shown by two previous children—and having at the same time made the remark that the right breast was much larger than the other, and gave double the quantity of milk, he thought it worth while to make examination of the milk from each. He arrived at the following conclusions:—

1. The composition of the milk produced by the two breasts, taken together, is from day to day very variable, although there be no appreciable change in the state of health. But temporary fatigue, or change of diet, or the keeping of the milk in the breasts, is sufficient to cause this difference. Thus, in analyses, the dried residue varied from 10 to 13·70 per cent. The density was also very variable. He obtained for the mean of the two breasts specific gravities varying from ·980 to 1·031.

2. The composition of the milk varied materially in each breast. Thus, that of the right breast, in addition to being much more plentiful, was also richer in the ratio of 1·20 to 1 for a minimum, to 1·74 to 1 as a maximum.

3. In these conditions the butter was usually secreted in a much greater quantity in the right breast, in the ratio of 1·50 to 1 (minimum), and 9 to 1 (maximum).

4. Azotized substances, such as caseine and albumen, were also secreted in much greater quantity in the right breast, in the proportion of 1·90 to 1.

5. The soluble principles, lactose and salts, were found to be secreted almost equally in each breast.

The Ambulances of the French Army.

The Union Medicales announce authoritatively the arrangements for the Ambulance Service of the French Army, as follows:—

The principle adopted by the Medical Service will be to avoid as much as possible the removal of persons suffering from gunshot fractures, and to treat them as near as possible to the battle field. To carry out this intention each ambulance corps will be comprised of a moveable ambulance with hospital tents placed in a neighbouring village. The service of the ambulance, sufficiently numerous to

deal with the requirements which are expected to arise, will be available at the ambulance, and a reserve comprising the officers, the students, and hospital sergeants will convert the ambulance, when required, into a temporary hospital, leaving the corps ready to follow the army. The organization of each ambulance will consist of a surgeon in chief, four surgeons, ten assistant surgeons, twelve assistants, a commissariat officer, and a chaplain, in addition to its camp followers, the nurses, and baggage guards.

The principle which will be pursued in filling up these offices will be as follows:—

The assistants will be taken from the students in medicine; the assistant surgeons from amongst French surgeons and resident pupils who can produce evidence of knowledge and experience. The surgeons will be chosen from the best of the assistant surgeons according to rate of promotion.

Nature has reason to believe that Professor Sir William Thompson will be the next President of the British Association.

We have the satisfaction to announce that, in spite of the opposition of a contemporary, Dr. Orange has been elected Superintendent to the Broadmoor Lunatic Asylum.

The will of Thomas William Burt, Esq., M.D., formerly surgeon in the Hon. E.I.C. Bengal Medical Establishment, and late of No. 2 Obere, Promenade, Homburg, Prussia, was proved in London, on the 7th inst., and the personalty in England sworn under £30,000.

Dr. Eustace Smith has been appointed Physician in ordinary to H. M. the King of the Belgians, and has had conferred upon him, the honour of Chevalier of the Order of Leopold. This appointment does not require Dr. Smith to relinquish his London practice.

However distressing and painful the occurrence of decapitation in the late execution in Dublin must be, it seems to us that neither the ferment of the *Irish Times* nor the contemptible anti-Irish philippic of the *Pall Mall Gazette* was at all justified by the circumstance.

Animated by feelings of compassion for the unfortunate criminal, whom it was no part of the law's desire or right to torture, the authorities appear to have adopted a principle in the carrying out of the execution which turns out in the light of experience to have been incorrect, and we think their error has been the result of perhaps an overstrained sympathy with the condemned convict.

The length of the rope used in the execution was 14 feet, a length greatly in excess of what had been previously employed, except on one recent occasion. So long a drop had been adopted on purely scientific principles. In the *Philosophical Magazine* for 1866, a communication from Professor Haughton is printed, which deals with the subject on mechanical grounds. In it Professor Haughton says that he "has searched in vain for well authenticated instances of fracture of the vertebra," and he notices the results of *post-mortem* examinations in two cases where the fall had been respectively 7½ and 11 feet, in neither of which dislocation or fracture had taken place. He, therefore, assumes that the ordinary fall of three or four feet is sufficient only to cause strangulation, and considers that the torture of death by this means must be great. He proceeds to say—"It has been ascertained by me that the shock of a ton dropped through one foot is just sufficient to fracture the anterior articulating surfaces of the second vertebra at their contact with the atlas, and that this force allows the shock to fall on the medalla oblongata so as to produce instantaneous death." Acting on this supposed fact, Professor Haughton gives the following formula:—"Divide the weight of the convict in pounds into 2,240, and the quotient will be the required length of drop." Professor Haughton does not say by what process he arrived at the conclusion that a force of a ton falling one foot is no more than sufficient to break the neck; but we presume he must have assured himself of the fact by experiment. Since the publication of this paper one convict was hung with the long drop, and on *post-mortem* examination it was found that the superior articulating surfaces of the vertebra were fractured near the posterior border, and the shock had been sufficient to extend the convict's neck by 1½ inch. In his evidence at the inquest which was held immediately after the execution—

Dr. Humphrey Minchin said, I am surgeon to the Richmond Bridewell, and, in compliance with the Act relating to the carrying out of capital punishment within prisons, I was present at the execution of William Carr on the morning of the 28th July, 1870; I have since made a *post-mortem* examination of the body; the head was completely severed from the trunk, all the parts being divided equally across; the second cervical vertebra was fractured, which alone would cause instantaneous death; it would be difficult to account for the cause of the decapitation on ordinary principles; the fall which he got was less in proportion to his height than the fall Kilkenny got at Kilmainham. The fall is a matter simply of figures; death by strangulation is caused by a short rope with all the attendant horrors of kicking and struggling; whereas a long rope insures a sudden, instantaneous, and painless death, by fracturing or dislocating one of the bones of the neck; a portion of the force of the fall is usually expended in tightening the elaborate noose usually employed, whereas, in the present case, I fear that the noose was tightened beforehand, and thus an additional force was reserved which resulted in separation of the head; the usual formula is 2,240lbs, which, divided by the weight of the offender in pounds (in this case 159), will give a quotient, representing the number required to break the neck, which would be 14; in my opinion the immediate cause of death was a traverse fracture through the second cervical vertebra, and a displacement of the second from the third; the drop is 22 feet from the ground, and the man fell 14 feet; I do not think the thinness of the rope contributed to the accident; I suggested 14 feet as a proper fall in accordance with the opinions founded on published scientific data, and with a view of avoiding a lingering and torturing mode of death. The rope did not give way.

The Quarterly Examinations of the Roaly College of Surgeons of Ireland have just concluded. For the first half, or primary anatomical examination, forty-five students were examined, of whom eleven failed to satisfy the examiners. On the second half, or surgical examination, forty-three presented themselves, of whom seven were rejected.

SCOTLAND.

EDINBURGH.

The Municipal Curators of the University of Edinburgh.—At a meeting of the Edinburgh Town Council, held on Tuesday the 26th July, Bailie Skinner, who was absent at the recent election to the chair of midwifery, read the letter which he had left for the curators recording his vote with his reasons. We give it *verbatim*, as it affords an amusing commentary on the remarks we made a few weeks ago on this subject.

"London, 28th June, 1870.

"Dear Sirs,—As I am just setting out for the Continent, and in all likelihood will not return in time to be present at the election by the Curators of a Profession to the Chair of Midwifery in the University of Edinburgh, I take leave hereby to record my vote in favour of Dr. Alex. R. Simpson, as a successor in that Chair to the lamented James Y. Simpson, Baronet.

"I have most attentively perused and considered the voluminous testimonials of the various candidates, and made personal inquiry of many professional gentlemen of eminence, in whom I have every confidence, as to the special qualifications of the competing candidates; and I have come to be of opinion that, as regards personal merits, aptitude for teaching, combined with scientific knowledge and professional skill, three of the candidates, viz., Dr. Kieller, Dr. Matthews Duncan, and Dr. A. R. Simpson, stand so very much upon a par with each other, that it is difficult to discriminate between them.

"This being the case, it has given me much pleasure to record my vote, as above, in favour of Dr. Alex. Simpson, for the following among other reasons:—

"1st. Because Dr. Simpson is the son of that worthy brother (still living) who was the acknowledged means of Sir James Simpson's professional success, from which the world has received, and will receive, a lasting blessing.

"2d. Because Sir James Simpson often expressed a wish that his nephew might succeed him in the Chair, as the person best fitted to continue and expound to the students his system of obstetrics. Added to this, Dr. Alex. Simpson will have the advantage of possessing his uncle's invaluable museum, medical library, diagrams, apparatus, and other appurtenances used in lecturing.

"3d. Because the *City* and *University* (reflected as these communities are in the Court of Curators), by electing Dr. Alexander Simpson, will pay the highest tribute of respect and gratitude to the memory of his uncle, and do honour to themselves by retaining the beloved name of 'Simpson' in connection with the Edinburgh University.—I have the honour to be, &c.

(Signed) "Wm. Skinner, Curator."

The Royal Maternity Hospital.—Dr. Matthews Duncan has been unanimously elected one of the ordinary physicians to this Hospital.

There is not much fever at present prevailing in Edinburgh, the cases occurring are almost relapsing.

GLASGOW.

The University.—The Queen has been pleased to contribute £500 in aid of the University new buildings.

ABERDEEN.

Royal Infirmary Aberdeen.—We are glad to see from the report of the meeting of the managers of this institution, that an effort has been made to attach certain wards to the chair of Surgery in the University. This is a step in the right direction, and we intend in a future number to call attention to the desirableness of having a prominent connection established between the University and the Infirmary.

We learn from the *Aberdeen Free Press*, of 19th July, that the Medico-Chirurgical Society of Aberdeen has declined to express any opinion on the subject of the recent appointment to the chair of midwifery in Edinburgh.

We regret, not that it has so determined, but that its decision should have been announced in the journal referred to in terms which are painfully derogatory to the society as a scientific body, and prejudicial to the dignity of the medical profession in Scotland.

Dr. Alex. Ogston has been appointed surgeon to the Aberdeen Infirmary, in room of Dr. Keith, resigned.

Correspondence.

VACCINATION AND RE-VACCINATION.

LETTER FROM DR. CHARLES R. DRYSDALE

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—I don't know if it has been remarked by yourself or most of your readers, how completely the present terrible mortality from that most fearful of all human diseases—small-pox—in Paris is proving the necessity of adult re-vaccination. The fact that many of my acquaintances and coadjutors in attempting to repeal certain Acts—the Contagious Diseases Acts, 1866-69—which I consider as useless and unjust, being unconvinced as to the merits of vaccination, is a reason for me troubling you to prove a fact which you doubtless think as already but too evident.

The actual epidemic of small-pox, according to the Committee of which M. Tardieu was president and M. Latour secretary, commenced in the month of November last. In that month there were 93 deaths from small-pox in Paris: in December 119. From the 1st January, 1870, to May 24th, 4,250 cases of small-pox were taken into Parisian hospitals. Of these 683 died—about 14 per cent. In former days the mortality from small-pox was about one-fourth of those attacked, and half-a-million persons were said to have died annually of this disease in Europe at the latter end of the 18th century. But in the French army every soldier on entering the ranks is re-vaccinated or vaccinated, and from the 1st January to 27th May, 1870, of 13,050 patients of the Val de Grâce military hospital at Paris, there were but 116 cases of small-pox, although Paris was full of small-pox contagion. Only four of these died. Of these 116 small-pox cases 96 had been vaccinated in infancy, 13 re-vaccinated with effect, 3 without effect; 7 had not been vaccinated, and one of these died. In former days small-pox sometimes killed as many as 80 per cent. of hospital cases, and was the greatest and most horrible of all plagues.

If those gentlemen, such as Mr. F. W. Newman, and even some of our own ranks, who are so much opposed to vaccination, would read the Army Medical Report Blue Book for 1868, just published, they would find in some cases—as for instance, in Scotland in 1868—not a single case of small-pox occurred among the soldiers in that year. In Ireland, owing to the admirable manner in which the Poor-law medical officers perform their functions as public vaccinators, small-pox has been literally "stamped out." In the ten years ending 1841 no less than 58,000 persons died from small-pox in Ireland, and thousands were disfigured by it. During the next ten years, ending in 1851, the figures fell to 38,274, and from 1851 to 1861 to 12,727. In the year 1866 only 187 persons died of the disease in Ireland, and in 1867 only 26 persons. It is said now to kill scarcely anyone in Ireland or in Scotland.

One of the anti-vaccinators, a gentleman whom I have great esteem for, begged me to consider, in a conversation with him, that consumption was now the prevalent disease instead of small-pox, and maintained (with Dr. Copland, I think) that this disease was caused by the prevalence of vaccination. Of course, in such a difficult science as that of medicine, it will always be impossible to silence such objections. The *post hoc ergo propter hoc* reigns supreme in physiology, as it does in social science; but I would just ask our friends, who assert that vaccination is the cause of consumption, how they make out their theory? I have remarked that black races die very rapidly of consumption, just as white soldiers do under the same circumstances, when shut up in unventilated barracks, and that the richer classes in this country, all of whom are vaccinated, do not die so much of consumption as the poorer classes, who are ill-fed and ill-cared for, although the latter are certainly not so universally vaccinated as the rich.

That one child in ten thousand vaccinated showed fever and died, is but a poor argument against vaccination. All diseases are apt to cause slight disturbances and occasionally to destroy life. That one child in half a million vaccinated should have syphilis from it, but proclaims the necessity for care in selecting the vaccine matter, and this seems not to be difficult, since such cases scarcely ever occur in Britain. The last question in compulsory vaccination is the question of individual liberty. I am quite ready to confess that Government, or society, has no right to compel a grown up person to be vaccinated, or to abstain from alcohol, if he or she objects to it on good or bad grounds; but neither in the matter of education nor vaccination can I admit that parents have paramount rights over the lives of their children. In the days of Ancient Rome a father had power over the life of his children. Now-a-days society cares more for the individual than for the family, and parents must learn the needful lesson that there is no reason because they have, wisely or unwisely, brought a new member into the State, that they are to neglect the best interests of that citizen, either from want of knowledge or from supineness. These are the reasons why I am in favour of compulsory vaccination of children. I should be glad if Mr. Newman would reply.

I remain, Sir, yours, &c.,

CHARLES R. DRYSDALE, M.D., M.R.C.P., F.R.C.S.E.

THE CONTAGIOUS DISEASES ACTS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—With your wonted impartiality, I hope you will permit me to return to the subject of the *Contagious Diseases Acts* in reply to the communication of your eminent correspondent, Dr. Charles Drysdale; and before doing so I would fain endorse Dr. Drysdale's remarks respecting the liberality and honesty of principle, which forces itself upon every observant member of the Profession, with which the MEDICAL PRESS AND CIRCULAR is conducted. I must at once admit, and I am not at all ashamed in being corrected by such a physician as Dr. Drysdale, that in using the word *virtue* I meant to imply *chastity*: I should be sorry to be understood by followers of the Bentham School that, in saying the Irish were virtuous, I conveyed they were happy. It would be a somewhat complex matter to understand any people living under unjust laws, and subject to the ignominy of a conquered race, being contented or happy. There is no truer friend of Ireland than Dr. Drysdale himself. Recent writings of his own, wherein the Irish Celt was contrasted with the Anglo-Saxon race, met not only with enthusiasm in Ireland, but were uproariously received by our brethren in America. I am truly proud to learn that a gentleman of Dr. Drysdale's culture and acknowledged ability, after correcting me in the use of the word "virtue" and substituting chastity instead, should so freely admit that the Irish are a "chaste race." If it be so they belong to the Church of the majority in Ireland, which our learned French *confrère* designates absurd, and whose doctrines he considers it so very difficult to comprehend. I am no advocate for priestly terrorism, and no one despises the petty tyrant in the sheep's clothing more than I do, so that I may at once assert I believe it is not owing to the men who inculcate certain doctrines, but that it is true religion itself existing in all its purity and strength in Ireland that keeps the people chaste and from prostitution. As it is the nature of Frenchmen to thirst for war, for Irishmen to continue disaffected because of grievances which require to be redressed, so is it the nature of other nations to be depraved and rife with contagious disease, infanticide, &c. If M. Lefort's assertions, respecting the difficulty of understanding the doctrines of the Catholic Church were true, the Church of the minority in Ireland should show a comparative diminution in the number of prostitutes, but it will be found quite the reverse. The Church of the majority has the least. I am no advocate for the *Contagious Diseases Acts*. Captain Vivian, who opposed the repeal of the Acts in the House of Commons, and who would, doubtless, go hand in hand with Dr. Drysdale regarding greater facility in obtaining divorce, could tell that it is the nature of the English nation to be only too ready to break through every dogmatic rule of morality, and that, if prostitution were put down with an iron hand by the State it would exist and flourish in secret.

No one can dispute the importance of Dr. Drysdale's teachings respecting large families, but how many men of such prudence and self-denial are there to be found likely to practise it? The treasurer of the Poor Curates Fund I dare say could tell some valuable practical lessons of the utility of such a doctrine, even if only practised by the clergy of the Church of England.

I cannot refrain stating, however high my opinion of Dr. Drysdale may be, and my profound respect for him as a gifted physician is truly great, that in my humble opinion greater facility of divorce will not obviate the evil of prostitution and contagious disease. I should be afraid of it increasing it. Depraved wretches would take advantage of it and prove the ruin of many women. Our existing laws on the subject alone deter him. In some districts we find where the people are too poor to pay the costs of a divorce they agree by mutual contract to separate, and practise their depravity *sub rosa*, but our experience is that it seldom proves salutary to any party. Suppose there were no legal restriction and marriage were a farce, society would be in a pitable condition.

I am, Sir, your obedient servant,

J. WARING-CURRAN.

Osman House, Sutton, Notts, July 28th, 1870.

A NEW IODINE PAINT.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I have been requested by some professional *confrères* to bring under the notice of the profession, a new *iodine paint*, which I have had prepared and used with satisfaction and success, in the cases of glandular enlargements and scrofulous diseases, wherein iodine is called into requisition. In the hands of esteemed and eminent practical surgeons, it has proved equally beneficial as in my own practice, and they speak or write in flattering terms of it to me.

I rub down half-an-ounce of iodine and a like quantity of iodide of ammonium in a Wedgwood mortar, and gradually dissolve it in twenty ounces of rectified spirit; to this I add four ounces of glycerine, shaking the solution well together. A very nice paint is thus obtained, which has the following advantages:—

1. The iodine is prevented escaping owing to the combination which, in the form of ordinary tincture, in warm weather it is very apt to do.

2. It preserves the iodide of ammonium instead of the iodide of potassium; the former being a more powerful absorbent than the latter, which recent investigation has verified.

3. The action of the glycerine is soothing to the skin, keeping it soft and pliable, a contrast to the shrivelling of cuticle produced by the ordinary tincture in common use, which frequently acts as a vesicant. But where absorption is desired, the part affected and its neighbourhood influenced, as well as the system generally, by iodine, and no local irritation required, this combination in form of paint will be found superior to the old tincture.

Some time ago, in the columns of the MEDICAL PRESS, I gave a history of very extensive bronchoceles met with in the Valley of Rossendale, which were reduced by the iodide of ammonium, exhibited internally as well as locally applied in form of citrate. Since then I have seen parallel cases in Derbyshire, which were much benefited also by the combination of iodine, iodide of ammonium, and glycerine to which I now direct attention.

I have not confined the use of the preparation alone to glandular swellings or scrofulous gatherings. I have employed it in chronic cutaneous diseases, to nodes, over enlarged livers, diseased joints, to hypertrophied parts or morbid growths, and in cases wherein it was necessary to alter an abnormal action or promote absorption, and the result was uniformily satisfactory, and I think I may safely say, the effect of the iodine was more readily appreciable, and more quickly demonstrated in its action on the system generally, as well as by its absorbent properties locally, than the old tincture of the British Pharmacopœia, *minus* its disadvantages.

I am, Sir, your obedient servant,

J. WARING-CURRAN.

Osman House, Sutton, Notts, July 22nd, 1870.

BATHING.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—"Is it right for 'orrid little boys to bathe in the river?" is a thought that must have occurred to thousands as well as myself whilst journeying up and down "between bridges" on the Thames. If it is wrong let the Medical Profession speak against it and the authorities rigorously repress it; but if desirable, now that so much is being done to improve our great river and utilize its banks, let the Government, while spending so much money, pay a little more to provide, not little boys only, but all ages and both sexes of our huge population with suitable, economical, health-giving, *decent* and *safe* opportunities of obtaining cleanliness and beneficial open-air bathing and swimming, either by proper structures (combined with strict regulations as to dress, attendance, &c.), as provided at Biarritz (Basses Pyrenees, France, where the establishments belong to the municipality, and are a considerable source of revenue), to be built at proper distances along the Embankment, or else provide for the formation of "Ecoles de Natation," as in Paris. Perhaps some of your readers will develope or utilize this hint.

ALBERT HIND.

July 25, 1870.

SPIRITUALISM VIEWED BY THE LIGHT OF MODERN SCIENCE.

MR. WILLIAM CROOKES, F.R.S., has published an article in the *Quarterly Journal of Science*, entitled "Spiritualism Viewed by the Light of Modern Science." Mr. Crookes is the editor of the *Chemical News*; he is recognised as one of the most accurate observers possessed by the Royal Society, and it was he who discovered the new metal "thallium" by the aid of spectrum analysis.

We extract from the communication some of its most important statements. Mr. Crookes says :—

"A man may be a true scientific man, and yet agree with Professor De Morgan, when he says—I have both seen and heard, in a manner which would make unbelief impossible, things called spiritual, which cannot be taken by a rational being to be capable of explanation by imposture, coincidence, or mistake. So far I feel the ground firm under me; but when it comes to what is the cause of these phenomena, I find I cannot adopt any explanation which has yet been suggested. The physical explanations which I have seen are easy, but miserably insufficient. The spiritual hypothesis is sufficient, but ponderously difficult.

"Regarding the sufficiency of the explanation, I am not able to speak. *That certain physical phenomena, such as the movement of material substances, and the production of sounds resembling electric discharges, occur under circumstances in which they cannot be explained by any physical law at present known, is a fact of which I am as certain as I am of the most elementary fact in chemistry.* My whole scientific education has been one long lesson in exactness of observation, and I wish it to be distinctly understood that this firm conviction is the result of most careful investigation. But I cannot at present hazard even the most vague hypothesis as to the cause of the phenomena. Hitherto I have seen nothing to convince me of the truth of the 'spiritual' theory. In such an inquiry the intellect demands that the spiritual proof must be absolutely incapable of being explained away; it must be so strikingly and convincingly true that we cannot, dare not, deny it. No observations are of much use unless they are truthful and made under test conditions; and here I find the great mass of Spiritualistic evidence to fail. In a subject which, perhaps, more than any other lends itself to trickery and deception, the precautions against fraud appear to have been, in most cases, totally insufficient, owing, it would seem, to an erroneous idea that to ask for such safeguards was to imply a suspicion of the honesty of some one present. We may use our own unaided senses, but when we ask for instrumental means to increase their sharpness, certainty, and trustworthiness under circumstances of excitement and difficulty, and when one's natural senses are liable to be thrown off their balance, offence is taken.

"In the countless number of recorded observations I have read, there appear to be few instances of meetings held for the express purpose of getting the phenomena under test conditions, in the presence of persons properly qualified by scientific training to weigh and adjust the value of the evidence which might present itself. The only good series of test experiments I have met with were tried by the Count de Gasparin, and he, whilst admitting the genuineness of the phenomena, came to the conclusion that they were not due to supernatural agency.

"The pseudo-scientific Spiritualist professes to know everything; no calculations trouble his serenity, no hard experiments, no long laborious readings, no weary attempts to make clear in words that which has rejoiced the heart and elevated the mind. But, where every step is towards the marvellous and unexpected, precautions and tests should be multiplied rather than diminished. Investigators must work; although their work may be very small in quantity if only compensation be made by its intrinsic excellence.

"The Spiritualist tells of bodies weighing 50 or 100 lbs. being lifted up into the air without the intervention of any known force; the scientific chemist is justified in asking that a power, professing to be guided by intelligence, which will toss a heavy body up to the ceiling, shall also cause his delicately poised balance to move under test conditions.

"The Spiritualist tells of flowers with the fresh dew on them, of fruit, and living objects being carried through closed windows, and even solid brick-walls. The scientific investigator naturally asks that an additional weight (if it be only the 1,000th part of a grain) be deposited on one pan of his balance when the case is locked. And the chemist asks for the 1,000th of a grain of arsenic to be carried through the sides of a glass tube in which pure water is hermetically sealed.

"The Spiritualist tells us of manifestations of power, which would be equivalent to many thousands of 'foot-pounds,' taking place without known agency. The man of science, believing firmly in the conservation of force, and that it is never produced without a corresponding exhaustion of something to replace it, asks for some such exhibitions of power to be manifested in his laboratory, where he can weigh, measure, and submit to proper tests.

"For these reasons, and with these feelings, I began an inquiry suggested to me by eminent men exercising great influence on the thought of the country. At first, like other men who thought little of the matter, and saw little, I believed that the whole affair was a superstition, or at least an unexplained trick. Even at this moment, I meet with cases which I cannot *prove* to be anything else; and in some cases I am sure that it is a delusion of the senses. That the subject has to do with strange physiological conditions is clear, and these in a sense may be called 'spiritual' when they produce certain results in our minds. At present the phenomena I have observed baffle explanation; so the phenomena of thought, which are also spiritual, and which no philosopher has yet understood. No man, however, denies them.

In reference to the opinions thus expressed, Mr. Varley, the celebrated electrician, an earnest disciple of spiritualism, has addressed a letter to Mr. Crookes, in which he describes electrical experiments carried out by him for the purpose of investigating alleged phenomena. He says,—

"I have scarcely ever been able to induce mediums, through whom the physical phenomena occur, to consent to sit for accurate investigation. In 1867, Miss Kate Fox, the well-known American medium, agreed to sit with me in New York during a series of investigations into the relations between the known physical forces and the spiritual. A Grove's battery of four cells, a helix eighteen inches in diameter, electro-magnets, and other descriptions of apparatus were procured by me. The plan of action was as follows :—I was to go through a series of experiments, and the intelligences or 'spirits'—as they are usually, and I think properly, called—were to narrate what they saw, and

if possible to explain the analogies existing between the forces I was dealing with, and those which they employ. We sat eight or nine times for this purpose, but although great efforts seemed to be made by the spirits present to convey to my mind what they saw, it was unintelligible to me. The only positive results obtained were the following:—As we sat in the dark, and the manifestations were sometimes violent, I had taken the precaution to place the battery and keys on a side table, and led the wires from the "keys" or communicators, to the apparatus on the tables round which we sat, so that I could, in the dark, perform the various experiments I had arranged to try. Whenever, by accident, my hands came in contact with one of the wires, without my being aware which wire it was, I put these questions:—'Is a current flowing through it?' and if they said 'Yes,' I asked, 'In which direction does it flow through my hand?' This experiment was repeated, if my memory serves me rightly, not less than ten times. Each time, directly after being informed of the direction of the current, a light was struck, and in every instance I found we had been correctly advised, if we assume that the current flows from the positive to the negative pole.

"The experiments with the helix were of two kinds:—First, 'what action had the electrified helix upon me when placed over my head?' Secondly, 'when a piece of iron, or a compass needle, was placed inside it, could the spirits affect the magnetic action of the helix upon the iron or compass?' Repeatedly during the investigations, and while we were in the dark, I seized the opportunity of placing the magnetized helix over my head, and immediately, on each occasion, the spirits requested me not to do it, as it hurt me; nevertheless, I could feel no pain or sensible action myself. As no one but myself was aware that I intended to, or was placing, this helix over my head, it is perfectly clear that the fact was made known by some means inexplicable as yet by orthodox science.

We most cordially commend the high scientific spirit evinced by Messrs. Crookes and Varley in these inquiries. No amount of reiteration of pooh! pooh! can open the eyes of the public to the swindle, if it be one, or thrust out the truths of Spiritualism from the light of day, if there be phenomena worthy of notice. If men like Mr. Crookes grapple with the subject, taking nothing for granted, even under overwhelming re-assertion, until it is proved, we shall soon know how much—if any portion—of it, we are to believe.

If Spiritualists are neither dupes nor swindlers they have gone far to put themselves in either category, firstly, by concocting ridiculous attempts at explanation of phenomena; secondly, by involving their phenomena in a fusty fog of darkness and mystery; and, thirdly, by setting their faces against scientific inquiry.

We need no further proof of this latter accusation than the *naïve* confession of Mr. Varley:—

"I have scarcely ever been able to induce mediums, through whom the physical phenomena occur, to consent to sit for accurate investigation."

Medical News.

Royal College of Physicians of London.—The following members were elected Fellows of the Royal College of Physicians on the 28th ult.:—William Wadham, M.D., London; Samuel Martyn, M.D., Bristol; Adam Bealey, M.D., Harrogate; Stephen Henry Ward, M.D., London; Edward Clapton, M.D., London; William Cholmeley, M.D., London; George Britton Halford, M.D., Melbourne, Victoria; Edward Long Fox, M.B., Clifton; Edward Thomas Wilson, M.B., Cheltenham; Charles Elam, M.D., London; Arthur Julius Pollock, M.D., London; Henry Matthews Tuckwell, M.D., Oxford; Octavius Sturges, M.B., London; William Smoult Playfair, M.D., London; Henry Gowen Sutton, M.B., London; Samuel Fenwick, M.D., London; Sydney Ringer, M.D., London; Charles Hilton Fagge, M.D., London; William Selby Church, M.B., London; Samuel Jones Gee, M.D., London; Walter Butler Cheadle, M.D., London; Philip Henry Pye-Smith, M.D., London; Dyce Duckworth, M.D., London; Hy. C. Bastian, M.D. Lond. At the same meeting the following having passed the required examinations, were admitted as members:—I. C. J. Fenwick, M.B. Cantab., of London; E. Buchanan Baxter (Lic.) M.B. Lond., of London; Charles Kelly, M.D. Lond., of London; and Frederick Thomas Roberts, M.B. Lond., of Kensington.

Royal College of Surgeons of England.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 26th ult., viz.: Messrs. Alfred Henry Carter, L.S.A., Pewsey, Wilts; Doyle Granville, Gloucester road, N.W.; Martin Henry Payne, L.R.C.P. Edin. and L.S.A., Bridgwater; and William James Palmer, L.S.A., Great Yarmouth—students of University College; John Desborough Robinson, Syston, Leicestershire, of Charing Cross Hospital; John Dixon, Newcastle-on-Tyne; Henry William Webster, Tamworth, Staffordshire; and Charles Holmes, L.R.C.P. Lond., Ardwick—of the Manchester Royal School of Medicine and Surgery; Morgan Philip O'Leary, Ballintarmin, county Kerry, of the Dublin School; Antonio José Amadeo, M.D., Philadelphia; Porto Rico, of Philadelphia; Edwin Brownrigg Wood, Birmingham; and William Hugh Lambart, Liverpool—of the Birmingham School; Adam Young, Boston, Lincolnshire, of St. Bartholomew's Hospital; Frederick Peter Deshon, L.S.A., Coulston, Wilts, of the Middlesex and London Hospitals; Kristo Dhan Ghose, L.M. and S., Calcutta, of the Calcutta School; Henry Macready Chute, Bristol, of the Bristol School; Henry Ensworth Jackson, Highbury; and Samuel Stickland, New Charlton, Kent—of Guy's Hospital; James Robert Liston, Peckham; and Charles Jervis, St. John's-wood Park—of St. Mary's Hospital. The following candidates, who passed in surgery at previous meetings of the Court of Examiners, having since obtained medical qualifications recognised by the college, were also admitted Members, and received their diplomas, viz.: Samuel Evans, L.S.A., Llandovery, South Wales; William Renwick, L.R.C.P. Edin., Tyr Phil, Glamorgan; Henry Parmiter, L.S.A., Dorchester; Edward Willis Way, L.R.C.P. Lond., Adelaide, South Australia; Arthur John Hogg, L.R.C.P. Edin., Ealing, Middlesex; Howard H. J. Nicholls, L.S.A., Kennington Park; William Watson Dove, L.R.C.P. Edin., Ledbury road, Bayswater; Richmond Leigh, L.S.A., Liverpool; and Henry Frederick C. Eagle, L.S.A., London Hospital.

University of London.—The following gentlemen have passed the Preliminary Scientific (M.B.) Examination. *First Division:*—Messrs. Edward C. Baber, St. George's Hospital; Albert B. Barrow and George H. Batterbury, King's College; Philip H. Carpenter, University College and Royal School of Mines; Eugene Cretin, St. Bartholomew's Hospital; Henry J. F. Groves and Henry Hetley, Guy's Hospital; Charles R. Bell Keetley, St. Bartholomew's Hospital; Edward Kennedy, B.A., Manchester Royal School of Medicine; John Lewtas, Liverpool School of Medicine; John Magrath and Bernard M. S. Roth, University College; James Shuter, St. Bartholomew's Hospital; Sydney H. Vines, Guy's Hospital; and Ernest W. White, of King's College. *Second Division:*—Andrew Dodson, Queen's College, Birmingham; George Garlick, University College; Francis G. Hamilton and Vincent D. Harris, St. Bartholomew's Hospital; Jean A. Hullard, University College; Arthur H. Jones, Private Study; William H. Lamb, Guy's Hospital; Thomas E. Maclean, University College; Edward M. Madden, King's College; Thomas S. Morley, Private Study; William J. Notley, B.A., University of Edinburgh; Frederick J. M. Palmer, Guy's Hospital; Henry E. Price, University and Regent's Park Colleges; James A. Rigby, Guy's Hospital; Thomas King Rogers, University College; T. Henry Sawtell, St. Bartholomew's Hospital; R. H. Ainsworth Schofield, Owen's College; John W. Taylor, Charing Cross Hospital; and Edward Wackerbarth, of University College.

At a Court of Examiners held on the 28th July, the following gentlemen having passed the necessary examinations, were admitted licentiates of the Society of Apothecaries, viz.:—Messrs. Robert Chalmers, of Glasgow; Edward Madely, of Kensington; Edwin Smith, of Birmingham; and Edward

Southee, of Canterbury. And at the same court the following passed the primary professional examination, viz. :— Messrs. B. Brindley, of University College Hospital; C. W. S. Deaken, of University College Hospital; T. R. Edmundson, of Guy's Hospital; G. H. Fosbroke, of Westminster Hospital; J. D. Harris, of St. Bartholomew's Hospital; W. A. Maybury, of St. Thomas's Hospital; R. H. Paterson, of Guy's Hospital; John W. Watson, of University College Hospital; and D. M. B. Wheeler, of Guy's Hospital.

Working Men's Fund for the Extension of the Queen's Hospital, Birmingham.—The third half-yearly report of the General Committees presented yesterday evening, shows that the amount received to this date is £2,878 3s. 9d., of which £729 15s. 4½d. has been paid by gentlemen, and others not belonging to the working classes. The contributions from workpeople during the third half-year have amounted to £43 18s. 9d. less than the first, and £95 6s. 0½d. more than the second half-year. The workpeople in 288 factories and workshops have paid to this fund since its establishment, in January, 1868, whereas only 203 subscriptions from bodies of workpeople were paid in last year to the five following local institutions collectively :—The General Hospital, the Queen's Hospital, the General Dispensary, the Eye Hospital, and the Children's Hospital. Such an example as this is highly commendable, and will, we trust, be followed by the working classes of other large towns.

East London Family Emigration.—Earl de Grey and Ripon's letter in the *Times* of Monday, on behalf of this fund, shows that in spite of harsh conduct towards our noble and self-sacrificing Profession, in the late debate on Medical Reform, we may yet hope to have his lordship's aid in some of the good works which depend upon us. Contributions will be received by the Countess de Grey, 1 Carlton Gardens, and we may hope that by another year the humanizing influence of the countess and her work may inspire the Earl with a desire to do justice towards our Profession.

The Sick and Wounded.—The care of these is the duty and joy of our Profession, which always practises neutrality and heaps its benefits on all. It is our pleasure then to record that a national committee has been formed in England to co-operate with those abroad in furnishing aid to sufferers from war. The Heir Apparent is president. The offices are at 8 Trafalgar square. There has also been formed a ladies' association to which every one will wish well, as no more appropriate sphere for female work exists. Contributions may be paid to the ladies of the association, or to Messrs. Ransom, Bouverie, and Co., 1 Pall-mall, East; Lady Lyell, 73 Harley street, W.; Mrs. Russell Gurney, 8 Kensington Palace gardens; Miss Florence Nightingale; Mrs. Lyell, 42 Regent's Park road; Mrs. W. Wilson, 24 Park square, Regent's Park, N.W.; Miss Shepley, 24 Park square, Regent's Park, N.W.; Mrs. James Reiss, 7 Cromwell Houses, South Kensington; Madame Lind Goldschmidt, Oak Lea, Wimbledon Park; Mrs. Salis Schwabe, 8 Clarges street, Piccadilly, W.; and Mrs. Spencer Percival Robbins, 5 James street, Westbourne terrace.

Bachelor?—The degree of "Bachelor" of Laws has been conferred by the Chicago University on Mrs. Kepley, wife of Mr. H. B. Kepley, of Effingham. This is better than lady "bachelors" of medicine.

NOTICES TO CORRESPONDENTS.

WERE THE PRIESTS OF ANCIENT EGYPT THE FIRST PHYSICIANS?

To the Editor of "The Medical Press and Circular."

Sir,—It appears to me that the readers of the Medical Press and Circular should feel most grateful to your talented contributor, Mr. Donovan, for having kindly supplied them with so much valuable information, the result of his profound research on this subject; truly brief, yet thoroughly comprehensive. The study of the classical history of physic, not only in the widest sense expands the intellectual capacities of the physician towards the reception of other more practical details, but, by the acquisition of the knowledge of the doctrines and practice of the ancients, suggest the fundamental structure of principles, many of which in our own days have been denominated *inventions* or *discoveries*, although in reality but the *re-introduction*, under brighter auspices, and guided by the superior advancement by a more enlightened age, of the practices of our forefathers, which, clouded by ignorance and superstition, have lapsed gradually into obscurity.

In connection with the subject at issue, it may be interesting to some who have not paid attention to the matter, to know that Mahomet not only practised medicine, but even wrote on the subject. Records which have been handed down from Abulpharagius (one of the most celebrated of the ancient Arabian physicians), acquaints us with the fact. He and his followers for several generations belonged to the sect of Empirics, which took its origin in Alexandria. About the same period (the latter part of the seventh century, A.C.) an Alexandrian priest named Aaron, wrote in the Syriac language a number of treatises called the "Pandects of Physic," which were afterwards translated into Arabic by a Syrian physician. It is also a remarkable fact that Mahometan mosques were always founded at the same time and place as hospitals and medical colleges, a custom first commenced by Rashid, the fifth Caliph of Bagdad, of the line of Abbas, and pursued by many of his successors.

Some little doubt exists on my mind regarding the correct interpretation of the word in the 50th chapter of the book of Genesis, which in the English version is translated *physicians*, as well as of the meaning which the translators intended to convey by the word they selected. Of this, however, after the revision of the Pentateuch.

I am, Sir, your obedient servant,

South Molton, Devon. Francis E. Clarke, M.B.

July 20th, 1870.

War Maps.—In addition to those noticed in our last, we have since received the 1s. 6d. map of Messrs. Johnston and Co., which, like most, if not all the others, represents that portion of the European continent within a given area of the seat of war; transferred from large maps to ston, and reprinted in colours on smaller sheets. There is one improvement in Messrs. Johnston's map which we do not find in the others. The little petty German States of the Confederation, not actually tributary to Prussia, although joined with that power against France, are printed with a different tint, whereas the other maps give the whole of Germany in one colour, which makes them less distinct for tracing purposes. We can highly recommend Messrs. Johnston's map.

Ionorans.—It is held by high authorities that the second eight days in the intermediate period are safe. The proofs of the statement are not conclusive, and it may be dangerous to proceed on an assumption of its truth. The subsequent week is considered peculiarly hazardous.

Baby-Farming.—As to "A. B.'s" letter in the *Times*, a correspondent could not help regretting, when he read that letter, that so much zeal as the writer exhibited in the cause should be allied with so little discretion and delicacy of feeling in carrying out the inquiry. He is greatly astonished that the *Times* should have given space to such a letter. The way in which "A. B." enlisted the co-operation of an ignorant servant, and the possible effect upon that servant's mind, with the gossip which the affair would cause throughout the household, seemed all most objectionable,—unwise in the extreme on the writer's part. I am glad "A. B" has been reproved through your columns. It is such indiscreet women who bring discredit upon their sex, and one cannot help regretting that so much energy and courage should be wasted upon a woman who has so little share of womanly instinct to guide such noble and valuable qualities aright.

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

The American Journal of the Medical Sciences. The Monthly Journal of Dental Science. Le Mouvement Medical. The Homœopathic Review. Science Gossip, &c.

VACANCIES.

Holborn Union (London) Workhouse—Medical Officer and District Medical Officer. Salaries, £150 and £105 respectively.

Great Northern Hospital, London—Surgeon. Must be F.R.C.S.

Anglo-American Telegraph Company—Medical Officer for Newfoundland. Salary, £300.

St. George's Dispensary, London—Physician-Accoucheur and a Surgeon. Honorary.

Bournemouth General Dispensary—Resident Surgeon. Salary, £100.

North Wales Counties Lunatic Asylum—Assistant Medical Officer. Salary to commence at £80, with board and residence.—[See advt.]

Birmingham Workhouse—Medical Officer. Salary, £200, with residence, &c.

APPOINTMENTS.

Badge, Dr. N., Assistant Medical Officer to the *Hamadryad* Hospital Ship, Cardiff.

Bellamy, E., F.R.C.S., Assistant-Surgeon at Charing-cross Hospital.

Butler, Mr. F. W., Assistant House-Surgeon to the Westminster Hospital.

Cockcroft, G. E., M.R.C.S., Medical Officer for the Hurworth District of the Darlington Union.

Godson, C., M.R.C.S., Surgeon-Accoucheur to the Lying-in Hospital, City road.

Hay, Dr. P. G., Assistant Medical Officer at the Aberdeen Royal Lunatic Asylum.

Orange, W., M.D., Medical Superintendent of the Broadmoor Lunatic Asylum.

Power, H., F.R.C.S., and B. J. Vernon, F.R.C.S., have been elected Ophthalmic Surgeons at St. Bartholomew's Hospital.

Ruxton, J., M.B., Junior House-Surgeon to the Preston and County of Lancaster Royal Infirmary.

Snow, H. L., M.B., House-Surgeon to the South Staffordshire General Hospital.

Steven, A., M.D., Medical Registrar at the Hospital for Sick Children, Great Ormond street.

Underhill, Dr. A. S., Resident Medical Officer at the Birmingham and Midland Free Hospital for Sick Children.

Whitcombe, E. B., M.R.C.S., Assistant Medical Officer to the Birmingham Borough Lunatic Asylum.

Wills, Mr. C. J., Assistant House-Surgeon to the Northampton General Infirmary.

Marriages.

Clothier—Carr.—On the 13th ult., at Tiverton, Henry Clothier, M.D., to Mary Elisabeth, daughter of Isaac Carr, Esq.

Hopkins—Smith.—On the 23rd ult., at St. Mary's, Bryanstone square, Alfred Boyd Hopkins, M.R.C.S., to Frances Eliza, third daughter of J. E. Smith, Esq., of Gloucester place, Portman square.

Irvine—Edie.—On the 19th ult., at St. Silas, Liverpool, John W. Irvine, M.D., to Mary, widow of John Edie, L.R.C.S.Ed.

Reed—Instone.—On the 13th ult., at St. Paul's Church, Hammersmith, Samuel Cartwright Reed, M.D., of Fulham, to Florence, only daughter of S. Instone, Esq., of Acton.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 10, 1870.

CONTENTS.

Original Communications.

EXPERIENCES OF A REGIMENTAL SURGEON IN INDIA.

By C. A. Gordon, M.D., C.B.,

Deputy Inspector-General of Hospitals.

(Continued.)

Constable, 10th Foot, aged thirty-seven, sixteen years in India, admitted at Dinapore, 23rd August, 1857. Having, the day previous, returned to cantonments from service in Jugdespore jungles, where he had been much exposed to sun and rain, he was, at 3 a.m. of that day, suddenly aroused from sleep by severe griping and purging. At seven o'clock he was brought to hospital, and immediately received a carminative draught. His eyes were then sunken, the tongue cold, fingers somewhat corrugated; the early stage of cholera was distinctly marked, and a few minutes after his admission cramps in the abdomen and limbs had become intense. A sinapism was now applied to the abdomen; hot brandy in sago was administered; aromatic spirits of ammonia and sulphuric ether, each 20 drops, with 10 drops of tincture of capsicums, were administered every half-hour. In two hours after treatment had been commenced the symptoms began to moderate, leaving only exhaustion. No other remedy than a continuance of the carminative was required, and recovery was rapid and complete.

With regard to the *post-mortem* appearances in cases of cholera, I would here transcribe what I had observed so long ago as 1843-4, in reference to epidemics of the disease which visited the *Buffs* stationed at Allahabad in each of those years. My remarks on that occasion were that "in examining the bodies of those who have died of cholera we are struck with the absence of all appearances which, under ordinary circumstances, would account for death. We always find extensive congestion of the venous system, the right side of the heart being gorged with dark liquid blood; and, what is a remarkable feature in the disease is the total absence of those coagula in the heart, which are usually discovered after death from other diseases. The stomach and bowels are remarkably pale; their inner surface coated with soft ropy matter, as if it had been smeared over with thick mucilage. The stomach usually contains a greater or smaller quantity of the medicines that had been administered in the course of treatment, and the lower part of the intestinal canal is filled with the characteristic rice-water fluid. The gall bladder is distended with dark ropy bile, and the urinary bladder is invariably contracted and empty.

The occurrence of increase of temperature in the bodies of those who die of cholera, and of spasmodic actions, both continuing for a considerable time after dissolution, are phenomena which, from their very nature, commanded the attention of medical officers. They are by no means of invariable occurrence in those who die of cholera, nor are they confined to such, having been frequently noticed in the bodies of persons destroyed by yellow fever in the West Indies and South America; but, when they are first observed, and especially if witnessed by a near relation of the deceased, the impression produced is something appalling. I give an example:—

Case of Lt. Followes, 53rd Regiment, Calcutta, 1856. About ten years ago, while stationed at Cawnpore, he had a severe attack of cholera, his recovery from which he attributed to his having clandestinely drank nearly a bottle of brandy.

He ever afterwards retained a rooted fear and apprehension of the disease; but his health continued good until the arrival of his regiment at Fort William, where, during the latter part of January and all February, 1856, he was frequently awakened suddenly at night by an attack of diarrhœa, attended by "spasms" in the abdomen. He never mentioned these to anyone but a servant, who used to procure hot water as a pediluvium, as well as some brandy and tincture of ginger, and under this treatment the symptoms disappeared.

On 25th of February, 1856, he visited Dum Dum for the purpose of bringing back his wife, who was there on a visit. At breakfast he ate a large quantity of fruit, of

which he was particularly fond, partaking, among others, of oranges and pineapple.

During the rest of that day he felt uncomfortable, but looked unusually well—so much so that his friends congratulated him. At dinner he had no appetite, and contented himself with a plate of soup. He complained of drowsiness, and during the meal nodded several times, although such was not his usual habit.

In the evening, when returning, he fell asleep shortly after entering the "garry;" but after a time awoke, feeling dreadfully sick, and with an inclination to be purged. He had to rush out almost instantly, when he vomited profusely, and had a copious alvine evacuation. His wife, on his return to his seat in the conveyance, having expressed her alarm and fear regarding his state, he said,—"Oh! there is no fear of me; I have once had cholera, and could tell at once if I had that disease."

He had no further evacuation previous to his arrival at his quarters at about 10 o'clock (p.m.); yet, by that time he was so weak that he was unable to stand. From this time he was purged, and vomited six times before 3 a.m. Cramps took place in his legs, the pain from which became intense. These extended to his stomach (abdomen) and loins. Jactitation was constant—he turned from side to side, tossed his arms about, and groaned from pain. His voice was hollow; his fingers corrugated; features sunken; a dark zone beneath the eyes; the tongue and breath cold; the pulse fluttering, and at times imperceptible; the entire surface bedewed with cold clammy perspiration, which stood upon his face in large prominent drops. The spasms continued a considerable time after both vomiting and purging had ceased; as the vital powers decreased his jactitation diminished, and then during each accession he could only moan, while, in subdued voice, he ejaculated, "Oh, God! Oh, God!"

About four o'clock a.m. all bodily suffering ceased, and he fell into a deep sleep. The temperature of the surface now increased somewhat; the pulse beat more full and steady, and hopes were entertained that recovery might take place. Meantime, worn out with distress of mind and bodily exertion, his wife also dropped off in a slumber. About eight a.m. the pulse again began to flag—it rapidly sank, and then became imperceptible; the warmth of surface gradually became less, and, without awakening from his rest, he passed into death.

The widow awoke, and looked calmly at the body of her husband as it still lay upon its side in the attitude of sleep.

She knew not the change that had taken place, neither could she realise its truth when informed of it—and now came a scene most trying and heart-rending. She rushed to the corpse, threw herself upon it, while she burst into an agony of tears and hysterical sobs. Sympathy at such a moment was out of the question, and she was left unmolested to give vent to her first burst of grief.

In a few minutes, what was our horror to hear her scream—"Doctor, he moves, he moves!"—the last effort of muscular contractility showing itself in slight flexure of the fingers. In vain we endeavoured to convince her how delusive were her hopes of returning animation. "But he's getting warm," she sobbed, while she looked at us imploringly, "and must be alive." We had to point out that this peculiar phenomenon was also one of the fearful malady that had just claimed its victim.

It was difficult to form a theory capable of accounting for these phenomena, and I question if any satisfactory explanation has yet been given in regard to them. I will only quote the opinions of two eminent authorities:—Dr. Carpenter observes* that "Muscles possess the inherent property of contractility, yet are dependent upon the nerves for the exercise of that power." . . . . "This contractility may remain for some time after the nerves have ceased to be able to convey to them the effects of stimuli;" and then goes on to remark that "whilst the irritability of muscles is gradually departing after death, it not unfrequently shows itself under a peculiar form." . . . . "the most remarkable manifestations being witnessed after death from cholera and yellow fever, the muscular contractions in such cases being frequently spontaneous, and sometimes give rise to movements resembling the ordinary actions of the living state." Dr. Carpenter further quotes from Dr. Dowler, of New Orleans, various illustrative cases, in one of which this contractility continued upwards of four hours after death in a fatal case of yellow fever, in allusion to which it was remarked that "many circumstances indicate that these movements were due to the inherent contractility of the muscles, and were not in any degree dependent upon the operation of the nervous system."

Referring to the increased bodily temperature after death in connection with *post-mortem* muscular contractility in these two forms of disease, he makes allusion* to the general fact, to which, however, there are numerous exceptions, that increase of bodily heat during life usually attends accelerated pulse, and decrease of temperature those affections in which the pulse is slow, although there are numerous exceptions. He observes that "it is not a little remarkable that the temperature of the body should sometimes rise considerably after death;" and he gives a table, according to which it would appear that in some cases of disease the temperature of the thigh and epigastrium rose to 111° Fah. and 113° Fah., at the same time that the heat of the brain was only about 100°. He, however gives no explanation of the phenomenon. He merely records it.

Professor Houghton would appear to be of opinion that the continuance of muscular motion and the occurrence of increased temperature after death "tend to prove that the impeded circulation, which is the prominent symptom in cholera collapse, is due to the constriction of the capillaries, in consequence of which the muscles are deprived of their supply of freshly oxidized blood, the result of which is necessarily contraction and cramp, which produces the excessive agony and cramp that characterises the disease."†

I regret much my inability to perceive that these observations contain anything approaching a sufficient explanation of the phenomena alluded to, and more especially of their occurrence, particularly in bodies of the dead, by only two diseases, namely, cholera and yellow fever. A similar increase of temperature is said to be sometimes observed in the bodies of those who die by tetanus.

The latest reference to this subject occurs in the *Lancet* of 1st January, 1870, where *post-mortem* temperature is briefly discussed. It is there stated that, respecting the cause of the phenomenon, one set of observers attribute it to *solidification* (rigidity of the muscles), others, to the continuance of *vital* action after the motion of the heart has ceased; but it is apparent that neither of these *explanations* affords any real clue to the ultimate conditions upon which it depends. The subject, however, is one of great interest and importance, and will, it is hoped, be fully investigated.

* "Human Physiology," pp. 319 et seq.

* *Op cit*, p. 638.

† Medicine in Modern Times, p. 144.

CASES IN PRACTICE.

By R. L. Johnson.

The wife of George B., residing in Westminster, stopped me by a footway of the neighbourhood on a certain occasion, and, in words beseechingly pathetic, implored my assistance to relieve her husband, a labourer, who was "knocked idle on account of his back." She would not have intruded on me, she said, but for the fact of their large family; and, as I happened to be in the neighbourhood, she thought I might try and do something for him.

I accompanied Mrs. B. to her residence, where I found her husband sitting in a semi-erect position, and in great agony. He complained of intense pain on the right side, in the "small of his back;" he had been ailing for a month, and had become worse daily since that time. He was losing flesh, sleep, appetite, and heart. He had been cupped, blistered, poulticed, and had taken "stuff;" but the relief experienced was only slight and temporary. Little exertion gave him great pain, and the position in which I found him on my arrival at his residence rested him most, and afforded him the only ease he experienced.

I caused his cotton and his flannel shirts to be removed. Ocular demonstration revealed nothing abnormal at the seat of pain; but, on running my fingers over the part, and applying a moderate amount of pressure, I found a substance seemingly semi-elastic, of about two and a half inches long, and half an inch in diameter, lying beneath the skin, and over the latissimus dorsi muscle, four inches above the crest of the ilium, and two inches from the lumbar vertebræ. This substance rested parallel to the course taken by the fibres of the lumbar aponeurosis—more deeply situated—and permitted a small amount of displacement each time I raised the skin over it, or attempted by finger and thumb manipulation to diagnose its nature and structure.

During the time of examination my patient suffered acutely; but, as he "felt confident I'd do him no harm," he bore his sufferings pretty well.

I concluded there was a foreign substance beneath the skin, but my difficulty to remove it appeared almost insurmountable, for I was without a pocket case, and a stranger in the neighbourhood!

I represented to my patient and to his wife the peculiar position in which I was placed. "The cause of your great sufferings," I said "appears to be very easily removable; it evidently lies not very deep below the skin—one little cut, and most of the anxiety and the pain would undoubtedly leave you; but, unfortunately, I have no pocket case with me, what shall we do? I have a keen cutting pocket-knife; but that——" "Ah, it might do; try it, Doctor," said Mrs. B., breaking up my sentence. "Eh, George, don't you agree?" "Oh, I agree to anything but the continuance of the pain I suffer," my patient responded.

Instinctively, I placed my fingers in a pocket of my vest, and removed from it the knife, and with it my *latch key*. I was about to replace the latter when a rather original notion entered my head. It was to cause the latch key to become an important agent in my little operation, and thereby likely to lessen considerably the limits of my knife's action; for, I just remembered that, as my fingers travelled towards the *ends* of that body on whose removal I became now heroically resolved, they appeared to become small and very definable. Consequently, I determined to try and force into the pipe of the latch key one end of the body to be removed, by depressing the opposite end of it as I forced; then to depress the key end, as I may be permitted to call it, grasp the skin, and force the opposite end; then to make a small incision through the skin over this end, and still use force sufficient to enable me to grasp the foreign body, and finally draw it through the opening. Well, I succeeded in applying the latch key as I intended; but, although the opposite end of the foreign substance pressed against the skin sufficiently to permit me to define its exact position, and to puncture the skin; still, the pain to my patient was so intense, and the difficulty of forcing the point of the foreign body to the surface so considerable, that I asked to be favoured with something strong and hollow, into which I might direct a now semi-exposed point. A pewter eg cup, a poker, and a smoothing iron were presented for n ceptance! and presently several neighbours of my patient dropped in with latch keys of many ages and sizes—one of the latter answered my purpose admirably, and it enabled me to remove from its abnormal position the cause of much anxiety and suffering to my patient. This proved to be a *needle*, with eye and point complete (the latter blunt on account of its thick jet black coat of oxidation), of the kind used for ordinary tailoring purposes.

Neither ooze of serum, blood, or matter, accompanied the withdrawal of the needle, and on the day following its removal my patient resumed active employment, buoyant, and blessing the doctor. But he is quite unaware when or how the needle found its late resting place, and assures me that for some years previous to his recent sufferings he occasionally experienced pain in his right thigh, then in his groin, and subsequently in his abdomen, and feels convinced the needle made its way to the position which it occupied at the time of its removal by me, through other regions of his person, gradually, and from the period of his infancy.

The needle is in my possession, and I have been informed it is not of recent manufacture. The thickened stricture by which it was surrounded, as it lay *in situ*, became absorbed ere many days.

CLINICAL MEMORANDA.

TABES MESENTERICA—INUNCTION.

(Reported by John W. Martin, M.D.M.Ch., Q.U.I.

The following case, illustrating as it does the success to be obtained in suitable cases from the treatment by inunction of the wasting and diarrhœa accompanying the affection known as tabes mesenterica, will, I trust, prove interesting:—

Case. (Notes taken Jan. 28th, 1870).—Thomas Moor, æt. two years, delicate for the past twelve months, troubled with an almost incessant purging, rarely ceasing for any length of time. About five weeks previous to date on which these notes were taken, he suddenly "lost his walk;" from which time the purging became incessant and rapid wasting set in. He complained of a great soreness of the body, any attempt at moving him giving great pain. The abdomen was hard, tender, and swollen. A severe cough caused him to vomit almost everything he eat. The expression of his face was most piteous. During four weeks that he attended at the Dispensary astringents of all kinds failed to give any but the most temporary relief. Nothing but a fatal result seemed awaiting him. Seeing in the Medical Press and Circular for January 22nd, 1870, the suggestion to treat such cases by inunction with olive oil, I thought the opportunity a favourable one for giving the treatment a trial. I ordered the mother to rub the oil, previously warmed, well into the child night and morning, and then to wrap him in flannel and prevent his getting fresh cold. On the 28th, the date on which these notes were made, the following is a comparison of his condition before and after the adoption of the treatment:—

BEFORE.	AFTER.
1. Purging.	1. Almost gone.
2. Cough and vomiting.	2. Losing cough, and vomiting altogether stopped.
3. Soreness of body.	3. None.
4. Wasting and emaciated appearance.	4. Appearance greatly improved.
5. Anorexia.	5. Appetite improved.
6. Unable to walk.	6. Able to walk.

From this time forward improved greatly. Placed him on Cit. ferri. ammon. and cod-liver oil. In the latter part of April had a recurrence of the purging, though nothing like what it had been in January; again, the inunction completely checked it, and he is now doing well.

In the above case inunction answered admirably, but I have met with other cases in which it had no effect whatever. Whether the failure was due to its being improperly or imperfectly carried out, I cannot say, but still, I think,

we must only regard it as one amongst many remedies with which we can do battle with a most serious and painful affection, and with which all engaged in practice are well acquainted. We may well feel thankful if it prove of service in some of the many cases that fall under our notice.

Hospital Reports.

INTRA-ABDOMINAL ABSCESS EVACUATED BY THE "ASPIRATEUR."

By Mr. Morgan, F.R.C.S.I.

Surgeon to Mercers' and the Westmoreland Lock Hospitals.
Professor of Surgical and Descriptive Anatomy, R.C.S.I.

Since the report of this remarkable case in the last number of the Press, the opening made by the trocar tube of the "aspirateur" became established with the surface, and, though not exceeding a crowquill in size, it poured out in the first three days an immense quantity of purulent matter of the same thick, healthy-looking appearance, with considerable fœtor. Many ounces were discharged daily.

The amount is now lessening daily, and the opening is rather closing; the fœtor also is less, and the patient's health has improved so much, that she ventured to get up and walk about during the absence of the nurse.

ARMY HOSPITALS.

Case of Aneurism of the Heart, situated at Apex of the Left Ventricle, bursting into the Pericardium, and causing immediate death.

By Staff-Assistant-Surgeon McNalty, M.D., F.R.C.S.I., Devonport.

Private R. N., æt. 26, a bandsman belonging to the 2nd Battalion Rifle Brigade, of nine years' service, five of which were passed in India, was brought dead to the Military Hospital, Stoke, Devonport, on 21st April, 1868.

History.—His Medical History Sheet shows that he had primary syphilis in 1862, since which period he was admitted into hospital three times for secondary symptoms; he had also been subject to chronic rheumatism.

He was considered a tolerably healthy man, was in the habit of playing the trombone, or some other brass instrument, and was constantly practising. Latterly he had lived pretty freely, but not to the extent of intemperance. On the 16th April, 1868, he felt indisposed, and was excused playing in the band on that day, but did not, however, feel sufficiently ill to seek admission into hospital. On the day preceding the evening of his death, he was subject to much mental emotion. The following account of the circumstances attending his death is furnished by a comrade:—

About 8.20 p.m. on the 21st April, the deceased entered an inn in Devonport, apparently in his usual health. Being offered a glass of ale, he made no reply, but walked over to a table in the room where some men were drinking, and immediately afterwards fell down. He appeared quite insensible, and was taken into the open air, but did not seem to revive; he was then conveyed without delay to the hospital.

There was some delay in making a *post-mortem* examination, owing to the supposition that a coroner's inquest would be held.

Appearances 38 hours after Death.—Body muscular, well nourished, and covered with a considerable amount of fat; scrotum, œdematous; no external marks, with the exception of some old scars, not adherent to the bone, and situated in front of both tibiæ. There was observed to be a want of death-like pallor in the countenance. Rigor mortis moderate.

The circumpallate papillæ of the tongue were somewhat enlarged. The larynx, trachea, and larger bronchi, were free from disease.

On opening the chest, the lungs were found not to collapse as much as usual; they were decidedly emphysematous, and were partially congested; pleuræ, healthy. The pericardium was enormously distended, overlapping and pushing aside the left lung. It was much thickened, especially where it embraces the large vessels at base of heart, and contained, at a rough guess, upwards of 20 ozs. of serum, blood, and loose, soft coagulæ.

The heart, from pressure, appeared twisted on its long axis, and, from maceration in the contents of the pericardium, was rough on its external surface (not unlike an ox's tongue), from disintegration of the superficial muscular fibres. The organ was very large, flabby, softened in texture, and of a dirty buff colour, and presented at apex a collapsed bag-like appendix which proved to be an aneurismal sac, quite empty, and capable of containing about three ounces of fluid. It communicated with the left ventricle alone by an opening three and half inches in circumference, surrounded by a thick smooth zone of the muscular fibres composing the "vortex," converted into fatty tissue. This degeneration had extended to the muscular papillares, as they spring from the walls of the ventricles, and was also very evident along the septum ventriculorum. The sac itself was deeply congested in various spots, and so thin that in some places its lining membrane and the pericardium were in direct opposition. The rupture had taken place at a part situated farthest from the apex of the heart, and was so limited in extent that it was not an easy matter to determine its precise seat, the water introduced for this purpose into the sac percolating very slowly through, and appearing more as a weeping, than otherwise, externally; this depended, perhaps, in a great measure, on the opening being blocked by the lining membrane of the sac.

The anterior curtain of the mitral valve, at its base, had a whitish appearance, as also had the semi-lunar valves of the aorta (particularly the two posterior), causing a loss of transparency, but no appreciable thickening; the right ventricle was dilated; the tricuspid and semi-lunar valves of the pulmonary artery were normal.

All the heart's cavities were empty; the larger vessels leading to right heart gorged with blood. The aortic arch presented white puckered streaks, as if atheromatous degeneration were commencing; the descending aorta, both thoracic and abdominal, and common iliacs were all healthy.

The liver was congested; the spleen about three times its ordinary size, and very friable—it broke down in the hand while being removed; the kidneys were highly congested; the stomach was distended with gas.

The tissues composing the scalp were congested; the partial bones presented, on either side of the sagittal suture and near the posterior extremity of the latter, two depressed spots, darker in colour than the surrounding osseous structure, and probably due to syphilitic poison; the brain substance appeared rather anæmic than otherwise; all the intracranial arteries were free from disease; no arcus senitis present.

A microscopical examination of the rough external surface of the heart showed interlacing muscular fibre, and a slice from the thick zone a granular appearance.

Remarks.—The history of the case explains pretty clearly the *post-mortem* appearances. The occupation of the individual causing force, respiratory efforts led to emphysema of the lungs and dilatation of the right ventricle, and the inordinate exertion, telling on a diseased heart, resulted in aneurism, which took place, as it generally does, in the left ventricle, which, unprovided with either a safety-valve arrangement or a moderator band to limit over-distension, which exist on the right side, has the hardest work to perform. It occurred also at a part where the disease

has made its most rapid strides, and where the walls of the cavity are anatomically weak—at apex, where the superficial fibres curve in. The commencing disease in arch of aorta, and the general tendency to adipose deposit, are to be taken and received as indications of the general malnutrition which existed. The case is remarkable for its comparative rarity. With regard to nomenclature, it would come under the head of true aneurism of the heart—the chronic form, or second variety, described by Rokitansky; it is of peculiar interest to Army medical officers, as the relative frequency of heart-disease among soldiers, as compared with the civil population, is a subject at present under consideration. Although there are no signs by which the disease could have been diagnosed with certainty during life, it is strange that no symptoms were complained of, with the exception of the slight indisposition alluded to.

Professor Aitken, who has very kindly favoured me with a communication with regard to the pathology of the case, is inclined to assign a syphilitic origin to the disease, and the history of the case favours this view; but I would have expected a greater amount of *syphilitic* cachexia to have existed during life, and a "gummatous nodule" to have had a more circumscribed area than the diseased structure had in this case. I may add that an independent examination of the part by an able microscopist showed fatty degeneration of the heart's fibres, and it is very probable that the two agents—syphilis, and morbid nutrition as expressed by fatty degeneration,—both contributed to weaken the heart's walls and cause the aneurism.

Case of Drowning.

Reported by Surgeon-Major Webb, M.B., Winchester.

Hammond's Baths are situated in the meadows near the river at Winchester, a short distance from the town. The soldiers of the 7th Depôt Battalion are marched down to the baths daily in detachments of 150 or 200 men. On the 19th July, the men had only been in the water a short time when a cry was raised that a man was drowning. The man was seen to sink, and great confusion followed. The size of the baths being small, the number of the men great, together with the noise, caused some little delay. The men commenced diving for the body, but unsuccessfully. The drowning man kicked one man, and then shortly afterwards rose to the surface; in doing so, he came in contact with a man diving to rescue him; he encircled his arm arouud this man's neck, and they went down together; the man who was thus dragged down put up his arm for help, it was seen and seized, and he was dragged out in an exhausted state. The men were now urged to continue diving, which they did for two or three minutes; but, owing to the very muddy state of the water, they could not find the body.

The precise time occupied in diving for the body is most important, but very difficult to estimate. The officers and five men, who were most urgent in their endeavours to save the man, agree with me in thinking two or three minutes elapsed. The remarks of the men, "He must be dead long before this," go to show the probability of two or three minutes' submersion.

A man, Private Green, 3rd Rifle Brigade, now volunteered to recover the body. Stripping off his clothes, he most courageously dived, reached the body, but failed to bring it up. He then took breath and dived again; this time he seized the leg, drew the body under water to the bank-side, seized the bank with his other hand, and directly he was seen a rush was made, and both were pulled up the bank.

Being an eye-witness of the whole, the determination, resolution, and courage of Private Green are beyond all praise, and struck me as an act of noble devotion to save a fellow creature.

Unfortunately the men and the body were on the opposite side of the baths to myself. Having called upon the men to rub the body, I ran round the head of the bath and on to the meadows, but found myself and Captain Knox cut off from the drowned man by a large muddy impassable ditch. Returning, we ran round below, and had to jump two large and several small ditches, and a distance of high meadow grass. Then a heavy thorn fence to keep out intruders had to be climbed: with great difficulty I got on the top of the fence, and jumped down amongst the men.

This detail is all-important. The time occupied in going round, jumping ditches, and getting over the high fence, Captain Knox and myself think occupied three minutes.

The work of resuscitation now commenced. There were no signs of life: the body was livid and cold, the face and neck black, eyes all but closed and fixed, jaws rigid and fixed. The Sylvester process was now used—seizing the wrists and elevating the arms high above the head, putting the pectoral muscles well on the stretch, and endeavouring to the utmost to increase the distension of the chest; the arms were then relaxed and, falling on the chest, firm pressure was applied on either side of the chest to expel every particle of air.

During the first two or three distensive motions, a gurgling tracheal râle or rattle was audible, which sound soon extended to both sides of the thorax. It was very distinct, resembling, in every respect, the passage of air through water—a bubbling, gurgling noise.

The resuscitation, as above, went on for the first quarter of an hour with little or no result, as far as external signs went. I endeavoured to imitate ordinary respiration, and to limit the number of artificial respirations per minute, as far as I was able. At the extreme elevation of the arms, when the capacity of the thorax was at its highest point, a few seconds were allowed to elapse before gradually relaxing the chest muscles; firm and steady pressure, to compress the whole of the chest and expel air, followed; then a small interval, and the elevation process recommenced. During the whole of this time, six or eight men were rubbing and drying the body, cleaning the mouth and nose, &c., in a most energetic manner; their flannel shirts were used to form a pillow for the head, which was only slightly raised, and also to rub the body with.

Whilst resuscitating, I gave directions to these men, urging them to save the life of their comrade; and the assiduous flannel friction and hand-rubbing were most praiseworthy.

During the second quarter of an hour (the exact time cannot be given), whilst watching the chest, a spasmodic, short kind of inspiration now and then became observable, at first of a very doubtful character; after some minutes, more clearly developed. It appeared as if the respiratory actions were commencing in short portions. The resuscitation was, however, continued, and these symptoms not depended on.

About the end of the first half-hour, the strength of these respiratory efforts were manifestly improving. During the next quarter of an hour they were so far improved as to induce me to venture to relax the artificial process; but *in an instant* it was evident they were of little strength, and not to be relied on.

About this time the first indication of movement occurred. It was with the greatest pleasure and deepest interest, after watching the body upwards of half an hour, I saw *the right upper eyelid* raised a very little, and only for a second, and in a few minutes afterwards the left upper eyelid moved.

The exertions of the men were now redoubled; every one had hopes; the skin had lost its cold dingy character, the face became clearer and lighter, and then a small temporary movement of both eyeballs followed.

In the next quarter of an hour, the respiratory efforts became stronger; but still very short, convulsive, or spasmodic in character.

At the expiration of an hour, reanimation was fairly established: the face had lost its lividity, the lips were assuming a natûral rosy tint, the jaws were unlocked, the

skin had some warmth; he could be roused by loud talking, but could not speak.

Exhausted by the exertion, I left the Sylvester process, and tried the side-to-side rolling process; he rapidly became worse, and the Sylvester process was resumed by a non-commissioned officer under my instructions.

Even at this time the man's condition was critical. On relaxing the process, to see if nature could carry on respiration, he went back; the head fell, and the eyes became closed.

Brandy having been obtained, with great difficulty he swallowed about a drachm, but it revived him.

Blankets and hot water were at hand, but the extremities were still very cold. The water was very hot, and, not having had a good full inspiration yet, I poured the hot water rapidly over his feet and legs; it had the desired effect; a scream and a fine full inspiration followed.

During the third half-hour he commenced to speak; but the oppression of the breathing, the drowsiness, and the râles in his throat and thorax indicated mischief.

When the circulation was fully established, he took a little more brandy, was wrapped up in blankets, and then carried to barracks.

On his arrival his condition again became alarming: the oppression in his chest, the difficulty of breathing, and the lividity of his hands and face, again appeared. A warm bath, stimulants, and mustard sinapisms rallied him; he became warm and perspired freely. The respiration, however, did not improve, and the pulse was rapid and feeble.

The obstructions to the pulmonary circulation were very evident; the face was congested, and the nails and fingers livid.

During the next twelve hours (the accident occurred at four in the afternoon) he dozed a little, and answered questions better. The improvement, however, was of short duration: the symptoms now were aggravated, the heart laboured, the pulse was galloping and feeble, the râles increasing, the pulmonary congestion urgent, and he died twenty-six hours after his accident.

The *post-mortem* revealed great pulmonary congestion, dirty-looking water in the larger bronchi, and a mottled emphysematous appearance externally of the lungs.

The larynx and adjoining parts were congested and swollen; effusion at the base of brain, and a remarkable gorged distended state of the lateral sinuses, also presented.

The chief interest in this case is the *time* this man was submerged, and it is necessary to speak with due caution and careful consideration. The actual submersion, Captain Knox, in his Report to the Royal Humane Society, has stated from *three* to *five* minutes—in my Report to the Society I gave five minutes, or about five minutes; but the evidence of the five men who were near the drowning man gives five minutes as the probable time, and even Captain Knox informed me it might have been five minutes. However, taking four minutes, the submersion is one of the longest on record in which resuscitation has followed.

Transactions of Societies.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

The annual general meeting was held at the Royal College of Physicians on Tuesday, August 2nd.

Dr. Boyd, President, in the chair.

A letter was read from Dr. Lockhart Robertson, resigning his office as one of the editors of the Journal; and a resolution was passed acknowledging the services which Dr. Robertson had rendered to the association, and congratulating him on his appointment as Chancery Visitor in Lunacy.

A resolution proposed in favour of the amalgamation with the Royal Academy of Medicine was rejected in favour of an amendment declaring such amalgamation undesirable.

Dr. Maudsley was elected president for the ensuing year; Secretary, Dr. Harrington Tuke; Editors of the Journal, Dr. Maudsley and Dr. Sibbald; Treasurer, Dr. Paul.

Sir James Alderson, Dr. Frederick Farre, and Dr. Lockhart Robertson were elected honorary members.

Dr. Boyd delivered an address advocating better provision for the early admission of acute pauper cases of insanity into county asylums, by providing for the proper care and treatment elsewhere of chronic and harmless cases. A discussion followed, the general opinion being that the present county asylums were too large and ill-fitted for the best treatment of acute cases of insanity. A strong opinion was expressed by some members that insanity was not increasing out of proportion to the increasing population.

Dr. Davey read a paper on *Felo-de-se*, advocating the view that suicide is always the result of cerebro-mental disorder. A discussion followed, in which several members protested against the opinion that suicide was, in all cases, an indication of mental disorder, maintaining that perfectly sane persons might commit suicide.

On the motion of Dr. Arlidge, a committee was appointed to examine the lunacy laws of the Continental States and of America, with a view to the suggestion of improvement in the Lunacy Acts of this country.

The members and their friends dined together in the evening at Willis's Rooms.

Literature.

HOLMES'S SYSTEM OF SURGERY.*

The third volume of our modern surgical cyclopædia comprises diseases of the eye and ear, of the organs of circulation, the muscles and the bones. It it is almost superfluous to say that the publishers have brought it out with the same care as its predecessors, and that the authors have revised their respective articles, so as to bring them down to the present date. This second edition is in fact an improved one—not a mere reprint—and the conjoint labours of so many first-class surgical writers, ably represent the present state of British surgery.

The first treatise is by Mr. Dixon, and we now have three original lithographic plates showing ophthalmoscopic views of the fundus of the eye. There being two views on each plate, there are thus six beautifully coloured illustrations. The letter-press of Mr. Dixon requires no recommendation. What he teaches us is sure to be accepted. There must be thousands of practitioners who desire to read up ophthalmic practice, and hardly know what book to buy. Let them get Holmes's system, and they will find in this volume all they want in less than 300 pages.

A similar remark might be made as to the next article in which Mr. Hinton gives an account of diseases of the ear, which every general practitioner may read with advantage. Since the death of Toynbee there is no one who could pretend to rank as the equal of Mr. Hinton in this branch of our art, and Guy's Hospital may well rejoice in having him as aural surgeon. As a *littérateur* of note, too, we expect to find his work not merely full of learning and practical remarks, but set before us with so much felicity of style as to make it attractive, and we are not disappointed. Mr. Hinton speaks with authority, and his dicta will be so universally accepted that we have no criticism to offer.

Mr. Callender's article "On Diseases of the Veins" has not been materially altered in this edition; nor has Mr. C. H. Moore's "On the Arteries and the Absorbents."

The learned editor gives a separate treatise "On Aneurisms," and this important subject could not have fallen into better hands, and we have many most instructive cases both in a tabular form and in a more extended form. This essay could only have been the production of an accomplished surgeon and clinical teacher.

* A System of Surgery. Edited by T. Holmes, M.A., Surgeon to St. George's Hospital, &c. 2nd edition, in 5 vols. Vol. 3. London: Longmans and Co. 1870.

Dr. Lockhart Clarke edits Mr. Tatum's article "On the Muscular System." His revision guarantees the most recent discoveries not being overlooked.

Dr. Little, the father of English orthopædy, is the author of the article on this branch of Surgery. Careful revision and additional woodcuts enhance the value of this edition, and show that Dr. Little thoroughly knows the wants of the general surgeon as to deformities.

The last article "On the Bones" is by Mr. Holmes, to whom we offer our cordial thanks, not only for the articles in the volume under notice, but for the project of his "System of Surgery," the energy and skill with which he carried it out, and for the improvements in the three volumes of the second edition now issued, and which are a sort of pledge for the remaining two, to which we look forward with unusual interest.

EDINBURGH OBSTETRICS.*

The Northern capital claims high rank in Obstetrics, and we need not, therefore, be surprised that it has been decided to give the Transactions of its Society a permanent form. We have here the first volume before us, and are glad to find that though its value is fully equal to that of its London sister, the bulk of the book is considerably less. The papers have appeared as they were read in the *Monthly Journal of Edinburgh*, and have merely been corrected by their respective authors. In the discussions on the papers the Publication Committee determined to reprint only such portions as were relevant to the subject matter of the respective papers; in fact, we have only here recorded the remarks that may be thought worth reading. The papers contained in this volume are classified in the table of contents under six heads, according as they relate to (1) pregnancy; (2) instruments and instrumental cases; (3) obstetric and medical agents; (4) diseases of women; (5) children and their diseases; (6) obstetrical, sanitary science and hygiene.

This classification is not adhered to in the work itself, but the Transactions are reported according to date. Thus, we have a continuous history of the Session of the Society, while the contents, being classified, render reference easy.

There yet remains an Appendix. This deserves separate mention, as it is in itself a most valuable contribution to obstetric bibliography. It is no less than a complete catalogue of all the papers that have been read before the Edinburgh Obstetrical Society, from its commencement, with their dates and the authors' names. It is arranged alphabetically, and by its aid any one may, in a few minutes, ascertain all the contributions to the Society on any subject he may select, and, the dates being added, he may know where to look for the reports in the *Edinburgh Journal*. This catalogue has been compiled by one of the Secretaries, Dr. R. P. Ritchie, who for such a service deserves the thanks, not only of the Society, and of the authors, whose ideas are thus made so easy to ascertain, but of all who take special interest in the progress of obstetrical literature.

It is almost impossible to exaggerate the value of such a compilation as this. The only thing that could supersede it would be a brief abstract of all the Proceedings of the Society by an impartial hand, and making a volume of about the size of the one before us. Few would dare to attempt that, though, perhaps, after this specimen of his patient work, it might be supposed Dr. Ritchie would not shrink even from that. In such a case the Society would do national service by issuing the work.

CURRENT LITERATURE.

The second part of Mr. Spencer Watson's work on "Abscess and Tumours of the Orbit" has been published by Mr. H. K. Lewis. It is a worthy sequel of Part I., previously noticed in our columns, and is illustrated by two fine plates, besides wood-engravings.

Dr. T. Fox has issued in a separate form his lectures on "Eczema" at the Medical Society of London, and which were published at the time in one of our contemporaries.

Dr. Corfield sends us a *resumé* of the "History of Hygiene," being the lecture introductory to his course on the subject, also reprinted from a contemporary.

Dr. Macnamara has printed a popular letter on the subject of the "Medical Bills," in which he suggests that rejected students might be prevented from passing at other boards by their certificates being retained by the rejecting board for a period of six months.

Dr. Dobell has brought out a fourth edition of his "Diet and Regimen in Sickness and Health." (Lewis.) It is considerably enlarged, and is stated to have been re-written.

The Half-yearly Abstracts which we should have announced last month, are, as usual, the cream of the periodicals for the past half-year, and their editors seem to fulfil their respective tasks with great discrimination.

The second edition is before us of "Deformities of the Mouth," by James Oakley Coles. (Churchills.) By the aid of some excellent plates Mr. Coles makes the subject of mechanically remedying cleft palate and other deformities plain to medical men as well as to dentists. His conclusions are based on fifty-eight cases, and deserve attention.

SCOTLAND.

UNIVERSITY OF EDINBURGH.

On Monday, the 1st, the ceremony in connection with the conferring of degrees took place in the Assembly Hall, in presence of a numerous attendance of ladies and gentlemen. The Chancellor (the Right Hon. the Lord Justice General) presided. The Dean of the Faculty of Law presented to the Chancellor, Dr. Acland, and Professor Max Müller, of the University of Oxford, upon whom were conferred the honorary degree of Doctor of Laws. The Dean of the Faculty of Medicine presented the following gentlemen, who had been judged worthy to receive degrees in medicine :—

Degree of Doctor of Medicine.—(Three stars indicate those who have obtained gold medals for their dissertations; two stars, those deemed worthy of competing for the dissertation prize; and one star, those commended for their dissertation.)—*Candidates who received the Degree under the New Statutes* :—Peter Buchan, Scotland; *James Spottiswoode Cameron, Scotland; William Hodgson Carruthers, England; ***Richard Caton, England; William Craig, Scotland; *Alexander Crombie; James Dunsmure, Scotland; ***David Ferrier, Scotland; *William Alexander Finlay, Scotland; *James Forrest, Scotland; Thomas Silvester Gell, England; Charles Bailey, Glenfield, England; Robert Bruce Low, Scotland; *Richard Lowther, England; Robert Lucas, Scotland; *William Paton Mackay, Scotland; *Harrison Mitchell, England; *Francis Walter Moinet, Scotland; Philip Henry Mules, England; Williams Nicholson, England; Walter Hugh Paterson, England; **John Wilson Paton, Scotland; Michael Welldon Rice, England; **Henry Sydney, England; Robert Shand Turner, Scotland; Yldefonzo Victor Watlington, Puerto Rico; Alexander Christy Wilson, Scotland; *Peter Alexander Young, Australia. *Candidates who received the Degree under the Old Statutes* :—William Chapman Grigg, England; *Edwin Hinchcliff, England (first-class honours); *Charles Julian Jackson, England; James Alexander Menzies, Scotland.

Degrees of Bachelor of Medicine and Master in Surgery.—Walter Duret Aubin, Jersey; John Bishop, England; Robert Blair, Scotland; Archibald Breloch (M.A. Glasg., Dr. Sc. Edin.), Scotland; James Pitcairn Bookless, Scotland; James Brassey Brierly, England; William Brown (M.A. Aberd.), Scotland; Alexander Chambers, Scotland; William Copeland, England; John Archibald Cowan, Scotland (second-class honours); James Denholm, Scotland; Edward Harriman Dickenson (B.A., Oxon.), England; George Tait Dickson, Scotland; Walter Dixon, Australia; Richard Wright Dodds, Berwick-on-Tweed; James Williamson Edmond, Bengal (second-class honours); John Nicholson Fleming, England;

* Transactions of the Edinburgh Obstetrical Society. Session, 1868-9. Edinburgh: Malachlan and Stewart. 1870.

Edward Flint, England; Arthur Edward Wellington Fox, England; John Fraser, Scotland (first-class honours); George Western Gipps, England; Alexander Gordon, Scotland; John Gibson Gordon, Madeira; Peter Macpherson Grant, Scotland; John Brodie Henderson, Scotland; William Balme Hepworth, England; Henry Walter Hill, India; Thomas Irvine, England; Walter Robert Spence Jefferiss, Scotland; William Gregory Keith, Ceylon; William John Kennedy, Scotland (second-class honours); Alexander Macdougall, Scotland (second-class honours); Duncan M'Gregor (M.A. Aberd.), Scotland; Robert M'Kerchar, Scotland; Hugh Marriner, England; Henry Charrington Martin, England; Thomas Dickenson Nicholson, England; John Nivison, Scotland; John Cunningham North, Wales; David Page, Scotland (first-class honours); Arthur Perigal, Scotland, received the degrees of M.B. and C.M. on November 19, 1869; James Reoch (M.A. Edin.), Scotland; James Turnbull Richardson, England; John Lloyd Roberts, Wales; Thomas Rutherford, Scotland; Henry Salt, England; Robert Spence, Shetland (first-class honours); William Thomas Wood, Scotland; Thomas Allan Wotherspoon, Scotland; William Wylie, Scotland.

Degree of Bachelor of Medicine.—John Drysdale, Scotland; Henry Ambrose Lediard, England; Roderick Fraser M'Kenzie, Scotland.

Degree of Master in Surgery.—John Brown Buist, Scotland, M.B., 1867.

The Ettles Prize of £40 to the most distinguished student for the year has been awarded to David Page.

Professor Laycock then delivered an address, selecting as his subject, "Education in Relation to Public Health and the Public Welfare." Immediately after the graduation ceremonial, the Chancellor, accompanied by the Senatus Academicus, Lord Neaves, Dr. Acland, Dr. Max Müller, Dr. Lyon Playfair, M.P., Mr. Gordon, Q.C., M.P., &c., proceeded to the University buildings, when the statue of the late Principal, Sir David Brewster, was inaugurated. Lord Neaves, on behalf of the subscribers, addressing the Chancellor of the University, formally delivered over to the University the "Brewster Memorial" statue. The statue was then unveiled, the band of the University Rifle Corps playing the University air, "*Alma Mater.*" The Chancellor in suitable terms acknowledged the gift which, through Lord Neaves, had been presented to the University.

Professor Maclagan said he had to discharge a duty, without which the proceedings of the day would not be complete. On the part of the Committee of Subscribers, he had to thank Mr. Brodie, the artist, for the prompt way in which he fulfilled the commission which was entrusted to him; and, on the part of those who were the recipients of the statue, he had to express to that gentleman their thankfulness for so great an ornament to the College quadrangle—for a representation of one who was so highly esteemed, of whom every Scotchman was proud as a countryman, and to whom those, more particularly, who had the honour of being his colleagues, looked back with so much reverence.

The statue, which is placed upon a pedestal, measures seven and a half feet in height, and occupies the centre arch on the west side of the College quadrangle. It is an admirable likeness of Sir David Brewster, and, as a work of art, the statue is in every way worthy of Mr. Brodie's high reputation.

Professor Allman, on closing the class of Natural History for the summer session, was presented by his students with a handsome time-piece, and a congratulatory address on his restored health.

We are glad to learn that the result of the meeting held in London a short time ago with regard to the present constitution of the Court of Curators in the University of Edinburgh has been unanimously to demand a change in the constitution of that Court. Reports from all parts of the country have been received by Dr. John Murray, the hon. secretary, urging him to carry out the resolutions of the meeting.

GLASGOW UNIVERSITY.

The Senatus Academicus, and other officials connected with the University, dined together in the Fore Hall on the 29th July to commemorate the occasion of their taking leave of the old buildings.

In a powerful article on the recent capping ceremony, in the Edinburgh University, the *Evening Courant* urges the importance of transferring botany and some other subjects to the preliminary training of students, so as to reserve all their strength for their strictly medical studies during their brief curriculum. The same article shows that the modern rise of State Medicine is "but a resuscitation of the doctrine inculcated by the Father of Medicine himself" in the following manner:—"Counsel the young physician to observe the situation of places, the difference of the air, the waters which are drunk, and the eatables which are the principal food of the inhabitants; in a word, all the causes that may occasion disorder in the animal economy." Upon this happy quotation the *Courant* comments with its usual interest in medical affairs as follows:—"We might go on to paraphrase the inculcation of the 'divine man of Cos' to still ampler issues, affecting the community and, through the community, the individual. But we have said enough to vindicate for the cause of State Medicine an august antiquity which ought to add fresh stimulus to its modern revival." We wish more of our London papers exhibited that appreciation of professional matters that characterises our valued Edinburgh contemporary.

SPECIAL CORRESPONDENCE.

M. CHARCOT'S CLINIQUE.

[FROM OUR OWN CORRESPONDENT.]

Paris, August 1870.

I sent you, a short time ago, some notes of the lectures which have recently been delivered at Hospice de la Salpêtrière, by an esteemed physician, M. Charcot, on certain disorders of nutrition, resulting on lesions of the nerves.

M. Charcot, in his second lecture, observed that the experiments of Erb Ziemssen and Weiss have recently thrown great light on this subject by certain experiments on rabbits, whose nerves were wounded, and in which daily observations were made as to the modifications of electric contractility, which ensued in the nerves and the muscles, under the influence of continuous currents and of faradisation. If the sciatic nerve of a rabbit be wounded severely, we observe almost at once a loss of electric excitability, whether recourse is had to faradisation, or to galvanisation, and, whilst it returns slowly at the centre end, it is rapid at the peripheric end. If the lesion be slight, the electric excitability returns quickly in the central end, and never completely fails to exist at the peripheric end. With regard to the muscles, faradisation shows from the very first day a diminution, and, a few days further on, a loss of contractility. Galvanisation denotes, during the whole of the time which corresponds to the depression of faradisation, an exaltation which, in its turn disappears, when faradisation becomes powerful again.

These facts are relative to conditions comparable with those which pathology presents us with. The above-mentioned observers operated as follows:—Almost always they applied upon the nerve a ligature more or less tightly drawn; or, again, they produced by means of forceps, a more or less marked crushing of the nerve. Their experiments also show that, if a nerve is cut through or excised

for a few lines, then the electric contractility diminishes in a progressive, although very slow, manner. It requires two or three months for it to disappear, and not only five to fourteen days as when it was crushed. In this case, too, we no longer notice that opposition between faradisation and galvanisation, which was remarked when the nerve was crushed, and exists in most pathological cases. The two modes of exploration produce exactly parallel results; the faradic contractility and the galvanic contractility became weakened together, and are together reproduced in their first intensity when the nerve is restored.

With regard to the disturbances of nutrition, which ensue after lesions of the spinal cord, the skin, the joints, the bones, and the viscera themselves may, generally speaking, become the seat of derangements of nutrition, consecutive to lesions of the spinal cord and of the brain. There are some special affections which very rapidly cause all modes of muscular alteration, whether functional or organic, which lesions of the nerves have made us acquainted with. On the other hand, there are some in which electric contractility and the nutrition of the muscle preserve them in a condition of perfect integrity, during a considerable space of time, months, or even years. The muscle, in the latter case, only becomes altered after a long time, under the influence of prolonged rest. In the first class, we range the spinal diseases which do not directly modify the structure of the muscle. These are, tumours, Pott's disease, partial myelitis. In these cases we have to do with very circumscribed lesions of the spinal cord, and only affecting a very limited portion of the grey substance. Next come even very extensive lesions of the white columns, provided that the grey substance be not attacked to a certain extent. I will cite, as specimens of the last class, all the riband-like scleroses of the posterior or lateral columns, or the sclerosis which occurs in disseminated plates, and even inflammatory softening of the cord. The second group comprehends those affections of the cord which may be followed by grave and almost immediate modification of electric contractility and by rapid atrophy of muscles. In cases of lesions which are confined to a focus, or, being diffused, affect a great extent of the grey substance of the cord, as in spinal apoplexy, we may see very rapidly occur diminution or even loss of the electric contractility in the muscles of the paralysed limbs. This has been observed in fourteen days. As this is a disease which in general proves rapidly mortal, we have frequently occasion to remark as its consequence either atrophy or degeneration of muscles.

Central myelitis sometimes attacks both the white and the grey matter of the cord, but it always predominates in the latter. This lesion has for one of its symptoms the diminution or prompt abolition of electric contractility. In a case of this kind an observer, Maunkopf, saw the contractility modified as soon as the seventh day. When the patients survive, it is easy to follow the progress of the other correlative phenomena; atrophy is rapid and the muscles soon are degenerated. According to Engelken and Maunkopf, the muscular lesions consist in a proliferation of the connective tissue. The nerves have always been found healthy. Fractures of the vertebral column sometimes are followed by myelitis. It is not astonishing that, in such cases, there is noticed sometimes a prompt diminution of the electric contractility.

The second category is composed of affections arising from more delicate lesions in which are exclusively affected at least at the beginning certain elements of the cord, *e.g.*, some of the great nerve-cells of the anterior cornea. These are usually irritative lesions. In such cases the white matter of the cord is ordinarily intact. The type of affections of this nature is infantile spinal palsy. In this disease we may remark setting out from the fourth day, a diminution, and shortly after a complete loss, of the faradic contractility in certain muscles. Soon, also, there is observed muscular atrophy which progresses rapidly. Some histological observations which require verification announce, in such-like cases, the simple atrophy of the primitive fasciculi with persistence of striatum. It is not known whether prolification exists; but, at any rate, the loading with fat observed sometimes in very old cases, is probably consecutive. Around this type we may be permitted to group:—1. Spinal palsy; 2. General spinal palsy—a disease recently described by Duchesne. Its evolution is slower than that of the described diseases, but it furnishes, as far as the muscles are concerned, analogous results. Is now the law of Brown-Séquard applicable to these facts? With respect to the first group, there is no contradiction. The riband-like scleroses which do not produce rapid disturbances in nutrition, are, it is true, irritative lesions, but they affect the white columns. Now we must consider the spinal cord not as we do a great nerve; the cord, we must not forget, is also a centre. The white cords are never the direct continuation of the nerve trunks, they are commissions established between the cells. Besides, we know that the white columns are gifted with properties very different from those of the nerves which issue from them.

With regard to the diseases which compose the second group, it is indispensable to remind ourselves that the lesions attack here always principally and exclusively the grey matter. In the substance are found some elements, true orgasis, which appear to be in immediate communication with the nervous filaments, composing the anterior spinal roots. I refer to the large nerve-cells of the anterior cornea. Well, the lesions of these cells, when of an irritative nature, determine—not to mention anything but the muscles—effects analogous to irritation of the nerves.

Cornell University.

Medical teaching in the United States seems to be in a very fine condition, if we may judge from the following extract from one of the French journals, the *Mouvement Médicale*:—"In the State of New York, at Ithaca, they are establishing a university founded by a man who commenced as a workman, and began by placing telegraphic posts. Mr. Cornell who has become enormously rich, has founded a university. This is seen sometimes in America, where people sometimes take it into their head to do such things. Mr. Peabody gave six millions of francs to found one at Maryland. Mr. Cornell has just given five millions to found one at Ithaca. But in this university, where all the pupils are on a perfect equality, where law and medicine are taught, there have been reserved three hours a-day for those men who wish to work at manual occupations. There are workshops where they carry on all the work that requires to be done for the university, such as carpentry, locksmith's work, &c. Any one may be a student during the daytime and carry on a trade for three hours. They can then gain from 20 to 25 francs a week, just enough to keep them. This gives us an example which astonishes us, but which is not at all surprising in America, in the respect for manual labour by intellectual workers." France and England have something yet to learn from the United States, besides large and deadly systems of warfare, which I think we might do without.

Army Hospitals.—During the last week a Commission has been sitting at the War Office upon the very important question of the administration of our Army Hospitals. The object of Mr. Cardwell, as submitted to the Commission, is to modify the action taken upon Lord Herbert's Commission of 1858, so as to throw upon the surgeons a greater co-operation between the Control and Medical Departments than exists at present. This, doubtless, in the event of war, will prevent many of the calamities which attended our Army in the Crimea.

The Director-General of the Army Medical Department having called attention to the desirability of sending experienced military surgeons to the head-quarters of the French and Prussian Armies, for the purpose of studying and reporting upon the effects of the more recent inventions of modern warfare, and the most approved methods of transporting the sick and wounded, the Secretary of State for War promised to endeavour to carry the suggestion into effect.

Registered for Transmission Abroad.

THE
MEDICAL PRESS AND CIRCULAR
Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
,, If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 10, 1870.

THE CHANCE OF THE CORPORATIONS.

Now is the day of grace of the Medical authorities—both Corporations and Universities. They have a good six months before them. Will they use it? We cannot forget that several of them have, time after time, announced their readiness to combine in the manner contemplated by the Act of 1858, and to a considerable extent carried out in Scotland. Calling to mind that the late Bill was framed on the principle of *compulsory* amalgamation, and that many bodies have expressed their wish for *voluntary* amalgamation, we cannot be blind to the probable effect on the Government should the latter plan be at once adopted. Suppose, for example, the Scotch bodies, having gone so far, should take another step in the same direction, and establish a conjoint board similar to that contemplated by the Bill. Would not that be taking such reform out of the hands of the Government, and thus make Scotland indifferent to the Medical legislation that the Privy Council is likely once more to propose? The Act of 1858 gives power to "any two *or more* of the Colleges and bodies in the United Kingdom" to unite, in the manner that the Edinburgh College of Physicians has united with its sister College and with the Glasgow Faculty. Now, what is to hinder these three bodies combining altogether instead of partially? and what, again, is to prevent the Scottish Universities from becoming parties to such an arrangement? Would money alone hinder this? Surely not. Let the bodies unite, and they could give such full authority to practise with the lowest diploma of two of the bodies, that a good round fee ought not to be objected to. Then each could offer its higher diploma on such terms as it pleased.

Further, take the case of Ireland. The principle of voluntary amalgamation has found great favour with most of the bodies. Let them carry it out, and the minority would now be glad to come in before the next Bill is brought forward. The only difficulty is a monetary one. This is proved by the fact that the Royal College of Surgeons in Ireland has twice made overtures to its sister College, which have only been refused on pecuniary grounds. The fee for the diploma of the Royal College of Surgeons in Ireland is £25, that of the College of Physicians £15. The Surgeons propose to charge £30 for the joint diploma, and to make a rateable division, each body reducing in proportion to existing fees. The College of Physicians refused to meet this liberal offer in the same spirit, and must, therefore, accept the blame of the failure of this project. It is not to be forgotten that the surgical body has a museum to maintain, and has educated more than double the number of its sister body. The College of Surgeons in Ireland has always been in the front rank, and in this instance again has shown itself the best friend of the Profession in the kingdom.

It might be well to unite and make the joint fee £35 in Ireland, *i.e.*, each body take what it does now. Still the College of Physicians ought to make some sacrifice, as it would thereby secure all the students instead of a part.

Would it pay the Apothecaries' fees for those who required the Company's licence, or allow the amount to be deducted by all who had paid them? The Apothecaries in no way concern the surgical Corporation.

But we have been told that our English bodies have nearly perfected a plan. Let them only move a little faster, and they may by next Session be in full working order. It is said the two Royal Colleges are quite agreed, but the Apothecaries' Society holds out for some better terms. Would it not be worth while to bear in mind that the Society has a great legal status in England, and has, moreover, done much to elevate the Profession, and, therefore, to yield a little to it in recognition of its services and legal position? Suppose, for instance, the two Colleges and the Society agree each to elect a certain number of examiners for a conjoint board, and that all who passed such a joint board should have the license of the Company, and the lowest diploma of the Colleges conferred upon them at the same time. What stands in the way? Only the everlasting question of fees. The Apothecaries' fee is only five guineas; the College of Physicians', fifteen guineas; the College of Surgeons', twenty guineas. If no reduction were made, this only amounts to forty guineas—a sum which, considering it would give all that could be required, we do not think exorbitant. Other countries exact quite as much, and as much is really paid by many under the present system. If it is really found excessive, some mode of reduction could be arranged. The College of Surgeons could afford, under an arrangement like that, to reduce to, perhaps, fifteen guineas, and the College of Physicians, as it would at once secure so great an increase in the number of candidates, could still more easily afford it. The Surgical College could make up for any loss by raising the fee for the Fellowship, and making it a little more accessible by abolishing a few useless regulations that prevent some aspirants from attaining it. As the College of Physicians, too, is supplanting the Company, it is but fair it should allow at least that amount to be deducted from its fee.

Thus, for thirty guineas the English student would have the most complete diploma that has yet been given. The only thing required is for each body to refuse to give its lowest diploma separately. But the Universities? True, such an arrangement would not compel them to join; but there is nothing to fear from the action of the English Universities. As to the London, none of her graduates would wish to shirk the joint examination. Oxford and Cambridge men are now practically obliged to take one

or more Corporation diplomas, and they would, under the new plan, of course take the joint one—mostly before graduating. The greatest success to such a scheme would be for the Universities to agree to admit no one to their lowest degree unless he had the joint diploma, or, in return for some concession as to appointing also examiners, to give the lowest degree concurrently with the Corporation diplomas to their own students respectively, on payment of the fee and fulfilling other requirements.

The above is but an outline of a scheme which might work easily. We by no means offer it as perfect, nor do we assert that it is better for it to be accomplished than for a radical reform of our whole system to be effected by Parliament. What we do say is, that it is within the powers of the bodies concerned to carry it out immediately; and their doing so would not only forestall the Privy Council, but probably preserve them for a considerable time from the control of that body; and we have reason to think that the Government would be glad of such an excuse for postponing any interference with corporate vested rights. But it must be done at once. We end as we began—*Now* is the day of grace of the Medical authorities.

THE LUNACY BLUE BOOK.

In the whole of England and Wales there were on the 1st January, 1870, a total number of lunatics, idiots, and persons of unsound mind amounting to 54,713. The number of pauper lunatics seems to be largely on the increase of late years; thus, in 1859, these amounted to 31,782, and, in 1870, to 48,325. The 54,713 insane were thus divided:—there were 27,980 in county and borough asylums; 2,369 in registered hospitals; 4,904 in licensed houses; 198 in naval and military hospitals; 462 in criminal asylums; 356 were private single patients. There were also 11,358 lunatics in workhouses, and 7,086 out-door pauper lunatics.

In page 18 of this interesting but sad report,* we find that in Middlesex the Secretary of State has again called the attention of the county magistrates to the want of accommodation in the county for pauper lunatics. At a visit to the Hanwell Asylum in August last year, the Commissioners found that in the interval since their preceding inspection there had been a total number of 927 applications for admission, all but 100 representing separate cases, out of which only 301 ultimately had the benefit of treatment in the asylum. At Colney Hatch, also, during ten months 329 patients were refused admission. At both asylums many of these applications were repeated four or five times before the patient could be received; and, in very urgent cases, the parish authorities had no alternative but to seek accommodation in distant asylums, at a cost for maintenance so greatly in excess of the county asylum, that it can excite no surprise to find that the unfortunate lunatic often remained for considerable periods in most unsuitable workhouse wards, deprived of all curative treatment, and daily losing the chance of ultimate recovery. Although the Commissioners are strongly opposed to any further enlargement of the Middlesex Asylums, they reluctantly consented to recommend increased accommodation for insane patients at Hanwell.

Several cases of violence being used by hospital attendants are still recorded, and once a lunatic seems to have been scalded so as to cause death. The importance of making *post-mortem* examinations, wherever practicable, of the bodies of patients dying in asylums is inculcated strongly in the Report. At Hanwell the practice is to make a *post-mortem* examination in every case without asking the permission of the relatives, although any express wish on their part against an examination is invariably attended to. Out of 76 deaths during the past year in the male division, autopsies were made in 62, and in the female division in every case. From the 1st June, 1864, to the 11th February, 1869, Dr. Lindsay states that 512 female patients have died, and that in all but ten cases *post-mortem* examinations were made (only four of these exceptions being the result of opposition on the part of the friends), and that in no instance have complaints arisen upon the subject. In the West Riding Asylum the practice is much the same, and out of 175 deaths examinations were made in 165 cases. In the Leicestershire and Rutland Asylums, where examinations are usual as a matter of course in every case of death, the consent of the friends is not sought. To ask for permission would, in Mr. Buck's opinion, result in a refusal in nine cases out of ten. All this evidence is extremely important at present. In the printed form for the admission of patients into St. Luke's Hospital the following paragraph occurs:—

"It being very important in the treatment of the insane generally, and conducive to the recovery of those afflicted with that distressing malady, that the physical condition of the brain, as well as the cause of the disorder, should be ascertained in cases of death, the Committee have directed that, should a patient die while in the hospital, the medical officer of the establishment be authorised to examine the body, unless an objection shall have been made in writing to the Secretary previous to the decease of such patient."

Liverpool is a city full of the miseries engendered by mere commercial occupations: we are, then, not surprised to find that the report of a visit to the Liverpool Hospital by the Commissioners is not a favourable one. "With few exceptions, the personal character of the patients was found to be very indifferent; and, indeed, the reason alleged why the females in the lower ward were never on any occasion taken beyond the airing court was, that they had no clothes fit to be seen in. The corresponding class of men were stated to be taken out as little as the women, and both were said to be rarely visited by any friends having any interest in them. The state of the furniture was discreditable in the extreme, and there was a general absence of tidiness throughout."

With regard to St. Luke's Hospital, it seems that in their last report the Commissioners expressed a hope that the governors would forthwith place the hospital under the medical superintendent, subject only to their own control; and, in their reply, it was stated that this was strongly objected to by the house committee. The Commissioners, in reply, again stated that they felt it would be almost needless to repeat arguments so obvious, and so often expressed, in favour of giving, in all asylums and institutions for the insane, the sole and paramount authority and responsibility to the resident medical officer; and they refer to the very unsatisfactory condition in which St. Luke's Hospital had been found at the last visit, as well as on many previous occasions, and to the painful disputes which

* Twenty-fourth Report of the Commissioners on Lunacy to the Lord Chancellor, ordered by the House of Commons to be printed 7th July, 1870. Pp. 277. Blue Book.

had arisen among its officers, in proof of the correctness of their views. No further correspondence ensued; but the stupid governors seem to continue to act as before. Such imbecility is very painful, indeed.

Regarding the system of registering the facts of insanity at present pursued in the county and borough asylums in England and Wales, it seems that the tables suggested by the Medico-Psychological Association, and recommended for that purpose in the Report for 1868, are now in use in thirty-six asylums. With regard to hospital attendants on the insane, in 1851 the Commissioners took occasion to point out that, for satisfactory performance of the duties, it was essential that there should be, not simply the ordinary qualifications of sobriety, honesty, activity, and general intelligence, but that equally indispensable were a fair education in reading and writing, good temper, patience, firmness, habits of self-control; in regard to the more helpless patients, a certain aptitude for learning and directing them in the way of employment or amusement; all which were not to be obtained except in persons of a higher grade than those ordinarily chosen, entitled to better remuneration at the outset; and to whom progressive advances in payment, as well as other privileges conditional on good conduct and length of service, might be ensured as would serve to attract permanently to the duties men really fitted to discharge them. It appears that no great attention has been paid to these excellent recommendations of the Commissioners, so that it can hardly be a matter of surprise that the continually increasing number of inmates in the larger asylums should be accompanied by a more and more frequent recurrence of such terrible incidents as have recently attracted the attention of the public to lunatic asylums. The Commissioners find it difficult to get juries to convict on the evidence of those lunatics who, of course, can alone be supposed to be disinterested witnesses in cases of violence in lunatic asylums. And they complain of persistent neglect in many cases, on the part of proprietors and superintendents, of the precautions established at the office in London against a re-employment in such duties of persons already guilty of misconduct in connection with them. Such are a few fragments from this sad record of human misery, the Blue Book of the Lunacy Board. There is much in the volume which will repay the perusal by all interested in general disease, and especially in social questions.

Notes on Current Topics.

Spermatic Disease.

It will be in the recollection of our readers that a few weeks ago, in an editorial article, we opened up the subject of spermatorrhœa; that we commented upon the absurdity of our brethren ignoring, so to speak, a most important functional disorder, and that we suggested that the only means of defeating quackery and benefiting our patients was to freely discuss the malady in its various forms, to dispense with delicacy in dealing with it, and to attack the malady as we do syphilis and other kindred though, perhaps, less important diseases of the generative system. We observe one of our contemporaries—the *Lancet*—acts upon our suggestion and avails itself of the practical work done by a few members of the Profession; but the editor of that journal, in teaching the treatment of spermatic disease, makes some sad blunders, which, if followed—but there is no member of the Profession foolish enough, it is hoped, to follow such an advice—would eventually lead to irreparable mischief. Our attention has been directed to the point by a practical surgeon well versed in the treatment of spermatorrhœa. In writing of cases wherein there is a libidinous direction of mind, almost akin to insanity, we are informed by the editor of the *Lancet*, in metaphor worthy of his rapidly waning journal, where counsel or warning is thrown off by such patients as water off a duck's back, that the physiological remedy of *regular intercourse* is the only one available. If the writer of the article knew anything practically of the subject he was writing upon, in common with a second years' medical student, he would know such a remedy would surely produce *Impotency*. This is too dangerous a doctrine to be preached, but the general tone of the whole article shows the incapacity of the writer; lest, however, it should fall into the hands of unprofessional persons, we warn them of such a dangerous step, which would lead on to disappointment, impotency, and, perhaps, true insanity. Such patients are better treated by the formation of a sore on the penis, so as to baffle the act of masturbation, and to advise marriage would be great cruelty. The condition of the spermatic fluid is not likely to impregnate; but, should impregnation accidentally occur, we should have a progeny worthy of the editor of the *Lancet*, and his thoughtless, but not the less baneful, suggestions.

"To Medical Practitioners."

Under the above heading we find an advertisement in the *Exeter and Plymouth Gazette*, which announces the fact that the Guardians of the Barnstaple Union, are desirous of engaging the services of a medical gentleman, (duly qualified!) to undertake the care of the sick poor within the parishes of Horwood, Instow, and Wertleigh, who will be required to provide in all cases, attendance, medicines, and appliances, for the munificent salary of thirteen pounds a year! We are tempted to ask what do the Barnstaple farmers pay their servants? We understand the 6th district of the Mansfield Union has a medical officer for £15 per annum! We don't know whether to feel more annoyed with the members of our profession who accept such humiliating stipends, or with the Guardians for offering them. The equalisation of districts, and remuneration of Poor-law medical officers, as advocated in these pages, is the only remedy to redress a crying evil; and we ask our brethren to assist us, by respecting themselves in refusing such miserly emoluments as those announced above.

Bravo, Brady!

Mr. Brady, M.P., is tasting now the pleasure of a great success. He has carried his new Superannuation Bill, and has even resisted the Lords' amendment, so far as to deprive it of its worst feature. It is really a cause for congratulation that a medical member has been able to carry a measure like this; and it augurs well for the future. We congratulate the Profession, and, at the same time, thank the honourable member for the patience and zeal he has expended in the cause. It is said that, next Session, Mr. Brady will propose further Poor-law Medical Reform in a bill to emancipate our Poor-law brethren from the dictation of guardians. Whatever he brings forward in this depart-

ment is sure to be well considered; and we trust he will give it his full attention, rather than add one more to the proposed bills for amending the Medical Act. Still, any good measure of that kind may count on the support of the Poor-law Medical Reformer, *par excellence*.

Baby Farming.

A MEMBER of the Profession, during the past week, has received a circular couched in the following terms :—

SIR,—I beg to forward *(sic.)* myself to your notice as a person fitted either to take charge of or adopt a child.

I am a respectable householder, and can forward the best references. Hoping this will meet with your approval,

I remain, yours &c.,

Mrs. G. E.——

Burning the Dead.

WHAT to do with the slain in the war, has occupied the attention of the *Gazette Hebdomadaire*, and we are glad to see that some of the writers are prepared to advocate burning as superior to burying. The ancient plan had many advantages from a sanitary point of view, and we should welcome any discussion which might tend to remove the objections of modern Europe to any mode of disposal of the dead, that might be better for the living than that now practised.

The Harvest Field.

MUCH illness is generally produced at this time of the year, owing to exposure to the heat of the sun whilst in the act of following a laborious occupation in the harvest field, and to the incaution and recklessness, in consuming large quantities of badly-brewed beer, when the system is overheated by incessant and severe work. The more the thirsty harvester drinks, the more he appears to require ; and it is a well known fact, that stimulants are most injurious in hot weather, regardless of the stomach being in an unfit condition to receive them. A member of the Profession advises, we perceive—and we highly approve of the suggestion—that the plan adopted in tropical climates should be followed, of commencing work at an early hour in the morning, when labour is pleasant, and the atmosphere cool, giving up the middle of the day, when the sun is strongest and the heat greatest, to rest, and recommencing work in the evening, and following it until the decline of day. We believe more work would be done for the farmer, and that less risk to health would be incurred by the operative, if this plan were followed.

The Ulster farmers, we believe, supply their servants or "*shearers*," as they are called, with butter-milk, upon which they appear to work and get through the harvest, better than the English, who are allowed so much ale or beer to drink ; the butter-milk of Ulster being a cool and refreshing beverage which appeases thirst, whilst the ale seems only to increase it, tends to diarrhœa, and unfits the gleaner for continuous work. We recommend then for health's sake, the early morning and evening labour system in the harvest field, and the substitution of milk for beer.

The Cancer-Curer.

WE had occasion last week to comment upon the Bone-setter. Complaints which have reached us from various sources respecting another medical parasite, of the genus dangerous, actuate us in referring to one of the greatest pests which infest the healing art—the *cancer-curer*. As a rule, we find this form of charlatan differs from the bone-setter in practising more for notoriety than for actual gain ; accordingly, the mischief done in country places by this class of quack is often great. The salve generally employed is a compound, for the most part, of some arsenical preparation. We have known one cancer-curer who relied upon conium, and had Baron Larrey always on the tip of her tongue—for she was a female practitioner, who had the advantage of living in France. We have seen some lamentable cases, the perfidious result of such quackery. A woman with scrofulous enlargement of the cervical glands had the ill-luck to allow herself a few months ago, a respected correspondent informs us, to be persuaded to consult a cancer-curer, who at once pronounced the nature of the case to be "a chain of cancer." He commenced operations in the usual way, and in a few weeks gave his friend the grave-digger a job. It is surprising to find people foolish enough to be so deluded, for it might be naturally supposed that one fatal error should suffice to terminate such abominable quackery. The cancer-curer can soon relieve himself of all responsibility in the hour of danger, after he has done fatal mischief—which society is leniently disposed to term an error of judgment—the practitioner of medicine is called in, the work of the dastard ignoramus is concealed from him, and when his suspicions are aroused and he inquires, even denied, so that when the patient dies, he (the medical attendant) has no other alternative than to certify as to the death. If he refuse, and thereby cause trouble, or provoke inquiry, he is not only maligned, but injured ultimately in his practice—in fact, he is compelled to accede to unjust and criminal demands. We are happy to be informed there are many exceptions, and that we have members of the Profession who, at loss and risk, have put the cancer-curer in the dock. Would that all could unite as one to do the same ; but, as long as our existing laws are so defective, we must not expect the Profession to be secured, or human beings' lives to be safe. Our only regret is that legislators allow themselves to continue in ignorance of the surroundings of so important a Profession as ours ; and that they do not personally suffer from the effects of inadequate laws occasionally. We suppose society will continue to suffer at the hands of the cancer-curer and the bone-setter until wiser legislators know how to protect the people from them ; there is no other remedy we can recommend, unless when, a case of poisoning malpractice is established, for the doctor to direct the attention of the Crown to it, and, if they refuse to prosecute, to ventilate and expose through a press ready to assist in the suppression of quackery ; for the time is coming when the State must, with an iron hand, defend and support the members of our Profession in the exercise of their important duties.

Greenwich Union—"Canvassing is prohibited, and will disqualify."

THE quotation which heads this paragraph is taken from the advertisement issued by the Guardians of the Greenwich Union. That body required the services of a medical officer for the workhouse, and, from the tone of advertisement put forth, one would be led to suppose that experience, as well as qualification, should be essential

requisites of the selected candidate. Forty candidates offered their services, from which number six gentlemen were selected as being the most "suitable" for the appointment. Finally the successful candidate turned up by the election of Dr. J. W. Walker, whose qualification dates from last year.

Now, amongst the two score candidates that sought this appointment were many whose high testimonials of ability, plurality of diplomas, and years of experience entitled them to the consideration of the *acute* Guardians of the Poor of Greenwich; and our surprise at the *want* of such consideration by them is so great indeed that we consider some little explanation due to the unsuccessful candidates as to the grounds on which the appointment was made; more especially as a rumour has obtained, that, although canvassing in person was "strictly prohibited," canvassing by deputy was not only winked at, but appreciated in certain quarters.

Health of the Armies on the Rhine.

Besides the dreadful death roll of slain and wounded, we may soon expect to hear of disease causing ravages in the ranks of the hostile legions. Dysentery is commonly prevalent in the Rhine provinces of France and Prussia, as well as in Belgium, during July and August. The favourite treatment just now among French surgeons is bismuth, in full doses. Ipecacuanha seems to have failed with the medical men on the borders of the Rhine. If the war be not suddenly concluded, intermittent fever will probably in about a month from this time be epidemic. It is almost sure to be of a very low type. Then these fevers will assume a remittent form, and true camp fever will become established. It is not improbable that cases of typhus will also occur in numbers to cause anxiety, though other forms of fever will probably be most prevalent. We are, of course, presupposing that every hygienic precaution will be adopted; for neglect of any would be sure to give rise to proportionate loss. We speak only of what is to be expected under most favourable circumstances. As autumn advances, the weather will become a more potent element —rheumatic affections and diseases of the lungs then taking the lead. At present, the one question is, whether the camp will be exposed to heavy rains.

Reform of the Medical Council.

Should the medical authorities combine in the way we have sketched out in our leader to-day, there would remain the question of the constitution of the General Medical Council. This body has refused to reform itself, and, therefore, we should have to go to Parliament for a short bill with that object. As the Government offered to take into consideration this question, if opposition were withdrawn from its late Bill, it might, on some such provision coming into force, voluntarily be disposed to give the Profession what its Council refuses—representation.

The Vicar of Dorking has succumbed to the recent operation for cancer of the tongue.

Up to the present time the advantages of the war have been almost entirely on the side of the Prussians. It is reported that upwards of 500 students have joined the French Army as assistant surgeons.

The Committee on Hospital Organisation has adjourned until October.

The *Food Journal* says that much of the turtle soup given away during the last four months has been made of conger-eels.

All vessels arriving at Constantinople from the Sea of Azoff are quarantined in consequence of the breaking out of cholera at Taganrog.

No less a quantity than fifty-four tons of diseased fish were seized and destroyed in London alone during last month.

The Annual meeting of the New Sydenham Society will be held to-morrow (Thursday) at Newcastle-on-Tyne, for the election of officers and other business.

As Dr. Turrell, of Windsor, was driving out last Thursday, his horse took fright, and he was thrown violently from his carriage. He is now lying in a critical condition, suffering from concussion of the brain.

Lord Lyttelton, who has recently addressed a letter to the Universities upon the study of Greek, presided on the speech day at Malvern College last week, when the subject was again referred to.

It is with deep regret that the Profession will learn of the sad result of an attack of ophthalmia in one of its most accomplished members. Mr. Timothy Holmes has, from this cause, lost the sight of the right eye. Happily, the other eye has recovered, and Mr. Holmes will, it is hoped, soon be able to return to his work.

Messrs. Power and Vernon have been appointed to the newly created office of Ophthalmic Surgeons at St. Bartholomew's Hospital. This is a fact that deserves attention, for, if the old Royal hospital gives its special departments to those not on its staff, other hospitals reputed to be more liberal will surely follow the worthy precedent.

A sad accident occurred at the new Drainage Works at Hastings on Friday night, whereby three men lost their lives. It seems that the tank, which receives the sewage previous to its separation for making artificial manure by the A B C process, had not been opened the previous day, and when two men, named Nash and Fry, descended as usual to work, they were suffocated by carbonic acid gas. Mr. Porter, the chemist to the works, courageously went to the help of his subordinates, but shared a like fate, and his body was afterwards washed into the sea.

A strange case of hydrophobia is reported in one of the Sheffield papers. Last week two children were sleeping in a field, when a donkey, which had been grazing in the same enclosure, seized one of them by the leg, shook it savagely, and then carried the little creature several yards. So severely was the leg lacerated that the child was taken to the hospital, where convulsions quickly supervened and death put an end to its sufferings. The house sur-

geon, Mr. Algernon Taylor, gave it as his opinion that the donkey must previously have been bitten by a mad dog. The verdict was death from hydrophobia.

Correspondence.

DOCTORS AND TEETOTALLERS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULR.

Dear Sir,—You have kindly on several occasions, permitted me—a non-medical man—to express my opinions on the above interesting subject in your journal. I again solicit at your hands the favour of this privilege, to express the gratification I have experienced recently from the perusal of two articles that have appeared in your issue of the 6th and the 20th inst. One from the pen of a "Physician," the other written by "George Ogilvie, M.D." Both communications confirm, very strikingly, the value of those views in relation to alcohol as an article of food and of medicine, that have been steadily impressed on the public mind for years past by the advocates of teetotallism. These, and some other papers that have appeared of late in our medical journals, confirm the views held by non-medical writers, as to the many dangers, not alone to health, but to the prosperity and happiness of the community also, which flow from the ignorant and unguarded use of alcoholic liquors that so universally prevails, and which, if they were caused by any other agency, would at once arouse such a spirit of determined opposition, as would soon banish the destroyer from these lands. No childish reasoning touching the rights of men who use this destroyer for private purposes of aggrandisement would be listened to for a moment, if a general sentiment did not prevail, that good in some form or other proceeded from the use of this poison—alcohol. This delusion teetotallers have been long striving to dispel. One of our chief impediments has always arisen and is still found, from the prevalent idea among medical men, that this article may be used safely, if not with advantage, if taken in *very small quantity*. Unfortunately, this necessary qualification or limitation never has been observed by any people. An individual here and there may keep within the line of safety. A nation never has done so, and never can do so. The only safety is in teetotalism. Hence, the pleasure which all the advocates of this sure means of safety from one of the greatest enemies man has to contend with, feel, when physicians come out of their shell to discuss this great question. I am much pleased when a learned writer such as Dr. Ogilvie, takes up the gauntlet against us, and in his endeavours to prove that we *may* be, or *perhaps are*, according to the axioms of exact science, or of medical knowledge, sometimes or somehow, not always altogether right in our radical conclusions, yet so weakly (as it seems to me) are we met in argument, and so cautiously is even the moderate use of alcohol recommended by such men, that no other conclusion could be come to by reasoning men, than this: that even acting in accordance with the advice of such writers as to so-called moderate use, it would be the safest course to abstain from the use of this poison altogether. The reading of Dr. Ogilvie's paper has afresh confirmed the sentiments which I had derived from other similar writers in my mind. These are, that for healthy men to tamper with alcohol, is extreme folly, and that even as a medicine, its value is so problematical, and its mischiefs so abounding, it would be best to discontinue it altogether. I think this is capable of proof from Dr. Ogilvie's own reasoning. Speaking of the action of alcohol, he says it has never "been thoroughly analysed." This is not the fault of teetotallers, and that its influence "requires more careful research." And he speaks of the "social, moral, and physical" evils it surely produces. He also tells us that we have "no very clear idea" of its effects on our system. I thought we had, in one respect at least, a very clear idea, and that is, its deteriorating effects on the brain, which has caused it to be named a "brain poison." I apprehend its smallest doses such as men call very moderate drinking, sensibly affect that organ, and that hence, arises *the* great danger of its use. It is not drunkenness that sends the noble ship to destruction, or that dashes one railway train into another. It is what is usually denominated moderate drinking that does this sad work, by disturbing the normal action of the brain. Dr. Ogilvie says, "we know nothing *positive* of its action in our system." Is not this opinion refuted by Todd and Bowman, who say that if alcoholic liquors were not speedily absorbed, the process of digestion could not go on in the stomach, their presence being fatal to that operation. And that Dr. Bowman is believed to be one of the first of living physiologists; therefore, first rate authority in this matter is proved by the fact that our Dublin Medical Colleges conferred on him the greatest honour in their power to bestow, because of his great acquirements, by making him an honorary member of their bodies?

The late Sir J. Simpson, a high authority, said to this effect at the meeting of the Social Science Association in Belfast in the Health Section: You may cleanse your lanes, and your streets, and your houses, as you will, but so long as you allow hundreds of publicans to pour filthy and poisonous alcoholic liquors down the throats of your people your labour will be in vain.

Dr. Ogilvie further informs us that "*if*" the quantity of alcohol taken be sufficiently small, no unpleasant consequences follow. Therein lies the whole difficulty of his position, and the all but impossibility of adherence to his rule. And after referring in plain words to the fact that "large bodies of men enjoy the most robust health without using them (alcoholic liquors) at all," he seems to endeavour to neutralize this fact by saying, "there is no sufficient evidence to show that their moderate use is *necessarily* unfavourable to health." The very danger of excess, which he clearly admits, proves that it is. He says, "a modicum of wine or spirits often restores the function of digestion." I place the positive dictum of Todd and Bowman to the contrary, against this opinion. With regard to his opinion that alcohol is useful in "debility connected with dyspepsia, hæmorrhage, or profuse discharges, certain stages of fever," and other complaints, I need only remark, that many men eminent in the profession, recommend an entirely different practice founded on long experience of its superiority.

I have now hastily but with intense interest, ran over Dr. Ogilvie's paper; and given as many extracts from it, in proof of my position as a teetotaller, that there is neither sense nor reason for the use of alcohol, as a common beverage, by men in ordinary health; and that, even as a medicine, its use were better superseded by other remedies,—as I dare venture to intrude on your space, by quoting. I thank him for his paper, although it expresses opposition to teetotalism, because I feel assured, that the more thoroughly this great question is examined, the more widely will its inestimable value to society, be recognized and acted on; and the less we shall hear about the difficulty of freeing the community from its evils. It will be treated as we treat incursions of Cholera, Plague, Fever, &c., as an enemy not to be reasoned with, or talked softly to, but expelled the land; just as our forefathers expelled wolves, because their presence was inimical to the public welfare. Or as our Irish landowner, did a few years ago, when cattle plague threatened them with the loss of some of their stock. They interdicted the importation of foreign cattle; and thus prevented the apprehended ruin. Now all these, and all other diseases put into one scale, would be weighed down as causes of human misery, by the effects of the Liquor Traffic, put into the other. No one is hardy enough to deny this; and yet we play with our enemy as little children, play with fire and other dangers, and allow sixty thousand of the men and women of these lands, to be annually carried away prematurely, to the dishonoured grave of the drunkard. And we permit six hundred thousand drunkards constantly to roam at large: a pest to their families, and a disgrace to their country. Are these evils to be spoken of with "bated breath and humbleness, !" or handled softly, with kid-gloves? The days are coming when society will be otherwise minded.

I hail with hearty goodwill, the advent of "A Physician" to our ranks; he speaks in favour of the Teetotaller's noble, but still too unpopular, work,—with right goodwill. May many other members of his profession hasten to assist us in getting entirely rid of this sworn enemy of our race.

Physicians,—your country expects this of you. You are the men set apart to warn us of the approach of every danger to health; has it any greater enemy than alcohol, to contend against? I am, &c.,

James Haughton.

35 Eccles street, Dublin, July 27th, 1870.

Gleanings.

The Correlations of Temperature, Pulse, and Respiration in Phthisis.

By Assistant-Surgeon Boileau, M.B., 29th Regiment, Quebec.

(From the *Army Medical Department Report.*)

There is at present a widely extended belief that the thermometer is, of all our aids to diagnosis, one of the most reliable in the detection of tubercular disease of the lungs. It is of the utmost importance that we should be acquainted with the real value of the instrument, as otherwise serious errors may occur; in addition to which the thermometry of disease will be unjustly impugned as a powerless means of diagnosis. The truth appears to be this, that the positive evidence of elevated temperature in a doubtful case of tuberculosis is of great value, whilst the absence of such elevated temperature is no proof that tuberculosis is not present. It is not even a proof that tuberculization is not in progress, it is not even a proof that any unfractuosities have not occurred in the lungs.

I have demonstrated that a person may progress to the stage of tubercular cavities in his lungs without exhibiting general elevation of temperature. And as this demonstration is of great consequence, I will give it *verbatim* from my case books, in order that the proofs may be scrutinised by those who are more experienced than I am.

I must admit, in deference to the opinions and experience of the well-known writers on the subject, that I have met with at least one rather exceptional case; but provided only that the circumstantial fidelity of the narrative is unquestionable, it alone must be of the greatest value, as a proof that tuberculisation of the lung may occur without general elevation of temperature.

Private J. McC., aged 27, service eight years, was admitted into the Regimental Hospital of the 29th Regiment in Hamilton, Canada West, on the 21st February, 1868. He had had very few entries in his medical history sheet. In 1863, dyspepsia gave him forty-four days in hospital, and in 1865, during the cholera season in Malta, he was ill for seven days with diarrhœa. During the last eight years, he had thus been only twice in hospital. His parents, brothers, and sisters, strong and healthy, and previous to this year he had been so himself. Latterly, he had become subject to colds, and within the month he had been troubled with pulmonary distress and cough. He was a fair-complexioned man, with blue eyes, and very white conjunctivæ; voice was hoarse.

February 24th.—Five observations have been made on this man's temperature—three mornings, viz., 98·6, 98, 98·2; and two evenings, 98·4, 98·2: average 98·2. His temperature is, therefore, normal. Judging from this fact, and from his general appearance, I do not expect to find anything very serious the matter with him.

He complains of a "cough and spitting," weakness, and a pain in the right hypochondrium when he takes a full breath. His voice is hoarse and weak, his breathing is quickened, the sputa is a mixture of froth and puriform detached masses, the skin is soft and delicate. Percussion yields a much duller sound from the left clavicle than from the right, and the infra-clavicular region of the left side is also duller than the corresponding right, but the difference gets less and less marked as we approach the mammary region. Percussion of the scapular region gives no reliable information. The respiratory sounds are very feeble indeed in the upper lobe of the left lung, whilst they are of normal strength in the right. Posteriorly they are rather feeble throughout the left, but positively puerile in the right; they are pure everywhere except under the clavicular and infra-clavicular regions of the left side, where there is an occasional but unmistakeable râle. The cardiac sounds are particularly clear and distinct. I suspect phthisis, but more than a suspicion is to-day unjustifiable; yet there surely cannot be any inflammation of mucous membrane, of pulmonary tissue, or pleura. His temperature this morning is 98·2, pulse, 108, respirations, 26; evening temperature 99·4.

February 25th.—Temperature, 97·8; pulse, standing, 132; lying, 108; respiration, 39; sputa of puriform masses floating in a thin fluid. Evening.—Temperature, 98; pulse, standing, 126 lying, 102; respiration, 32.

February 26th.—Temperature, 98·2; pulse, standing, 118, —lying, 96; respiration, 34. Evening.—Thermometer broken by accident; pulse, standing, 120, lying, 104; respiration, 36.

February 27th.—Pulse, standing, 120—lying, 100; respiration, 32. Evening.—Pulse, standing, 118, lying, 104; respiration, 36.

February 28th.—Pulse, standing, 116, lying, 102; respiration, 32. Evening.—Pulse, standing, 120, lying, 100; respiration, 36.

February 29th.—Pulse, standing, 120, lying, 100; respiration, 32. Evening.—Pulse, standing, 118, lying, 102; respiration, 32.

March 1st.—Pulse, standing, 112, lying, 116; respiration, 32. Evening.—Pulse, standing, 118, lying, 100; respiration, 32.

March 2nd.—Pulse, standing, 118, lying, 100; respiration, 32. Evening.—Pulse, standing, 120, lying, 100; respiration, 32.

March 3rd.—Pulse, standing, 120, lying, 102; respiration, 32. Evening.—Pulse, standing, 118, lying, 104; respiration 34.

March 11th.—There is distinctly less motion in the left than in the right side.

March 19th.—Sputa more puriform.

April 1st.—Less cough, less expectoration, rales diminishing, dulness less marked.—Temperature, 98·2; pulse, standing, 120—lying, 112; respiration, 26.

April 2nd.—Temperature, 98·4; pulse, 122 standing, 112 lying; respiration, 32.

April 3rd.—Temperature, 100·4; pulse, 116 standing, 108 lying; respiration, 32.

April 4th.—Temperature, 99·2; pulse, 122 standing, 112 lying; respirations 34.

April 5th.—Temperature, 99·4 pulse, 120 standing, 112 lying; respiration, 32.

April 6th.—Temperature, 98; pulse, 104 standing, 100 lying; respirations, 32.

April 7th.—Temperature 98·2; pulse, 112 standing, 110 lying; respirations,

Which gives an average for the week of—Temperature, 98·8; pulse, standing, 114—lying, 109; or a difference between standing and lying of only 5, and respiration 31.

April 8th.—Temperature, 97·8; pulse, 112 standing, 100 lying; respiration, 32.

April 9th.—Temperature, 99·2; pulse, 114 standing, 110 lying; respiration, 34.

April 10th.—Temperature, 98·0; pulse, 120 standing, 116 lying; respiration, 32.

April 11th.—Temperature, 98·0; pulse, 114 standing, 110 lying; respirations, 34.

April 12th.—Temperature, 98·2; pulse, 114 standing, 108 lying; respiration, 32.

April 13th.—Temperature, 98·0; pulse, 120 standing, 114 lying; respiration, 32.

April 14th.—Temperature, 98·2; pulse, 118 standing, 112 lying; respiration, 43.

Which gives an average for the week of—Temperature, 98·2: pulse, standing, 116—lying, 110; or a difference between standing and lying of only 4, and respiration 32.

April 15th.—Thermometer, 97·2; pulse, 116 standing, 100 lying; respiration, 32.

April 16th.—Thermometer, 97·6; pulse 120 standing, 116 lying; respiration, 32.

April 17th.—Thermometer, 98·2; pulse, 118 standing, 110 lying; respiration, 34.

April 18th.—Thermometer, 97·8; pulse, 120 standing, 116 lying; respiration 34.

April 19th.—

April 20th.—Thermometer, 98·8.

April 21st.—Thermometer, 98·6; pulse, 116 standing, 112 lying; respiration, 32.

Which gives an average for the week of—Temperature, 97.8; pulse, standing, 118—lying, 113; or a difference of only 4 between standing and lying; and respiration, 33.

April 22nd.—Thermometer 98·0; pulse, 120 standing, 114 lying; respiration, 32.

April 23rd.—Thermometer, 98·0; pulse, 120 standing, 116 lying; respiration, 34.

April 24th.—Thermometer, 98.2; pulse, 118 standing, 114 lying; respiration, 32.

April 25th.—Thermometer, 98·2; pulse, 120 standing, 116 lying; respiration, 32.

April 26th.—Thermometer, 98·0; pulse, 118 standing, 114 lying; respiration, 32.

April 27th.—Thermometer, 98·0 ; pulse, 118 standing, 114 lying.

April 28th.—Thermometer, 98·0 ; pulse, 118 standing, 114 lying.

Which gives an average for the week of—Temperature 98 ; pulse, standing, 119, lying, 115 ; or a difference between standing and lying of only 4, and respiration, 32.

April 29th.—Temperature, 94·4 ; pulse, 120 standing, 116 lying ; respiration, 32.

April 30th.—Temperature, 98·6 ; pulse, 120 standing, 114 lying ; respiration, 32.

May 1st.—Temperature, 98·2 ; pulse, 118 standing, 112 lying ; respiration, 32.

May 2nd.—Temperature, 98·4 ; pulse, 120 standing, 116 lying ; respiration, 32.

May 3rd.—Temperature, 99·4 ; pulse, 120 standing, 116 lying ; respiration, 32.

May 4th.—Temperature, 98·8 ; pulse, 120 standing, 116 lying ; respiration, 34.

May 5th.—Temperature, 98·0 ; pulse, 118 standing, 114 lying ; respiration, 32.

Which gives an average for the week of—Temperature, 98·5 ; pulse, standing, 119, lying, 115 ; or a difference between standing and lying of only 4, and respiration, 32.

May 7th.—Temperature, 98·6 ; pulse, 116 standing, 110 lying ; respiration, 32.

May 8th.—Temperature, 98·0 ; pulse, 114 standing, 110 lying ; respiration, 32.

May 9th.—Temperature, 98·4 ; pulse, 120 standing, 116 lying ; respiration, 32.

May 10th. Temperature, 97·8 ; pulse,—standing,—lying ; respiration, 32.

May 12th.—Temperature, 100·6 ; pulse, 120 standing, 116 lying ; respiration, 32.

Which gives an average for the week of—Temperature, 98·7 ; pulse, standing, 117, lying, 113 ; or a difference between standing and lying of only 4, and respiration, 32.

The diagnosis of phthisis having been made some time, he was brought before the half-yearly Invaliding Board, and on its recommendation would have gone home to England, had he not become so much worse before the invalids were sent from Canada. He was now obliged to take altogether to his bed. On the 13th of the month, he was attacked with a violent rigor ; his temperature rose to 104·6 deg., with a pulse of 124 lying, and respiration, 34. Next morning the existence of large cavities was too evident. The sputa became enormously excessive, of a purulent appearance, and the following observations were made:—

May 13th.—Temperature, 102·8.

May 14th.—Temperature, 99·6 ; pulse, standing, 108.

May 15th.—Temperature, 100·2 ; pulse, standing, 100 respiration, 32.

May 16th.—Temperature, 90·0.

May 17th.—Temperature, 100 2 ; pulse, 104 lying ; respiration, 28.

May 18th.—Temperature, 99·2 ; pulse, 104 lying ; respiration, 32.

May 19th.—Temperature, 98·8 ; pulse, 110 lying ; respiration, 34

Which gives an average for the week of—Temperature, 100 ; pulse, 107 lying, and respiration, 31.

On the 14th I made the remark—"The system has temporarily recovered from the shock, and is becoming tolerant of the diminished available lung tissue. This tolerance will, however, soon yield to necessity, and the lungs will soon be incapable of purifying the blood even to the extent required for his diminished body."

His evening temperature on the 15th was only 99·2 deg., and on the 18th 99·4 deg. On the 19th also his evening temperature was 99·4 deg.

On the 20th, the sputa was frothy and puriform, and very characteristic of phthisis. It is needless to dwell on the physical signs. The intestinal canal performed its functions regularly and healthfily. He seems to have no disease whatever but that of the lungs. The following observations were taken:—

May 20th.—Temperature 99·6 ; pulse 120 lying ; respiration 38. Evening.—Temperature 99·4.

May 21st.—Temperature 100·4 ; pulse 108 lying ; respiration 40. Evening.— Temperature 100.

May 22nd.—Temperature 99·2 ; pulse 110 lying ; respiration 36. Evening.—Temperature 100·2.

May 23rd.—Temperature 100·4 ; pulse 120 lying ; respiration 40. Evening.—Temperature 100·8.

May 24th.—Temperature 100·2 ; pulse 120 lying ; respiration 38. Evening.—Temperature 100·2.

May 25th.—Temperature 99·6 ; pulse 124 lying ; respiration 42. Evening.—Temperature 100·2.

May 26th.—Temperature, 99·8 ; pulse, 120 lying ; respiration 42. Evening.— Temperature 99·6.

May 27th. Died this morning, after—as well as we could judge—an illness of about three months and a-half in length. For the last 10 or 12 days he has been in a marked state of hectic, cheeks very much flushed, and suffering from profuse sweating and frequent rigors ; pulse very small and quick. A few days ago he expectorated a mass of tubercle about the size of a walnut. He has had but one solitary attack of hæmoptysis ; never complained much of thoracic tenderness.

Autopsy 30 hours after death.—Skin very white and semi-transparent ; body rather well nourished, there being a considerable quantity of subcutaneous fat ; muscles red and firm ; the cavities of both pleuræ almost entirely obliterated by adhesions of great tenacity. I never before removed the lungs from the body with such difficulty. Some portions of their substance I left attached to the thoracic wall. The pleuræ were converted into a muscular looking covering for the lungs, which was about one-eighth of an inch in thickness. This covering appeared to be a fleshy substance, but was in reality a tissue pervading with tubercle.

Having removed the lungs with as much as possible of their investing morbid membrane, which must effectually have prevented all gliding motion of the viscera, I found them thickly studded with grey miliary tubercles, giving to the cut section a very rough appearance and feel. In the left lung they pervaded every portion of the pulmonary tissue, giving whole square inches of the surface a perfectly grey appearance. Dispersed throughout the lungs there were also masses of yellow tubercle, from the size of a pea to that of a pigeon's egg, and varying from a soft consistence to the hardness almost of cartilage ; in fact the apex of the left lung was more like a piece of cartilage than anything else. In the upper lobe of this lung I found a cavity the size of a walnut, and there were besides several anfractuosities. The right lung was about as far advanced in disease in its upper lobe as the left was in its lower, and the lower lobe of the right lung had by far the smallest quantity of deposit, and that of the grey miliary character, without any yellow tubercle ; so that if we had placed the apex of the right lung under the base of the left, and made a clean section from top to bottom through both, we should have had a successive gradation of developed disease presented to us. At the top complete replacement of lung tissue by morbid product of the most developed character, resulting in utter destruction of parts ; lower down the tissues pervaded by the grey miliary first form, with a good deal of the yellow, lower still (top of right lung), the grey universally pervading with very little yellow ; lower still nothing but the grey form, and lower still a few cubic inches of what might be called the available portion of the pulmonary organs. And so with the pleuræ. At the top (upper lobe of left) the lung was so solidly united to the parietes that the knife only could separate it ; lower down the fingers could do this, but with great difficulty ; lower down (upper lobe of right) this was easier to do, and lower still there was a portion of the pleural cavity existing.

The heart was very fat on the surface, but was otherwise quite healthy ; liver and spleen quite normal ; no enlargement of the mesenteric glands.

Remarks.—The physical signs and the diagnosis were most satisfactorily verified by the *post-mortem* examination. It appears to me certain that a miliary deposit had taken place to a very considerable extent when he first presented himself at hospital. Yet at this time his morning and evening temperatures were normal ; in fact until the 11th of May his temperature, with remarkably few exceptions, was always normal ; but there is one remark to be made here of paramount importance. I am here speaking of his temperature between nine and ten o'clock *every morning. Unless the time of a thermometric observation on a patient is given, apparently conflicting theories will be announced, and endless controversy will be the result.* Temperatures taken before noon are all-important for one reason out of many—viz., that it is in the morning that invaliding boards and consultations generally take place. Observations taken at such times are of value, only in comparison with others taken at the same time of day. I may

state, however, that I have taken several normal evening temperatures of phthisical patients.

The pulse in this case was almost invariably over 100 lying, and I believe that the rapidity of the pulse to be more constant in phthisis than the elevation of temperature. A peculiarity (?) in his pulse was the small increase of rate when he stood. This, however, has been stated to be very generally the case in phthisis. The respirations were almost invariably over 30 lying or standing. With all this, there was I believe no inflammation in the lungs, nor had we evidence of general fever. Why should we necessarily seek for such? I have seen morbid deposit in the penis, and removal of that deposit by ulceration, which destroyed nearly half the organ, where the average temperature of 54 morning and evening observations was 98·4 deg. 40 of the temperatures being 99 deg. and under, the highest taken being 100·4 deg. three only exceeding 100 deg. I have seen syphilitic sarcocele terminating in sloughing, where the average temperature given by 28 observations was, for morning 97·5 deg. one only exceeding 99 deg. and for evening 98·3 deg. two only exceeding 99 deg.; and I have, in like manner, seen necrosis of the tibia with extensive subcutaneous infiltration, and a large number of buboes, &c., without any elevation of axillary temperature. I do not mean to say that increased heat is not a strong corroborative evidence of the existence of phthisis. I think it is, but I believe that it is hazardous to assert that because a patient's temperature is not above 99 deg. that he is not phthisical. I think it proved that a considerable deposit of tubercle may, under favourable circumstances, take place in the lungs without giving rise to elevation of temperature; and I may here state my opinion, founded on about 30,000 observations, that the maximum of axillary temperature in a healthy man is 99 deg.

There are some particular points of interest in the case which I have given, but as they have no bearing on the question of the correlation of temperature, pulse, and respiration, I must pass on to a consideration of the next case, which justifies me in expressing the opinion that tuberculosis may be in progress without causing a diagnostic increase of natural heat.

(To be continued.)

Medical News.

Royal College of Surgeons of England.—The following gentlemen, having passed the final examination for the diploma, were duly admitted Members of the College at meetings of the Court of Examiners on the 28th and 29th ult.:—Henry Bennett Bailey, L.S.A., Sutton St. Edmunds, Lincoln; William E. Battersby, M.B. Dub., Killarney; H. W. Langley Browne, West Bromwich; Joseph Hirst Clarke, Sheffield; Charles Clay, Dewsbury, Yorkshire; Henry Edward Dixon, Watlington, Norfolk; Robert T. S. Eagar, Andenshaw, Lancashire; George Fenton, L.S.A., Great Smith street; Alfred W. Harding, Percy street; William Hardman, Blackpool, Lancashire; Henry Jukes Hibberd, Peckham; Francis Hollingshead, Coventry; Hubert Ernest Hudson, L.S.A., Cranbrook, Kent; Joseph Hunt, Hopwood Allchurch; Thomas Llewellyn Lloyd, Wrexham, North Wales; William Henry Lovejoy, M.D. New York, Portman street; Francis Ottley Lovell, Kilburn; Jameson John Macan, Cheam, Surrey; Alexander Mitchell, Birmingham; George P. O'Farrell, M.D. Dub., Boyle, Co. Roscommon; Charles Bagge Plowright, L.R.C.P. Edin., North Wotton, Norfolk; Walter Rigden, L.S.A., Canterbury; Edmund B. Ravenhill, Arlingham; Bernard John Shaw, L.S.A., Attercliffe, Yorks; Arthur William Smith, L.S.A., Halifax; Charles Wait Smith, Jamaica; George E. K. Thorpe, L.S.A., Sheffield; Lawrence Kingston Times, Manchester street; Thomas H. F. Tothill, L.S.A., Topham, Devon; Charles William Vickers, L.S.A., Huddersfield; Edmund S. Warburton, Betley-Crewe; George Wilson, L.S.A., Claverton street.

The following candidates, having passed the required examination, obtained their diplomas in Dental Surgery at a Board of Examiners held on the 2nd inst.:—Edward Bartlett, Connaught square; Charles Lane Clark, Harley street; Francis Frederick Ebbetts, Tottenham; George Graham Forster, Durham; Isidor Isaac Lyons, St. John's-wood; Charles Claude Rogers, Cork street, Burlington Gardens; Richard William H. Tucker, Truro, Cornwall.

University of London.—The following gentlemen have passed since the publication of the last list in our issue of the 3rd instant:—First M.B. Examination.—(*Entire.*) *First Division:*—George Harry Barfoot, Henry James Benham, Sidney Coupland, William Smith Greenfield, Charles Atkinson Nankivell, and Walter Ottley—of University College; George Birt, Sydenham College, Birmingham; Ebenezer Geer Russell, Guy's Hospital. *Second Division:*—Thomas Barlow, B.Sc., University and Owens Colleges; Philip Henry Bindley, Richard Goodwin Breeze, Leonard Cane, Walter Bernard Cornelius, Charles Washington Shirley Deakin, Rickman John Godlee, B.A., Thomas Anthony Aloysius M'Cann, Ebenezer John Ramsay, and Arthur Rich Saunders—of University College; Cuthbert Hilton Golding Bird, B.A., Benjamin Neale Dalton, Thomas Eastes, and George Henry Percival—of Guy's Hospital; Gerald Bomford, John Alexander Cockburn, Andrew Duncan, Joseph Henry Phillpot, and William Rose—of King's College; Thomas Carleton Railton, Owen's College and St. Bartholomew's Hospital; Henry William Saunders, St. Thomas's Hospital; Herbert Taylor, St. Bartholomew's Hospital. *Excluding Physiology.—Second Division:*—David Arthur Davies, University College; William Williams, Guy's Hospital. *Physiology only.—Second Division.*—John Thomas Darby, University College; Robert Eardley-Wilmot, King's College.

Health of the Quarter.—The Registrar-General's quarterly return of the marriages, births, and deaths registered in the divisions, counties, and districts of England states that in the United Kingdom the births of 275,273 children and the deaths of 162,750 persons of both sexes were registered in the three months ending on the 30th of June, 1870. The natural increase of population was thus 112,523. The number of persons married in the quarter ending the 31st March, 1870, was 108,202. The resident population in the middle of 1870 was estimated at 30,838,210, that of England and Wales amounting to 22,090,163, of Scotland to 3.222,837, and of Ireland to 5,525,210. The corrected death-rate of the quarter was 22·1 per 1,000; the birth-rate 37·1; the marriage rate for the previous quarter 15·5. The annual birth-rate was somewhat above the average; it was 37·00 in 1,000. Mr. Glaisher shows that April came in cold; that the temperature then rose, and was high until near the end of the month. Anon cold came, and rain fell in small quantities in different parts of the country, until May had fully set in; then the weather became warm and dry, and full of sunshine until nearly the end of June, when the cold, changeable fit returned, and brought a little rain. These months were almost rainless at Greenwich; only 1·2 of rain fell on 15 days out of 91, against an average of 5·8 in. Over the country, especially in the north, the rainfall was not so inconsiderable. Mr. Glaisher estimates the mean rainfall at 3·37 in. The mean temperature at Greenwich was 54·4 Fahrenheit. The mean temperature was 12·4 deg. centigrade; about 1 deg. over the average. The air was unusually dry. Taking saturation at 1·00, the degree of humidity was ·70, whereas it was ·76 on an average of 29 years. The air travelled horizontally at the rate of 10 miles an hour. In metric measure at Greenwich, the rainfall of three months was 3 centimetres, the average being 15 centimetres; for the country generally the rainfall was about 8 centimetres. The wind travelled horizontally at the rate of 16·5 kilometres an hour. The mortality, 22 in 1,000, did not exceed the average of the season, which lies between the extremes of winter when it is highest, and summer when it is lowest, unless some great epidemic prevails. 121,246 persons died in the 91 days; more by 7,508 than the average of the preceding three spring quarters. The annual mortality per 1,000 was 22·81 in the chief town districts, less than the average of ten preceding years by 0·61; while in the other districts of small towns and villages the mortality was 21·02, or 0·69 above the average. This may probably be interpreted to imply that the sanitary measures now in operation in towns are producing an effect which is counteracted by the increase of neglected nuisances in the country. This establishes the necessity of covering the whole area of the kingdom with an effective sanitary administration. The mortality of London has increased in the three last spring quarters; there has been a decrease in the mortality of Birmingham, Manchester, Salford, Sheffield, Hull; an increase in Bradford among the 17 English towns of the first magnitude. The mortality in the 50 towns of second magnitude was at the rate of 21·9 in 1,000; among these towns those of lowest mortality were Dover, Southampton, Coventry, Birken-

head, Ashton-under-Lyne, South Shields, Carlisle, where the mortality ranged from 13·1 in Birkenhead to 28·8 in Carlisle. Among the towns of highest mortality are Maidstone, Reading, Oxford, Cambridge, Exeter, Stoke-upon-Trent, Macclesfield, Wigan, Bolton, Huddersfield, Halifax, Swansea, where the mortality ranged from 23·5 in Reading to 27·0 in Exeter, and 31·6 in Halifax. These high rates of mortality should be inquired into specially by the local authorities. Measles, scarlet fever, and fever have been epidemic in Halifax; but the diseases that prove so fatal in Exeter are not so apparent. In 17 large English towns the rate of mortality from the seven principal zymotic diseases, namely — small-pox, measles, scarlet fever, diphtheria, whooping-cough, fever, and diarrhœa was lowest in Sunderland (1·1) and Leicester (1.4), highest in Sheffield (4·8), Bradford, and Bristol (5·6) per 1,000, At the present time it is important to watch closely the mortality of infants. In the healthier districts of England it appears by the Life Table that out of 100 born alive 10 die in the twelve months following. Now, the births in a quarter have been compared with the deaths in the same time under *one* year of age in 17 large English towns, and the deaths are 15 to 100 births; five are killed by various causes in these towns in addition to the ten that die in healthy country districts. In this quarter the infants fared worse in Bradford, Liverpool, Manchester, Leeds, Bristol, where from 17 to 18 out of 100 born alive died; best in Portsmouth, Sunderland, and Sheffield, where from 11 to 13 infants under 12 months of age died to 100 born alive. It may be of use to state that no epidemic disease prevailed to any extent during the three months of April, May, and June, in Lowestoft, Herne Bay, Eastbourne, Sidmouth, Exmouth, Ilfracombe, Tenby, Aberystwith, Llandudno, Rhyl, Malvern, Buxton, Matlock, and Harrogate. Scarborough, Yarmouth, the Isle of Wight, Weymouth, Torquay, Penzance, Weston-super-Mare, Southport, and Tunbridge experienced outbreaks either of scarlet fever or of some other zymotic malady, but in none of these places was any epidemic very fatal except in Penzance. It is thus fortunate, the Registrar General concludes, that, while a sanguinary war is raging on the Continent, tourists find the English watering-places in a comparatively satisfactory state—in fact, much healthier than the places of resort abroad, where sanitary science has made even much less progress than in England.

The Edinburgh University Club.—On Monday, the 1st instant, the Members of the Edinburgh University Club dined at Hampton Court. In the absence of Dr. Sievcking, one of the Vice-presidents, from indisposition, the chair was occupied by Dr. Alexander Halley, who recapitulated the objects of the Club, dwelling particularly on the opportunities its periodical *réunions* afforded for the revival of early College associations, and the maintenance of good-fellowship among the widely-scattered *alumni* of Edinburgh.

Vaccination.—The Privy Council have presented Mr. J. W. Dryland, M.R.C.S., of Kettering, a gratuity of £22 4s., and to Mr. W. Conway Hind, of the Swineshead District of the Boston Union, the sum of £7 7s. for successful vaccination.

The Northampton Lunatic Asylum.—The Annual Report of this institution has just reached us, and, after a careful perusal of its pages, we congratulate the Committee of Management generally, and the Medical Superintendent and Secretary particularly, upon the excellence of the arrangements for the employment and amusement of the large number of patients the Asylum contains. Husbandry and gardening are extensively patronised; and even the question of "What shall we do with our sewage?" is disposed of in miniature, by its distribution by gravitation over the land, which is much enriched thereby. The number of patients in the Asylum during the past year was 573, the sexes being about equal. The deaths were somewhat in excess of previous years, which is easily accounted for by the large proportion of extreme cases admitted. Some time ago we directed attention to the great want of accommodation for the insane of the middle class—for those who cannot afford to pay heavy sums, and who are still above being paupers. We are happy to find this *desideratum* is accomplished by the additions made to the buildings of this institution, where the payments vary from one guinea per week, according to the circumstances of the case and the accommodation required.

Sanitary Reform.—It is stated that the managers of the metropolitan asylums have resolved to retain possession of the fever hospital at Hampstead in order to meet the requirements of the metropolis, which is threatened with an epidemic of typhus fever. Alas! no fever hospital will meet the requirements of this metropolis. The cures effected at the hospital will be but a poor compensation for the deaths of thousands which must occur from the effects of dirt, muddle, and "consideration" before next Session. What the metropolis really requires is a simplification of our Sanitary Acts and the establishment of some less complicated machinery than that which local authorities now neglect to put in action. It also requires a Home Secretary who will not only take a deep interest in matters of domestic concern, but will also energetically, and without loss of time, carry out those reforms which are so urgently required. Our lives should be to the Home Secretary what sovereigns are to the Chancellor of the Exchequer. A waste of the former is far more serious than a waste of the latter. The terrible mortality from scarlet fever which made so many homes desolate last year, and has since become chronic in the metropolis, should have made sanitary reform one of the principal measures of the Session now expiring; but it is too late now. No ray of sunshine will clear the shadow of death that wraps in misery and gloom the dens which form the dwelling place and dying place of so many of the poorer classes in this country. Perhaps when we have educated them they will be more content to live like pigs and die like dogs; in the meantime it only remains for them to make their bow to the Home Secretary and thank him for the kind "consideration" he has bestowed on their case. "Ave Cæsar, morituri te salutant!" is more likely to be his greeting at the close of the Session then "Well done, thou good and faithful servant!" which expression he modestly informed his audience at the Mansion-house on Saturday he expects to hear addressed to himself and the other members of the House of Commons as a reward for his labours.—*Pall Mall Gazette.*

Prizes at the French Academy.—M. Chenu has obtained the statistical prize for his Medico-Chirurgical Statistics of the Campaign of Italy in 1859-60. The prize for Medicine and Surgery has been conferred on M. Junod for his Hæmospasia, £100. M. Luschka, of Tubingen, for his Topographical Anatomy, £80. MM. Paulet and Sarazin, for the same subject, £80. Dr. H. Roger, for his Chorea in Children, £60. M. Maurin, for his Typhus among the Arabs, £60. M. Knoch, of St. Petersburg, for his Bothriocephalus Magnus, and M. Saint Cyr, for his Tinea Favosa among Domestic Animals, £40 each. Other prizes are conferred for investgations and proposals to prevent the evil effects of certain unhealthy trades, viz.—M. Pimont, for his Plastic Calorifuge, £100. M. Charrière, for his Apparatus for saving shipwrecked crews. The Cuvier prize has been awarded to Ehrenberg. The Barbier prize has been divided between M. Mirault, of Angers, for his Temporary Surgical Occlusion of the Lids in the treatment of Ectropion arising from a Cicatrix; and Dr. Stilling, of Cassel, for the improvements introduced by him in Ovariotomy. The Godard prize has been presented to Hyrtl, Vienna, for Genito-Urinary Organs of Fishes.

Association of Medical Officers of Health.—At the annual meeting of this Association the following officers were elected for the year ensuing:—President, Dr. Robert Druitt; Vice-presidents, Dr. Aldis, Dr. Buchanan, and Dr. Woodforde; Treasurer, Dr. Aldis; Secretaries, Dr. J. Northcote Vinen and Dr. Thomas Stevenson; General Purposes Committee, Drs. E. Ballard, H. Letheby, W. Hardwicke, W. T. Iliff, Thos. Sutton, J. J. Rygate, Mr. Jno. Liddle, and Mr. C. F. J. Lord.

Apothecaries' Hall.—At a Court of Examiners held on the 4th inst., Messrs. William Frederick Richardson Burgess, of Bethnal-green road; James Tompsett, of St. Leonard's-on-Sea; and Samuel Walker, of York, having passed the necessary examinations, were admitted licentiates of the Society of Apothecaries; and Messrs. Arthur Culver James, of Guy's Hospital; William Odell, of St. Bartholomews Hospital; William Rendall, of Guy's Hospital; and William George Watson, of University College Hospital, passed the primary professional examination.

Fever in London.—The following are the numbers of cases admitted into the London Fever Hospital during the last few weeks:—There were admitted during the week ending May 7th, 2 cases; 14th, 6; 21st, 10; 28th, 8; June 4th, 4; 11th, 14; 18th, 9; 25th, 10; July 2nd, 13; 9th, 18; 16th, 36; 23rd, 13; 30th, 8.

Vaccination.—Dr. Snow says in his last monthly report as City Registrar of Providence, in America:—The experience of the past winter has only been a repetition of the old, well-established story in this city—the absolute protection from small-pox afforded by vaccination, and the importance of re-vaccination. The small-pox has been brought into Providence no less than five times since last November from other places. The first time the disease was extensively spread before it was recognised; but was arrested completely after about thirty cases, mostly modified, had occurred. In the other four instances the disease was confined to the parties who brought it from other places. Vaccination has been quite general in the city during the past winter, and we may say confidently that there are few, if any, places in the country where the population is so well protected against small-pox as in Providence.

Fatty Degeneration of the Placenta. By Andrew C. Kemper, A.M., M.D., of Cincinnati, Ohio.

September 25th, 1868, Mrs.———, æt, 33, had always enjoyed excellent health; uterine functions perfectly regular; nearly two years after her marriage, she supposed herself for the first time pregnant, her catamenia having ceased. She experienced all the usual effects of that condition, without any unfavourable symptom, until February. About the first of January she had suffered for several days from mental anxiety, and in the second week in February she became aware of a sudden diminution in her size, after which she was not larger than previous to her conception. There was no discharge or other sensible cause for this. About the middle of April some dribbling hæmorrhage occurred, and continued for a couple of weeks. Medical advice was sought, but without any practical solution of the difficulty, except to convince her that she was mistaken in the supposition that she had been pregnant. The hæmorrhage returned on the 19th and 20th of May, and on the 30th, after two or three sharp labour pains, a blighted fœtus, of apparently two months, was expelled from the uterus. Membranes were of a dark, dusky, modena colour, unbroken, and showing the form of the fœtus through them. Placenta normal size for fœtus of two months, entirely composed of fat, but resembling on its uterine surface the outer layer of fat on the ribs of beef, and was unctuous to the touch. Uterine surface presented two irregularly shaped, branch-like bloody streaks, three lines broad, and an inch and a-half long respectively, very nearly at right angles with each other. Excepting these streaks, there was no appearance of vessels upon or within the placenta. The anterior wall of the abdomen seemed to be of more than ordinary thickness. The pelvis was of good shape and well developed. The lochial discharge ceased on the fourth day. On the sixth day there was a sudden gush of blood from the uterus that blanched the cheeks and lips of the patient. Since then there has been no discharge. The convalescence has been rapid, and the patient has been going about the streets for several weeks apparently in perfct health.—*American Journal of the Medical Science.*

A Case of Dislocation of the Humerus from Sneezing. Reported by P. H. Garritson, M.D., Macomb, Ill.

I was called early one morning to see John H., a carpenter by trade, aged forty-two, who, while combing his hair, preparing for breakfast, suddenly sneezed and dislocated the head of the humerus into the axilla. By grasping the arm close up to the axilla with my left hand, and with my right manipulating the elbow, I succeeded, with but little difficulty, in reducing the dislocation. The after treatment consisted simply in supporting the arm in a sling for a few days.

Now, the rationale of the dislocation I am not certain that I know, but the reader may judge for himself. He says he was combing his hair with his right hand, and was holding his left arm nearly on a line with the coracoid process of the scapula. In the act of sneezing we naturally throw the head forward, and the arm at the same time being held in the position he had his, the muscles being relaxed, save sufficient to retain the position, through the involuntary sudden contraction of the deltoid, brachialis anticus and biceps muscles, the elbow will raise and the head of the humerus be correspondingly or proportionately depressed. This we think must have been the cause of the dislocation. Never having heard of a dislocation being produced under such circumstances, I have thought a note of it might not be uninteresting to some of the profession.—*Medical Archives.*

DECAPITATION IN HANGING.

We understand that an investigation was held, by order of the Lord Lieutenant on Tuesday last at the Richmond Bridewell, by Drs. Lentaigne and Hatchell into the occurrence which took place at the execution of the convict Carr. The whole question to be decided was as to whether the drop of 14 feet was so long as to involve the unfortunate result. It seems that Mr. Price, the gaoler at Kilmainham, had expressed to the governor of the Richmond prison and to the Board of Superintendence that the rope would break, or else decapitation would take place, and it seems very strange that this warning was not communicated to Dr. Minchin, the surgeon of the jail. At the coroner's inquest, subsequently—

Dr. Minchin was, of course, examined, and took his stand firmly on the investigations of Professor Haughton to which we alluded in our last. It appears that the long drop is not so much of a novelty in Ireland as we had been led to suppose. Dr. Minchin mentioned several cases in which it had been used, and notably referred to the execution of Burke at Clonmel some years ago. The convict in this case was 12 stone weight, and received a drop of 16 feet, which, according to Professor Haughton's formula, would give a shock of 2,688 lbs., or nearly a ton and a quarter, and yet decapitation did not follow.

A member of the Board of Superintendence of the City Prison, Hugh O'Rorke, J.P., of New Row, a man of great intelligence, and well skilled in matters relating to manufacture of ropes, gave most important evidence. He showed that the rope (in Carr's case), owing to the peculiar way in which its strands had been laid, was incapable of the smallest degree of resiliency, a property which is possessed by all good ropes, and he attributed the accident to this fact, and not to the length of fall at all. If it had been properly made it should have "sprung" about two feet—*i.e.*, elongated by its elasticity and shortened again. Out of several ropes on the table he picked out one and said that from its make he would insure its having the necessary spring; whereupon Mr. Price, of Kilmainham, at once remarked, "that is the very rope with which Kilkenny was hung, and it actually did become elongated considerably at the moment of the fall, and sprang back again!" The Commissioners looked upon Mr. O'Rorke's evidence as very satisfactory, and most valuable, as establishing the fact that the length of drop recommended by Dr. Minchin, in accordance with the rule enunciated by Professor Haughton, was *not excessive*, and that the accident was not attributable to any error of calculation on his part.

NOTICES TO CORRESPONDENTS.

Notice to Subscribers.—*The Publishers beg respectfully to remind those Gentlemen who have not paid their Annual Subscription, now overdue, that the most convenient mode of remittance is by Post-office Order, or cheque, which should be made payable, in England, to Albert Alfred Tindall; Ireland, Moffatt and Co.; Scotland, Maclachlan and Stewart.*

"FREE TRADE IN SURGICAL INSTRUMENTS."

To the Editor of the "Medical Press and Circular."

Sir,—I have just had my attention called to an article in your impression of the 22nd of June last, entitled "Free Trade in Surgical Instruments," in which you comment very freely on the opinion expressed by the Nottingham and Notts Chemists' Association, relative to the issue of Maw, Son, and Thompson's catalogue to surgeons.

In justice to the members of that Association, will you allow me to say that you appear to be labouring under an erroneous impression with regard to the decision in question.

The chemists of Nottingham, like other towns, are not, and have no wish to be, vendors of surgical instruments. They think, with you, that Maw, Son, and Thompson are perfectly justified in sending out price-lists of such things to the Profession, and would support them in such

The Irish Medical Journal

BEING THE JOURNAL OF THE

Irish Medical Association

No. 128. PUBLISHED EVERY WEDNESDAY NEW SERIES

BELFAST BOARD OF GUARDIANS.

ALLEGED DISCOURTESY TO A MEDICAL OFFICER.

With reference to the charge made by Dr. Rea against Mr. Thomas Wilson, one of the relieving officers, for discourtesy and impertinence, Dr. Rea appeared by direction of the Board to substantiate his statements. It seems that a man named Russell had applied to Mr. Wilson for admission into the hospital. Mr. Wilson, knowing him to be a person of bad character, sent him to Dr. Rea with a line inquiring if he was able to work. Dr. Rea scored out the words "fit to work," and submitted that he was "ill with rheumatism." Mr. Wilson again sent to know if he was able to do work, and Dr. Rea struck out the words. This was repeated four times, and on the fourth time Dr. Rea wrote on the back of the ticket that the patient required urgent medical treatment. Dr. Rea also wrote to the Board, stating that Mr. Wilson had gone out of his sphere to treat him discourteously, and even impertinently.

The Chairman.—The point now is, was Mr. Wilson right or wrong in insisting on getting an answer as to whether the man was fit to work or not?

Mr. Gaffikin.—What was the answer the doctor gave you when you inquired whether he was fit to work or not?

Mr. Wilson.—That he was ill from rheumatism.

Mr. Ward.—A relieving officer has great discretion and great responsibility and I think it his duty to know whether a man is able to work. It strikes me it was a very proper question for him to ask. The whole question of relief or non-relief turned upon the answer; because if a man was able to work and got hospital relief, and it turned out upon the doctor's certificate that he did not require the relief, it would be very improper to put him on the rates.

The Chairman.—Did you, Dr. Rea, intend, in this case, that the man should be sent to the hospital?

Dr. Rea.—Certainly, I did.

Mr. Wilson.—Well, then, Sir, I would like to know if he was under medical treatment when in this house?

Chairman.—I don't think that's the question

After some further discussion it was arranged that some other form should be prepared to obviate the difficulty.

Dr. Rea said he had no objection to the matter being settled, and the subject then dropped.

The remaining business was routine.

CARRICK-ON-SUIR DISPENSARY COMMITTEE.

The business of the meeting was in reference to the complaint made by Mr. Murphy, apothecary, about certain medicines supplied to the dispensary, by the contractor, and which Mr. Murphy said were unfit for use.

Dr. Fitzgerald explained that the medicines complained of were not quite up to the mark, but they were dispensed without any bad effect.

The Hon. Secretary explained that the matter would have been brought under the notice of the committee before this, but there was no meeting of that body on the 13th ult.

The following resolution was then adopted by the meeting:—

Resolved—"That inasmuch as it appears that the medicines complained of were used before the meeting on the 13th of June, and the medical officer having stated that he cautioned the contractor at the time, and that all the medicines supplied before and since have given satisfaction, that no further action be taken on the matter, but we recommend the medical officer to get a written report from the apothecary should such a thing occur in future."

The meeting then adjourned.

SLIGO BOARD OF GUARDIANS.

VOUCHING OF REQUISITIONS OF COMMITTEES.

A requisition was read from Dr. Burrows for medicine and medical appliances for the Riverstown Dispensary.

A guardian asked if the dispensary committee had signed the application.

Mr. Kerrigan, speaking from his experience, believed that if those requisitions were to await a meeting of the dispensary committee, the dispensary would be often left without medicines.

Mr. M'Cloughry understood that it was not legally necessary to have them signed by committees.

Mr. C. G. Jones believed it was, but of necessity they did not ask to have it done.

Mr. Jeremy Jones said that out of the thirty or forty gentlemen that constituted the committee of management for the Sligo Dispensary, on a late occasion no member attended a meeting but himself.

The requisition was passed, and the matter dropped.

OMAGH BOARD OF GUARDIANS.

COMPULSORY VACCINATION.

The following letter from A. H. Robinson, Esq., Medical officer, Fintona District, addressed to Mr. M'Knight, Clerk of the Union, was read before the Board by the Chairman:—

"Fintona, July 23, 1870.

"Dear Sir,—James M'Connell, child of James M'Connell, born and registered in Dromore district, was vaccinated by me successfully in October, 1869, the child being then and since resident in this district. The father was summoned to Trillick Petty Sessions in May last, for not having his child vaccinated in Dromore, although he had not resided in that District since May, 1869, and fined

in his absence and has since paid 2s. 6d. fine and costs. The mother has been with me to-day complaining of the hardship, and I thought it right to lay the facts before you for the information of the Board of Guardians who will, I hope, take the case into consideration. Mrs. M'Connell states that on their getting the summons, they went to Dr. Marshall and showed him my certificate of successful vaccination of the child."

Mr. James Mackay considered that it was a case of great hardship, and wondered very much why the case had been proceeded with if it was true that the certificate of vaccination had been shown to Dr. Marshall.

Mr. Stack remarked that if M'Connell had attended the Petty Sessions and shown the certificate to the Magistrates the case would have been dismissed with costs against the doctor.

Mr. Greer said that assuming the woman's story to be true, it was very wrong of the doctor after having seen the certificate to make no remark about it at Petty Sessions.

Mr. Stack recommended that a statement of the allegation made by M'Connell be sent to Dr. Marshall and that he be directed to pay the costs which had been incurred in the proceeding.

Captain Buchanan was in favour of the Doctor being communicated with respecting the matter before anything should be put on the minute books.

This course was unanimously approved of by the Board, and the Clerk was directed to write to Dr. Marshall regarding the matter.

CLAREMORRIS UNION.

Mr. Henry French, pursuant to notice of motion, proposed that the salary of Dr. P. B. Reynolds, Medical Officer of the Claremorris Dispensary District be increased from £75 to £100 per annum, same being the salary paid in the other dispensary districts of the Union.

Mr. F. A. O'Malley seconded the resolution, which was agreed to without a division.

Mr. James E. Treston proposed, and Captain Sheffield seconded, the following resolution, which was also adopted unanimously :—"That whenever a Medical Officer in this Union absents himself in future from the discharge of his duties, unless such absence is occasioned from illness, the Medical Officer will be required to defray the expense of a competent substitute."

ENNIS UNION.—Wednesday.

Medicine Contract.—Several tenders came before the board for the supply of the above, the lowest being that of Messrs. Hunt, Dublin. Drs. Dillon, Enright, and Courtnay said that none of the parties whose tenders were before the board could possibly supply the description of medicine required by the Commissioners at such a low price, but expressed their conviction that Messrs. Hunt's medicine was quite as good as what the others could supply, though proposed at a lower rate.

The Chairman thought it would be very injurious to the ratepayers of the Union if they rejected the lowest tender, which would have the effect of destroying competition, especially in such a dear commodity as the medicine supply.

Mr. M'Mahon observed that Mr. Hunt supplied the union with medicine during the past year, and none of the medical gentlemen found any fault with it, he thought they might just as well accept his tender this year also.

Ultimately, Messrs. Hunt's tender was accepted (pending the appointment of two securities which were omitted in the form), but the medicine was to be subject to analysis, and, in the event of its not being of the proper quality, the officers of the union were to purchase the best and charge the contractor with the increased expenditure (if any).

CLONMEL DISTRICT LUNATIC ASYLUM.

At the special meeting of the Governors, Dr. Flynn laid before the Board the following letter, resigning, through ill health, his official appointment as Resident Medical Superintendent :—

The following minute was unanimously adopted, several gentlemen expressing their sincere regret that ill health should have compelled the retirement of so faithful and zealous an officer as Dr. Flynn had proved himself to be :—

"The Board of Governors of the Clonmel District Lunatic Asylum, having received from Dr. Flynn a document announcing his determination to place his resignation in the hands of the Lord Lieutenant, we cannot allow his resignation to go forward without placing on record our unanimous opinion of the long and meritorious services of Dr. Flynn, extending over twenty-nine years, during which time his close attention to business, his unvaried humanity and skill in the management of the unfortunate class placed under his care, has at all times deservedly merited our most cordial approval. We most sincerely regret that Dr. Flynn's state of health has rendered his resignation advisable; and we wish now to convey to Dr. Flynn our most earnest and affectionate wish for the restoration of his health and his future happiness in his well-earned and honoured retirement.

"Charles Bianconi."

BELFAST BRANCH OF THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

On Wednesday, the usual quarterly meeting was held here of the committee of this local branch of the above most excellent and useful society, when the chair was filled by Professor Cuming, M.D., the other members present being Dr. Filson, M.D., Portaferry; Dr. Whitaker, M.D.; and Dr. Stewart, M.D., honorary secretary. The report was made that Dr. Brown, R.N., Mayor of Belfast, had attended as a deputation at the recently held annual meeting of the society at large in Dublin, which proved to be a very large and influential one, and at which, according to the official statements that were made, the affairs of the society appeared to be prospering, and that a steady increase of supporters was on its subscription roll. The several grants recommended to be given to the society's recipients of this branch were all freely made by the parent body, and have since been duly received by the respective applicants, each being deeply grateful for an assistance always in time and acceptable, however small in amount. The meeting on Wednesday had under discussion a subject which has been already frequently before it —namely, the large number comparatively of the Profession, both in town and in the country districts, who lend a deaf ear to the earnest calls made upon them to give their countenance and support to a society whose objects are so purely beneficent and so deserving of being maintained in vigorous operation, but which they cannot be expected to be when so many "shut up their bowels of compassion" from those of all others requiring their warmest aid. It was hoped, however, that this apathy would give way to a kindlier and more generous line of action—one which would redound so much to to the credit of all parties, and bring joy and gladness to not a few whose poverty was their misfortune, and not their fault. Some routine business having been disposed of, the chair was vacated, and the meeting adjourned.

Correspondence.

THE GUINEA FEE.

TO THE EDITOR OF THE IRISH MEDICAL ASSOCIATION JOURNAL.

Sir,—We believe most of the heads of our Profession, together with those who are anxious to uphold their rights, insist upon the value of the old English guinea in payment of fees. We have frequently heard it discussed whether the acceptance of a sovereign would not do equally well since the guinea coin has become extinct, but the majority ruled that the extra shilling was essential. Now we believe it is not generally known that when the guinea was originally coined it was intended to make it value for a current twenty-shilling piece, but from an error the value of the gold was increased. We understand in the time of Sir Isaac Newton the true value of the coin was twenty shillings and eightpence, and it was in his time the Crown proclaimed the value of twenty-one shillings. Of course we all remember the name guinea was applied because the coin was made from gold that came from the Guinea Coast. The first notice of this was in 1649, during the Commonwealth, but not until the days of Charles II. was the name really given. We hold, then, since the coin was originally intended to circulate for twenty shillings, and that a costly error was made, that the members of our Profession should be satisfied with the sovereign. We are the last to deprive our brethren of their rights, but this is one only of usage, and considering the coin was a costly error, and is now entirely superseded by a more useful one, we ought to feel satisfied with it and prove ourselves above associating the paltry shilling with the compact fee in the form of a twenty-shilling piece.

A Physician.

HEALTH OF DUBLIN.

In the Dublin Registration District, the births registered during the week ending July 23rd, amounted to 165. The average number in the corresponding week of the years 1864 to 1869 inclusive, was 173.

The deaths registered during the week were 118. The average number in the corresponding week of the previous six years was 109.

Seven deaths were caused by fever, viz. :—1 by typhus, and 3 each by typhoid or enteric and simple continued fever.

Scarlet fever proved fatal in 4 instances, and measles in 1.

Four deaths resulted from croup.

Eleven deaths were ascribed to bronchitis, and 2 to pneumonia or inflammation of the lungs.

Three deaths were referred to apoplexy, and 5 to paralysis.

Nine deaths were caused by heart disease, and 1 by aneurism.

One death was ascribed to nephria, or Bright's disease, and 1 to "urinary disease."

Phthisis or pulmonary consumption caused 20 deaths, mesenteric disease 2, and hydrocephalus, or water on the brain 3.

Five persons died from cancer.

Three deaths were the result of accidental causes, and 1 was suicidal.

Of the deaths registered during the week, thirty-two were under 5 years of age, and thirty-one were 60 years and upwards.

In the Dublin Registration District, the births registered during the week ending July 30th, amounted to 148. The average number in the corresponding week of the years 1864 to 1869 inclusive, was 157.

The deaths registered during the week were 114. The average number in the corresponding week of the previous six years was 132.

Seven deaths resulted from fever, viz :—4 from typhus, 2 from typhoid or enteric, and 1 from simple continued fever.

Scarlet fever proved fatal in 4 instances.

Four deaths were referred to diarrhœa.

Bronchitis caused 5 deaths, and pneumonia or inflammation of the lungs 2.

Three deaths were referred to liver disease, 1 to kidney disease, and 1 to nephria, or Bright's disease.

Seven deaths were ascribed to heart disease, and 1 to aneurism.

Twenty-four deaths were caused by phthisis or pulmonary consumption, 4 by mesenteric disease, 1 by hydrocephalus or water on the brain, and 3 by scrofula.

Four deaths were referred to cancer.

Thirty deaths occurred in persons 5 years of age, and 19 in persons who were aged 60 years and upwards.

THE LUCAN INSTITUTION FOR IDIOTS NEAR DUBLIN.

The Managing Committee have submitted to the Council a Report which states that there were 25 children in the Institution viz. :—14 Boys and 11 Girls—of these 9 are Free ; a portion of the cost of care and maintenance, varying from £2 10s. to £15 a-year is paid by the relatives of 9 others, and the entire by those of the remainder. The numbers were increased on the 1st of August, when an election was held for the admission of eight more—four to be free, and four partially paying.

In the Asylum there are at present 86 patients whose comfort has been greatly increased by the supply of new furniture and the improvements effected in the sanitary arrangements of the house.

In their last Report the Committee stated the circumstances that had arisen rendering it impossible to carry on the Institution and Asylum in the Lucan premises. Since then they have received offers of several places, one of which seemed to them so suitable that they called a special meeting of the Council to consider it, when it was agreed to accept the offer.

These premises consist of the House and Demesne occupied by the late Lord Donoughmore, at Palmerston, within five miles of the General Post Office. There are two houses and 47 acres of land enclosed on three sides by a high and substantial wall, and having free access to abundant supplies of water. The mansion-house will afford accommodation which could not be surpassed in excellence and convenience for the Lunatic patients, and the other will supply the wants of the Institution for Idiot till a new building can be erected.

A Committee that has been in existence for some time for the establishment of an Asylum for Epileptic Patients, having made application to have a ward opened for the reception of such patients in connection with the Institution, on the plea that the two conditions, Idiocy and Epilepsy, are very closely associated, your Committee have agreed to do so. It has been arranged that the funds should be kept perfectly distinct, and that the Epileptics should only have the benefit of the money collected for their own support, and that none should be admitted till a sufficiently large sum had been obtained to cover the cost of their care and maintenance.

We observe with very great satisfaction, that Mr. Justice Keogh has considered the evidence given by Dr. Alton of Tralee, in a recent trial worthy of a very warm eulogism. Such a tribute from one of Her Majesty's Judges, is a mark of approval as worthy of respect as it is unfortunately unwonted.

His Lordship said he seldom met with a gentleman who had power of conveying in more explicit or intelligible language the injuries received, showing how thoroughly he understood the nature of the case. He had given his evidence so that anyone of common sense could understand it.

Mr. Coffey, Q.C., replied for the defence of the four doctors, and paid a tribute to Dr. Alton for the lucid manner in which he had detailed his evidence. He said he should follow his lordship in congratulating the county on possessing such a man as Dr. Alton.

His Lordship in charging the jury said, he should congratulate them on having in this county one of the best specimens of clear speaking intelligent doctors he had ever met. He was a credit to the county. His Lordship was particularly struck with the abscence of useless technicalities in the evidence of Dr. Alton. He did not even use a classic quotation (laughter). Speaking of the fracture he said simply the blade bone. Why if he wished he could convert it into a string of words which you could not understand, and possibly himself.

IMPORTANT PROSECUTION UNDER THE CONTAGIOUS DISEASES ACTS.

At the Plymouth Police Court, on Friday, Mrs. E. M. King, and Mr. Daniel Cooper, Secretary to the London Rescue Society, who are at present residing at Devonport for the professed purpose of opposing the Contagious Diseases Acts on behalf of the Anti-Contagious Diseases Acts Association, were summoned for resisting those members of the Metropolitan Police who are specially appointed to work the Acts in this district applying to the Royal Albert Hospital, at Devonport, in the execution of their duty, and also for inciting certain women to resist the police. At present there are four summonses against Mrs. King, and one against Mr. Cooper, but it was stated by the Admiralty solicitor, Mr. E. W. Eastlake, that there are many others to be brought forward. So far as the case went, the facts appeared to be that Mrs. King and Mr. Cooper are in the habit of daily visiting a notorious street in Plymouth, occupied chiefly by women of bad character, for the purpose of inducing the women coming under the Acts not to submit to their provisions. In the case in question against Mrs. King, partly heard on Friday, a prostitute named Eliza Binney, who had purposely evaded the Acts for some time past by leaving the neighbourhood when served with a notice to attend at the hospital, and who had just returned, was being taken by the police to the hospital. On her way she was met in the public streets by Mrs. King and Mr. Cooper, both of whom directly advised her not to go unless taken by force. The police ordered them not to interfere, but Mrs. King, it was alleged in evidence, endeavoured to forcibly detain the woman by placing her arms round her waist, and pulling her away from the officers. The woman, who submitted quietly when first apprehended, now resisted so much that the police were obliged to use violence, and at last got a cab to convey her to the hospital, where, after being kept until the following day, she was seen by the house surgeon, and, at her own request, also by three private medical men, and discharged within an hour afterwards, there being no reason for her detention. The solicitor, on behalf of the Admiralty, said that the opposition of these people had become of such a serious character in the working of the Acts that he had been positively instructed to press in case of conviction against Mrs. King for the infliction of imprisonment without the option of a fine. The case for the prosecution in regard to the first charge against Mrs. King was closed on Friday. The address for the defence made by the solicitor on the opposite side raised the technical point that inasmuch as no evidence had been given that the woman had been served with a certificate requiring her attendance at the hospital, and inasmuch as there was no evidence that the magistrates had issued an order for her to attend—the Acts rendering it necessary that both these points shall be observed—the police had no right to apprehend her, and therefore she was not in lawful custody. The case was adjourned.

On Tuesday the hearing of the case was resumed. The evidence for the defence was completed, four witnesses having been called, whose testimony was directly opposed to that of the constables called for the prosecution. There were four summonses against Mrs. King and one against Mr. Cooper. The Bench, however, declined to give their decision in this case until the others were heard. The prosecution then preferred a second charge against Mrs. King for inciting a woman, whom the police were taking to the Royal Albert Hospital, at Devonport, to resist the police, and also a charge against Mr. Cooper for inciting the same woman to resist. The other two summonses were not gone into. It was contended for the defence that there was positively no resistance or incitement to resist, but that the only object in view on the part of Mrs. King and Mr. Cooper at the time in question was to raise the legal point as to whether the police, under the circumstances, were justified in apprehending the woman and taking her to the hospital. Several law points were raised in regard to the working of the Acts which will probably be settled in another court. The Bench fined Mrs. King and Mr. Cooper £5 and costs each. Notice of appeal was given.

MEAT PRESERVATION.

The first public sale by auction of colonial preserved meats recently took place at the stores of Messrs. Goldsborough and Co. The lots offered were 2,000 packages of meat, each package or case containing twelve 6lb. tins, the production of the Echuca Meat Preserving Company. This company, it may not be out of place to mention, says the *Melbourne Daily Telegraph*, has only been established a few months, by local enterprise, and with a nominal capital of £10,000. Since commencing meat-preserving operations, the company have used over 80,000 sheep and 200 head of cattle. Messrs. Goldsborough and Company introduced their first sale with a luncheon, and no meat except that of the Echuca Company found a place in the bill of fare. This consisted of kidney soup, spiced beef, boiled mutton and caper sauce, sheep's tongues and tomato sauce, Irish stew, and boiled beef and carrots. The cold meats, as turned out of the tins, were sweet and nutritious. The contents, prepared without bone, came out in compact masses, surrounded and permeated with gelatine. The crucial test, the eating of it, proved to be in every way equal to fresh meat newly cooked.

Compulsory Retirement.—A correspondent of the *Bombay Gazette* says that he has received by the mail, from a very authentic source, information that the Duke of Argyll has positively and peremptorily declined to offer any inducement to the senior members of the Medical Department of India to retire, and that he intends to carry out compulsory retirement at fifty years of age, on the promulgation of the Medical Warrant, which is shortly expected, authorising the amalgamation of the Indian with the British Medical Service.

The Army Medical Department.—The *United Service Gazette* says that it is confidently rumoured that the scheme for the unification of the Army Medical Department has been abandoned.

Printed and Published for the Proprietor, at the Office of the "Medical Press and Circular," 6 D'Olier street, Dublin.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 17, 1870.

CONTENTS.

Original Communications.

A NEW CAUSE OF VENEREAL CONTAMINATION — TESTED BY PRACTICAL OBSERVATIONS AND INOCULATIONS FROM A HITHERTO UNRECOGNISED SOURCE — INOCULATION AS A MODE OF TREATMENT.

By Mr. Morgan, F.R.C.S.I.,

Professor of Surgical and Descriptive Anatomy, R.C.S.I.
Surgeon to Mercer's and the Westmoreland Lock Hospitals.

Much has yet to be done in reconciling the various differences of opinion which still exist between surgeons with regard to the venereal disease, many of whom have paid special attention to the subject. Thus, some will see the clearest evidences of the duality of the venereal poison, when examining the subject from one point of view; others will be equally positive of the contrary theory, and that, no matter what may be the form of the primary lesion, the ultimate effects on the system will be much the same; others, again, will see proofs of the existence of several forms of sore and infecting poison, each followed, as Carmichael supposed, by special constitutional evidences. Climacteric influences, diatheses, the effects of certain treatments, &c., modes of life, have all been looked to as explanatory of the various modifications of the primary and constitutional lesions that are so often seen; and each observer is apt to view the question through the jaundiced spectacles of preconception and of the particular school in which he had been trained. Though so much has been written on the subject, still the difference of opinion is most remarkable. It must be assumed that the Parliamentary Commission of Inquiry held during the last few years was the most complete investigation into the subject that could be obtained. Witnesses and experts were examined from different parts of the country and from abroad, and yet the most serious difference of opinion existed as to the nature and effects of the venereal poison, and as to the characteristics of certain forms of contagion; some holding to the dual theory of an infecting and non-infecting form of primary sore, and others expressing themselves as equally convinced of the contrary.

The Committee appointed by the Government, report that—"It is declared in evidence by twenty-nine experienced witnesses that sores both soft and hard may be followed by every variety of syphilitic eruption."

Some of these witnesses stated their views so strongly that they may well demand careful consideration. Thus—

Mr. Syme, whose opinion, from his well-known character as a practical surgeon, must be regarded as having been most authoritative and valuable, stated as follows, so shortly ago as April 7th, 1865:—

"Mr. Spencer Smith.—Judging from the view which you take of the disease and its pathology, and the treatment you adopt, I conclude that you rather incline to the opinion that the whole subject has been rather over-elaborated of late years?—*A.* Most thoroughly.

"Chairman.—Is there any further remark that you desire to make to the committee upon this subject?—*A.* I think that the refinements and the division of the local sores, and the varieties of them, and the modified administration of mercury for their cure, have done an infinite deal of mischief.

"With your large experience of venereal diseases, you must have seen every variety of sore. Can you readily distinguish sores at first sight during their early stages, supposing them to be divided into sores which affect the constitution and sores which do not, or hard and soft sores?—*A.* My experience does not lead me to divide them in that way. I believe that the variety of appearances in sores depends, not upon varieties of poison, but upon varieties in the constitution of individuals; the constitution, the habits, and the mode of life.

"You do not, I think, acknowledge the duality of the poison. You think that different sores are produced by the same poison?—*A.* I do."

Mr. Syme here, no doubt, alludes to the disease in males, and attests to the opinion formed by his "large experience" with them.

Mr. Lane, however, with twenty years' special experience at the Lock Hospital, London, gives his opinion as follows, April 11th, 1865:—

"Chairman.—How many years have you been connected with the Lock Hospital?—*A.* About twenty years.

"As acting surgeon, or consulting surgeon, or both?—*A.* As assistant surgeon for about 10 years, and acting surgeon or full surgeon for about 10 years. For the last 4 or 5 years I have been consulting surgeon.

"During that time you have had large opportunities of seeing the venereal disease in all its forms?—*A.* Certainly.

"I need scarcely ask you whether you recognise the constitutional disease known as syphilis?—*A.* I do.

"Do you recognise the two forms of the primary sore marked by the soft and the hard characters?—*A.* Yes, I recognise those. I should say that the soft chancre is the proper type of the syphilitic sore, and that the hard chancre, the phagedenic sore, and sloughing sore, are deviations from the soft chancre, that being the proper type of the venereal sore. I would add that I consider the primary sore a local affection, and that the constitutional disease depends upon the continual absorption of the poisonous matter of the original sore.

"I understand, from what you have already stated, that the type of the disease is the soft sore; but may I say that you are an opponent to the duality of venereal poisons?—*A.* Yes, I am an opponent to that. I consider there is but one poison."

Mr., now Sir W. Ferguson, very distinctly doubts the duality of the disease, applying the term syphilis to all sores, April 4, 1865:—

"Has it happened to you to have seen a secondary eruption arising from a soft sore?—*A.* Yes; I have seen it frequently.

"Would you treat that secondary eruption arising from the soft sore as you would treat the secondary eruption arising from a hard sore?—*A.* Yes, pretty much the same.

"Do you admit the distinction between non-infecting sores and infecting sores, meaning constitutionally infecting; that there is a sore that will not go further than just affect the glands of the groin, and another sore from which you will have constitutional symptoms?—*A.* No; I think that you see the constitutional symptoms from the soft sore as readily as from the hard. I look upon the hard as the more severe form of the disease. I have seen secondary symptoms come on after a soft sore."

Mr. Busk, surgeon to the *Dreadnought;* Mr. Acton; Mr. J. P. Lane; Mr. Nelson, Melville Hospital; Surgeon Major Stuart; Mr. Longmore; Mr. Cutler; Mr. Coote; Mr. Erichsen, and others, did not recognise the dualist theory.

On the Continent, authorities are not agreed. In America they are not either. Thus, Bumstead (following the French School) urges the dualist theory; yet Gross, in his masterly work on surgery, states as his conviction:—"My observations would lead me to infer that while there are really two varieties of chancre, the indurated and the soft, they do not by any means possess the properties which he (Ricord) ascribes to them. So far from giving my adhesion to such a doctrine, I have had the most unequivocal evidence in numerous instances of the infecting properties of the soft chancre; indeed, I am satisfied that some of the very worst cases of secondary and tertiary syphilis, that I have been called on to treat, have been cases of this description, originating generally in very small sores upon the head of the penis or prepuce, perfectly soft in their consistence, very superficial, manifesting no disposition to spread, and soon completely disappearing."

It is matter of daily observation at the Westmoreland Hospital that infection signs follow sooner or later almost every case of primary sore; but the series of cases I have detailed, when alluding to inoculable vaginal secretions, will prove abundantly that the usually believed infecting type of sore, or glandular enlargements, is a rarity in these women, who must be accepted as the true specimens of the disease in Dublin.

I have received the most recent information on this question from the Government Lock Hospital, Aldershot. June 29th, 1870, the surgeon states:—

"Undoubtedly, many patients are admitted suffering from general syphilis, in whom soft sores have only been detected, with or without suppurating bubo. That even while in hospital with inoculating sores only, secondary manifestations do occasionally occur."

From the Government Lock Hospital, Cork, out of 324 cases the surgeon states:—

"Amongst the sores I have not met with more than two or three which could be considered in any way indurated—almost all were superficial—secreting pus or mucus, without any marginal thickening, elevation, or induration; in fact, they all had the character of the soft sore—the indurated chancre in the female *being very rarely met with here.*

"Of this I am positive that I have had here several cases of what is usually known as the true Hunterian chancre, under my care in the male; and, as I have stated before, I have not had one well-marked case of the same form of chancre in the female. My experience is that the indurated chancre is not invariably followed by rash, sore throat, &c.; it is usually so followed, but not so frequently as generally supposed."

From the Lock Hospital, London, July 4th, the surgeon states:—

"Severe secondary symptoms have also frequently occurred after soft sores. A considerable number of soft sores are also followed by symptoms; there is not much difference in their severity, whether following a hard or a soft sore."

It is remarkable that the description of the primary sores at the Lock Hospital, Cork, Aldershot, London, and here, agree so exactly—yet in all these places they must be considered as, at least, the chief sources of the disease as communicated to the male population.

A careful examination of the subject, with the large number of 1,582 cases under observation in the Westmoreland Hospital during the past two years, have satisfied me that the sore now prevalent amongst females but very little resembles the usually accepted type of the infecting sore, while it is most certainly followed by constitutional signs. I refer, of course, to the disease as it occurs in Dublin; and as I see it pursue its course in the wards of the hospital, representing the contagion source of the disease in this city. Out of all the cases under my treatment during the last eight months, but two represented the characterising features of the infecting sore so defined. In these two cases nothing could be better marked than the figure of the sore—its non-purulent aspect, indurated base, smooth surface, comparative insensibility, and pleiad of indurated glands. Yet the constitutional signs in these cases were by no means severe, or at all as marked as in, I might say, all the other cases of primary sores, where there was not the slightest evidence of induration, or any of the usually described essentials of this type of sore; in fact, the two cases present nothing very unusual in the following summary of their history:—

No. 661.—A comely girl of eighteen had been on the town seven months only, and had never been before diseased. She first observed a sore a fortnight before; on admission, Oct. 11, 1869, a perfectly marked hard or Hunterian sore, about the size of a fourpenny-piece, existed on the labium; there was no evidence whatever of a previous sore, and the inguinal glands of the same side were somewhat dense. The sore gradually healed in three weeks by local appliances; but in one week before it did so, a scattered papular rash appeared over the body; a smart iritis also

ARTIFICIAL CONTAGIOUS SORES

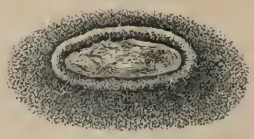
PRODUCED BY INOCULATION.

By Mr. MORGAN, F.R.C.S.I., &c.,

SURGEON TO MERCER'S AND THE WESTMORELAND LOCK HOSPITAL, DUBLIN.

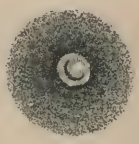
PLATE I.

Series 1.
Sore produced by inoculation from another sore, the product of spontaneous inoculation by apposition with the opening of a bubo, on a patient not having at the time any primary sore, but who soon developed constitutional signs.

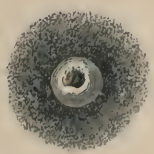


Series 2.
Sore produced by inoculation with the vaginal discharge of Series No. 1 after having been two months under observation in hospital.

Series 3.
Sore produced by inoculation from another sore, the produce of inoculation with the patient's own vaginal discharge, when sixty-three days in hospital.



Series 4.
Pustule produced from inoculation with a vaginal discharge twenty-four hours after introduction.



Series 5.
Pustule produced by inoculation from a sore the product of a sore inoculated from a vaginal discharge.

Series 6.
Pustule produced by inoculation from the patient's own vaginal discharge as seen seven days after inoculation. Pustule now burst.

developed itself, and she had some flying nocturnal pains and alopecia.

The treatment consisted in 10 gr. calomel suppositories used per vaginam every night, or every second night, and the patient was discharged cured.

The dense cicatrix of the original sore still existed.

In this case the iritis was very amenable to treatment, and, indeed, so were all the constitutional signs. The patient had been in good condition, and was well off as to diet, lodging, &c.

No. 898.—A very well conditioned girl of twenty; had been about two years living irregularly; accustomed to a luxurious and dissipated life; first felt a sore two months before admission, February 10th, 1870. As in the former case there was a well marked typical sore on the labium—now nearly healed—and there were some coppery papules over the body, particularly on the face and chin, but the general condition was very good. So mild were the symptoms that the patient would not remain any length of time under treatment, and left hospital.

Neither of these cases have returned to hospital, which make it pretty certain they suffered no farther symptoms.

It is remarkable that though these were the sole representatives of the typical infecting sore, they escaped with very mild manifestations indeed of the constitutional influence; while in numerous other instances, tabulated in the subjoined lists, it will be seen that though the apparent primary sore was of the soft, or so-called non-infecting type, yet that constitutional signs almost invariably appeared :—

TABLE No. I.

List of Patients who have been Last Admitted with Primary Sores, Diseased now for the First Time.

Nature of the Primary Sore.	Followed by				
	Papular Rash.	Patches.	Pains.	Iritis.	
One soft, not inoculated	Yes	—	—	Yes	
One large soft, do.	Yes	—	—	—	Produced a dead child.
Do. do.	Yes	—	Yes	—	Produced a living child.
Soft sore	Yes	Yes	Yes	—	All but suppurating bubo and sore [throat.
Sloughing sores	—	—	—	—	No constitutional signs or bubo.
Do.	Yes	Yes	—	—	
Chronic sore	—	—	—	—	
Do.	Papulo-squamous	—	—	—	
Do.	—	Yes	—	—	With anal fissures.
Do.	—	—	—	—	
Large soft sore at fourchette ...	—	—	—	—	Nothing observed during thirty-three days succeeding.
Do. do. ...	—	—	—	—	Has been since admitted with rupious ulcerations.
Slight sore do. ...	—	Immense patchy vegetations	—	—	No other signs.
Ulcer of uterus	—	—	—	—	No other signs.
Do.	Yes	—	Yes	—	
Several soft sores, auto-inoculated three times	Yes	—	Yes	—	Was thoroughly cachectic.
Do. auto-inoculated...	Yes	—	—	—	
Do. do. ...	Yes	Yes	—	—	
Do. do. ...	—	Yes	—	—	
Do. do., twice	—	—	—	—	Got warty vegetations at urethra.
Do. do. ...	Yes	—	—	Yes	Extreme alopecia; suppurating bubo.
One sore do. ...	—	—	Yes	—	
Do. not inoculated...	Yes	Yes	Yes	Yes	
Do. do. ...	Yes	—	—	—	Suppurating bubo and roseola.
One large do. ...	Yes	Yes	Yes	—	Suppurating bubo.
Do. do. ...	Yes	—	Yes	—	Suppurating bubo.
Do. do. ...	Yes	Yes	—	—	Produced a dead child and roseola.
Do. do. ...	—	—	Yes	—	Extreme alopecia.
Several soft do. ...	Yes	—	—	—	Cachexia.
Do. do. ...	Yes	Yes	—	—	
Do. do. ...	Yes	Yes	—	Yes	
Do. do. ...	Yes	Yes	—	—	Produced a dead child.
Do. do. ...	Yes	—	—	—	And gummata.

A consideration of this tabulation shows that, though seven of these cases had inoculable sores, one only failed to show constitutional signs of a decided character; four others had suppurating buboes, yet also subsequently showed infection signs, while numerous other instances, witnessed by their subsequent manifestations such as rash-iritis, patches, pains, &c., the potent influence of the constitutional poison, of which the source appeared to be a primary sore, devoid of induration, or other character usually ascribed to the infecting type.

b

TABLE No. II.

TABLE OF THE LAST NINETEEN PATIENTS NEVER BEFORE DISEASED, ADMITTED FOR THE FIRST TIME, WHERE THE PRIMARY SORE WAS EITHER HEALED OR HAD NOT BEEN RECOGNISED BY THE PATIENT.

Mucous patches only.	Papular.	Pains.	Iritis.	
Three cases	Yes	Yes	Yes	With discharge.
Six „	Yes	—	—	One produced a dead child with discharge.
Three „	Yes	Yes	—	One with patches of the throat with discharge.
Two „	—	Yes	—	With discharge.
Three „	Yes	Yes	—	With discharge.
Two „	—	—	—	With discharge.

The second tabulation shows the remarkable sequence of rash and other signs after mucous patches. Had the primary been a typically infecting sore, it could hardly have escaped notice, on account of its density and long persistence, as well as from the tumid state of the inguinal glands, which retain their induration so long.

From observation of the disease in a number of cases of both sexes, it seemed to me necessary that some source of origin existed for the propagation of primary sores than that usually recognised. This I was particularly interested in from seeing the disease apparently communicated to males from females who seemed not affected by any sore, and that the form of the affection in such instances was that of the soft or contagious sore. I consequently undertook an investigation into the origin and propagation of this prevailing form of sore, found both in the female and male, the results of which go to prove that the soft or chancroid, and easily inoculable sore, is capable of being produced from a vaginal discharge or (in the ordinary acceptation of the term) from a gonorrhœa in a patient, where constitutional taint exists, and this taint may be as yet occult, or may have shown itself, and be apparently cured.

I have tested this by a tolerably extensive series of inoculations, and as yet have not been able, with one exception, to produce a characteristic pustule and sore, where evidence of constitutional infection was wanting; but where such was present I have found little or no difficulty —indeed, the vaginal discharge in a purulent, or even muco-purulent form, furnishes a more potently inoculable source often than the sore itself. I here allude to the ordinary inoculable sore, which I have often inoculated both in male and female, and yet seen constitutional signs follow in women almost invariably, and in men not unfrequently.

In order to avoid, as far as possible, any sources of error, I selected cases for some time confined to hospital, and I have tested by inoculation the various conditions of the system as furnished by the vaginal secretion, be it purulent or muco-purulent: thus, in the first series, I inoculated from the artificial product of a spontaneously inoculated bubo, and produced, as usual, a chancroid, or soft sore, on the patient's person; from the vaginal secretion of the same patient, who never had a sore that I could detect, and who believed herself never to have had one, I inoculated a case in another part of the hospital, thus avoiding the possibility of confusion, and produced a most characteristic pustule and sore; this produced its like on the patient's own body, by the accidental inoculation of a pimple.

In various other cases I have inoculated in like manner, invariably producing the regular contagious sore. My inoculations were always performed on subjects already under the syphilitic influence; I cannot therefore distinctly state that in a virgin subject the result would be a chancroid, but it may very reasonably be so concluded. It goes far to explain the occurrence of constitutional signs when we consider that the initial sore may have originated from the vaginal discharge of a constitutionally infected patient when grafted on another also infected, and thus be communicated to a person hitherto unaffected; and although its appearance would be that of the soft, so-called uninfecting sore, yet, from its doubly-poisonous mode of generation, it can hardly be supposed its infecting properties would not be most intense.

It is remarkable that the vaginal discharge retains the property of producing a sore by inoculation after the healing of the primary, as will be seen by referring to the accompanying remarkable cases of inoculation while in hospital and under surveillance:—

All observers agree that constitutional syphilis can be communicated from various secretions, such as from mucous patches, of the mouth, vulva, breast, &c., and from the blood, &c.; yet, by direct experiment, it can be shown that the "soft," or usual form of venereal sore, can be communicated by inoculation from the vaginal discharge of patients intensely syphilitic, and that this sore, when reproduced on other patients, also intensely syphilitic, still shows itself as a soft sore. There remains, I think, no difficulty in presuming that this product, which may have been reproduced through many tainted generations, is thoroughly infecting in its properties, and from its mode of reproduction should be more intense in its results than the justly feared offspring of mucous patches or other secondary lesions.

I have selected the following cases to illustrate the propagative power of vaginal discharge, and also to prove the beneficial effects of the inoculation treatment, which has of late attracted so much attention:—

SERIES No. 1.—*Inoculation with vaginal muco-purulent discharge from a patient not suffering from a sore, performed on a child eight years old, suffering from vulval condylomata —Production of a typical soft sore on the abdomen—Propagation of chancroids from this sore.*

CASE No. 1,024—Ward 2—aged eighteen, a very well conditioned girl, having only left her home in the country six months before, was admitted on April 2, 1870, suffering from a very large suppurating bubo of the left groin, rather below Poupart's ligament, but having no sore, and not being aware of ever having suffered from one. I opened the bubo, which was painful, and contained a large quantity of pus. After a fortnight a speculum examination was made, but no sore discovered; there was some vaginal discharge of a semi-purulent character.

May 6th.—A sore was observed forming on the abdomen opposite to the orifice of the bubo, which was still unclosed; this sore in a few days assumed all the characteristics of a soft sore, or chancroid. By speculum examination, repeated on ten different occasions, no sore could still be discovered.

On the 19th of May, 1870, I inoculated the right side of the abdomen from the naturally auto-inoculated sore,

caused by the irritation of the discharge from the bubo; this formed a most characteristic pustule with depressed centre; it then ulcerated, and finally presented the aspect shown in the drawing taken by Mr. Mackay on June 14th. All the characters of a chancroid were well seen, with the peculiar edge, irregular surface, and copious discharge.

Thus far the history is clear. First—Of discharge from a bubo causing a sore by apposition. Second—Of an inoculable sore procured from this source. Third—Of the transmission of this sore, the second generation of a suppurating bubo to another person already syphilized, producing a characteristic pustule and sore as the third generation.

The most interesting and startling point with regard to this case is, however, the inoculability of the vaginal discharge, which I proved thus:—

Having had the patient under my observation, and confined to hospital for exactly two months, and having satisfied myself by frequent and careful speculum examinations that there was no possibility of an intra-vaginal sore, and that but a very little muco-purulent discharge alone existed, on the 2nd of June I removed some of the vaginal secretion through a speculum, taking care that it did not even touch any external part, and I inoculated with it on the abdomen a girl eight years old, No. 1,140, suffering only from vulval condylomata, with a very clean and clear skin; this produced a most characteristic pustule; this became on the fifth day a perfectly formed ulcer.

The sequence of constitutional signs thus showed itself:—

On June 14th the sore caused by the bubo inoculation had quite healed, having existed about thirty-five days. Papulo-squamous rash now appeared on the arms, the chest, the thigh, and the loins; the hair commenced falling out, and a slight iritic attack showed itself. There was a general murkiness of skin, but the health improved; the second inoculated sore shows as yet but little inclination to heal.

The patient rapidly improved, and left hospital on July 4, 1870.

SERIES No. 2.—*True chancroid produced on an already infected patient from the vaginal discharge of a patient, who, though not at the time showing infection signs, shortly did so, while in the hospital.*

No. 1,118.—A girl, eight years of age, was admitted May 18th, Ward 8, suffering from condylomata of the vulva and anus; there was no rash whatever, but she had an ulceration of the arm of a gummatous character. The history of the case points to her having been infected by her sister, a married woman, who had been in the hospital under my care this year for very copious mucous patches of the mouth and labia. Her husband, to whom she had been married but a few months, I saw also; he was suffering from mucous patches of the mouth, and admitted having had a sore and suppurating bubo five months before his marriage.

This girl I inoculated on June 2nd with the vaginal secretion of the preceding No. 1,024, Series No. 1, taking it carefully by means of a speculum, as before mentioned. A most characteristic pustule and sore was produced, the appearance exactly representing a chancroid, or soft sore, as shown in the illustration.

There was no possibility of any accidental contact with a sore, as the part was carefully guarded by a watch-glass, and the progress of the inoculation till the formation of a perfect typical sore was most regular. The drawing was taken twelve days after the inoculation.

In order to test the specific nature of this inoculated sore, on June 13th I introduced some of the discharge from the surface on the point of a pin on the right side of the abdomen of Case 1,085, a woman suffering only from a primary sore, and procured a most characteristic pustule and sore. Still further to try the communicability of this artificial sore I tested the patient No. 1,000, suffering from intense syphilitic poisoning, a most abundant rash, and recently having had a suppurating bubo, producing chancroid sores.

It is evident that in these two instances the artificially produced inoculations were equally contagious; the one, Series No. 1, produced from the offspring of a suppurating bubo in the same person, and the other, Series No. 2, produced in another person from the vaginal muco-pus; and those sores could, of course, be reproduced indefinitely. Supposing that either of these or similar cases communicated a sore to a male, I cannot doubt but it would have every resemblance, as shown in the illustration, to a soft, or chancroid sore, so called; but I also cannot doubt it would be an infecting sore, having originated in the 1st series from the vaginal muco-pus only of a patient showing, subsequently, undoubted signs of infection; and in the 2nd series having a double contamination, first, from the source of origin, the vaginal muco-pus of an infected patient, and then of the already infected patient, on whom the poison was grafted, and, as in this instance, already suffering from constitutional evidences. Experiments go far thus simply to explain how it is that constitutional evidences have been seen to follow soft or chancroid sores.

The health of this girl rapidly improved, and the condyloma healed; the artificial chancroid inoculated a pimple in its neighbourhood, and lasted about one month. She was discharged perfectly cured July 21, 1870.

SERIES No. 3.—*Inoculation from the vaginal discharge of an intensely syphilized patient—produced on her own person sixty-three days after admission—Auto-reinoculation from this artificial sore—Indefinite power of this second product—Non-inoculabity of the primary sore—Suppurating bubo—Papular rash—Nocturnal pains and intense cachexia—Rapid improvement of the health by inoculation.*

In Series No. 2 the development of a contagious sore from inoculation with a vaginal discharge is sufficiently evident, where the vaginal secretion was inoculated on a different person. A more interesting and curious circumstance with regard to communicability is that of the formation of a contagious sore on the patient from her own vaginal discharge, and the capability of this sore, so produced, to give birth to a second, and this of being propagated indefinitely.

Patient No. 988, admitted March 21, 1870, aged hardly eighteen years, left home in the country about four months before her admission; during that time she got a severe inflammation, apparently of a strumous nature, from which she lost an eye. About three weeks previous to admission she observed a sore on the left labium—non-painful, pus-secreting, and equaling a florin in size, without the slightest induration; a painful bubo was formed in the left groin, which suppurated shortly after admission, and from which I produced a characteristic but feebly marked pustule and sore on the abdomen.

In four weeks after her admission a copious coppery roseolar and papular rash appeared; she became intensely cachectic, and racked with pains, had sweatings, and was thoroughly prostrated by the syphilitic poison.

She was treated up to this by tonics, good diet, iodide of potassium, and iron. The stomach became very irritable, and it was impossible to give any internal medicine—even a creasote mixture was intolerable.

I therefore used the cautious and careful inunction of ten grains of mercurial ointment every afternoon. Unde this treatment, after ten days, there was some improvement in the general symptoms.

On the 23rd of May (being sixty-three days from her admission), I had the patient, who was extremely weak and prostrate, carried to the table, and, on speculum examination, found a rather copious vaginal muco-purulent secretion. I removed some of this through the speculum,

and washed out and examined the vagina and uterine neck; there was not the slightest breach of surface, or even irritation. I inoculated the left side of the abdomen with this pus, and produced a very well-marked, but not large, characteristic pustule.

On May 28th, in order to test the inoculability of the primary sore, I collected from the surface a copious charge of pus, with which I inoculated the abdomen, but with a negative result.

On June 3rd, being ten days from the date of the inoculation from the vaginal discharge, I inoculated the right side of the abdomen from the artificially formed sore, and produced a more perfect and vigorous pustule than in the first instance. This I refreshed, on June 9, with her own vaginal discharge, producing a sore, from which I performed the following inoculations, amply proving the contagious property of this second transmitted product of a vaginal discharge on the patient's own person while suffering from intense syphilitic intoxication.

June 7th, being four days after the introduction of the second virus, I inoculated Case No. 1,075 with the pus from the second inoculation, having first allowed it to dry. Whether from this cause, or the early stage of the pustule, or some accidental mal-performance of the inoculation, it did not succeed satisfactorily, fading away in three days.

June 9th, I inoculated from her vaginal discharge Case 1,159, already syphilitic, but with ill-formed result, fading in three days.

June 10th, three days afterwards, inoculated a weak cachectic patient, No. 1,163, suffering from copious papular rash, and produced a characteristic, small, well-shaped, pus-secreting ulcer on the abdomen, the exact resemblance of the parent source.

June 11th, I inoculated with the same (having first allowed the pus to dry), No. 1,169, suffering both primary sore and copious spots, but possibly from this cause, did not succeed satisfactorily, the pustule being abortive.

June 12th, I inoculated with the same, Case No. 1,112, suffering from what may be termed a true typical sore on the right labium, without induration, but with somewhat indurated inguinal glands on the right side, with copious papular rash appearing at the same time. This inoculation was most successful—producing a pustule and marked chancroid; illustration of which is very perfect, as taken two days after the inoculation, showing the pustule and peculiar inflamed base.

This series shows the inoculability of a vaginal discharge on the *patient's self;* the re-inoculability of this artificial sore on the *patient's self;* the propagation of this sore to other patients suffering from syphilitic manifestations, as No. 1,112 and No. 1,163.

The improvement of this girl's health from the period of the inoculations was most remarkable. She is now, June 18th, almost without a symptom, though taking no medicine. Wine, stimulants, good diet, have been freely given, but no medicine.

On June 23rd, I again inoculated her from her own vaginal discharge, and produced by the 28th a regular characteristic pustule, being now three months after admission to hospital. On the same day I inoculated from the same source No. 1,060 with success, and No. 1,093 without success. Discharged perfectly cured August 1st, 1870.

During the last two years no more intense case of true primary syphilitic intoxication has been in the hospital, and, though contrary to received theory, she suffered from a very large suppurating bubo on the same side as the sore, which had not the slightest induration; it secreted pus freely, was painful, and extensive, having all the characters attributed to the soft non-infecting sore.

SERIES No. 4.—*Primary sore—Non-indurated—Roseolar and papular rash—No inguinal enlargements—Inoculation from a vaginal discharge—Formation of characteristic pustule—and soft sore—Cure of the constitutional signs.*

No. 1,075, a remarkably strong healthy-looking girl of twenty-one, and had been a domestic servant till within two months, was admitted April 27, 1870. Ward No. 2.

About one week previously she felt a sore at the fourchette. On examination, this is ragged, pus-secreting, and painful; there are no inguinal enlargements whatever, and there is some slight discharge; but the rent at the fourchette is too sore to allow the use of the speculum.

On May 26th, being thirty-six days since first observing the sore, roseolar blotches appeared on the body and face, and in a few days more some scattered papules also were seen; the throat became patchy and sore.

On May 31st, inoculated her with her own vaginal discharge, using the speculum to see that the vagina was free from any sore. The result was negative, but some redness and anger appeared at the site of the inoculation for the first two days.

On June 13, I inoculated her from Case No. 1,093, a strong very dark skinned girl, having no sore, but suffering from copious mucous patches, discharge, papular rash, and pains, and having had, with the primary, two months previously, a suppurating bubo; the extensive scar of which is very visible. This inoculation was a perfect success, the pustular stage, after twenty-four hours, is well shown by the drawing, taken at the expiration of this time, a perfect chancroid, as large as sixpences formed. The patient rapidly improved from the date of re-inoculation, and the rash completely disappeared. I did not think it necessary to test the inoculability of this artificial sore further, as the appearance was so perfectly marked.

On July 7, I inoculated this patient from vaginal discharge of Series No. 12, forming a perfect pustule and sore.

SERIES No. 5.—*Primary sore of the right labium—Non-indurated, but presenting the general appearances of an infecting sore—Tender and indurated inguinal glands on the same side—Copious papular rash evolving itself—Primary sore resisting inoculation—Inoculation from a vaginal discharge.*

Patient aged twenty-two, No. 1,112, married, has a healthy child living; her husband died of phthisis two years since; four months ago went on town, and first felt a sore one week before admission, on May 13, 1870. She is now in tolerably good general condition, and has a sore about the size of a fourpenny-piece on the labium, with non-indurated base, but having a clean surface, secreting but little pus, and resembling the general appearance of an infecting sore, minus induration, or even a parchment thickening; a slight enlargement could already be felt in the inguinal region, and the glands became rather dense.

May 16.—I inoculated from this sore when unirritated, but without success.

May 23.—Some murkiness is appearing about the face.

May 31.—Inoculated with gonorrhœal matter from a male patient, but without success.

June 3.—Inoculated from her own vaginal secretion, which is hardly a pus secretion, with negative result.

June 7.—Inoculated with vaginal muco-pus of a girl aged seventeen, No. 1,140—suffering from patches of the vulva, purpuric, and lichenous spots—with this I produced a characteristic, but not vigorous pustule, which faded and dried up by the 12th of June.

June 9.—Found a small ulcer of the uterus appearing, and inoculated from it, without result.

A papular rash was now showing itself on the face and limbs.

June 12.—I now inoculated from the second artificially produced pustule of 988, Series 3, being the grandchild, so to speak, of a vaginal discharge, and it produced, by the 16th, a well-marked pustule shown in the illustration—the angry base, depressed centre, and peculiar pustule is very typical indeed.

On June 16, I performed a most interesting experiment. A patient, No. 911, who had been for over three months in the laundry of the institution, and who had been nearly

two months under my care, in the hospital, previously (so that she was under observation and absolute restriction for more than five months) had no sore for over four months, and came under my care again, with papular rash, alopecia, and patchy ulceration of the throat. I made a vaginal examination, and found a muco-purulent discharge still existing; with this I inoculated the subject of this series on the opposite side of the abdomen, and produced a characteristic pustule and well-marked sore.

On June 27, I inoculated the patient from this vaginal discharge of the patient, forming Series No. 11, and produced a most characteristic pustule and chancroid.

There is no doubt but that this pustular sore, the offspring of the vaginal discharge of an intensely syphilitic woman, in another intensely syphilitic, was indefinitely transmissible, and that the former inoculation of June 16, as the grandchild of the infected patient, grafted on another equally intensely infected, was also indefinitely transmissible.

If either of these doubly distilled poisons were communicated to a healthy male, it is surely pretty certain that, though the appearance would be that of a soft sore, it would communicate the taint. Yet, what is here demonstrated experimentally and artificially, I have no doubt, does frequently occur, as I have often seen non-indurated sores and suppurating buboes, and inoculable sores, followed by constitutional signs in the female, and not very rarely in the male.

SERIES No. 6.—*Inflammation of the labia—Condylomata—Papular rash—Vaginal discharge—Disappearance of the rash.*

No. 1,060.—A strong girl, aged nineteen, about twelve months on the town, and never before diseased; was admitted April 22, 1870—Ward 2. She is about four months pregnant.

She had observed one month before a sore at the labium, which was not very painful. She has now inflamed and tumid labia, patchy sores, and elevated condylomata, and a papular rash making its appearance.

There is a large surface of elevated pale patchy sores between the labium and the thigh, and, on vaginal examination with the speculum, no sore or abrasion could be detected, but there was an appreciable amount of muco-purulent discharge.

On May 30, a sore was observed on the mons veneris, opposite to one of the ulcerated mucous patches on the thigh, having much the appearance of a soft sore; from it I inoculated the abdomen, and, on June 3, a small pustule formed; but by June 7 had died away.

June 7.—I inoculated the other side of the abdomen from her own vaginal secretion, which was then not very abundant; this formed a well-marked pustule with depressed centre and somewhat inflamed base—the drawing of which was taken on the 14th June—seven days after the inoculation. The next day this burst and gradually dried up, the small ulcer left by it healing up by the 20th. The entire stage of this sluggish, but not abortive, inoculation being thirteen days.

June 25.—I inoculated in two places, the abdomen with vaginal secretion, now hardly purulent, of 988, Series 3, three months after her admission, and produced most characteristic pustules and sores equalling a shilling in size.

The rash had quite disappeared by July 6; the mucous patches and labial tumefaction still partially existed.

(To be continued.)

SECONDARY HÆMORRHAGE,

OCCURRING ON THE EIGHTH, FIFTEENTH, AND TWENTIETH DAYS.

By JAMES DOBBIE, M.D.

MRS. L., æt. forty-one, was safely delivered of her eighth child, placenta came away entire, uterus contracted firmly, and the lady was making an excellent recovery, when, on the eighth day, apparently from over-exertion, she was suddenly seized with most alarming hæmorrhage. When I arrived I found the patient in a very prostrate condition, pale, anxious countenance, feeble pulse, cold extremities and bleeding most profusely. On pressing over the abdomen I found the uterus distended to the size of a child's head, and on making an examination the parts were found very relapsed and the os dilated to the size of a shilling. I removed the clots and applied firm pressure over the uterus, at the same time applying cold to the pubis, and administered liq. ergot every half-hour. Finding this did not succeed in stopping the bleeding, I plugged the vagina, retaining the plug in for several hours; on its removal I found the hæmorrhage had ceased, I continued the pressure over the uterus and also administered the ergot at longer intervals. The bleeding did not recur, and the lady made a good recovery.

Mrs. B., æt. thirty, was making an excellent recovery from her second confinement, and everything had gone on naturally and well, when, moving about on the fifteenth day, she suddenly alarmed her friends by falling down in a faint—on being removed to bed she was found deluged in blood. When I saw her she had considerably recovered, but was still very weak, and the bleeding still pretty profuse. I found the os slightly dilated, I applied cold to the parts, and kept up pressure over the uterus and administered ergot and acidulous drinks. The flooding recurred on three separate occasions, but ultimately ceased, and the lady made a good recovery. The hæmorrhage in this case appeared to have been induced by constipation.

Mrs. K., æt. twenty-eight, had made an excellent recovery from her second confinement, and everything had gone on naturally, when on the twentieth day she had a considerable hæmorrhage, but, with rest and similar treatment to the above, the patient recovered and did well. The cause of hæmorrhage in this last case appeared to have risen from the patient using too much exertion over the washing-tub, and from having suffered for three days from the irritation of toothache.

Hospital Reports.

ARMY HOSPITALS.

CASE OF SUDDEN DEATH IN TYPHOID FEVER.

By Assistant-Surgeon BOILEAU, M.B., 29th Regiment, Canada.

PRIVATE G.P., aged twenty-three, and having completed a service of seven years, was admitted into hospital on the third day of the fever. On the fourth I recorded an unusual weakness of the cardiac systole. He progressed most favourably until the thirteenth morning, having all the usual symptoms of the disease, which appeared to be of a mild but decided type. The only medicine administered was 10 grains of the bicarbonate of soda in 2 drachms of the tincture of gentian, which he took three times daily. On the day preceding his death, this medicine was omitted, and 10 grains of compound kino-powder substituted. From 8 to 10 ounces of wine, with 2 pints of beef-tea, were given to him daily.

Up to the moment that he expired, there was not a sign or symptom to warrant an unfavourable prognosis.

Fortunately, for my own satisfaction, I had given to the patient himself, and to his attendants, the most precise directions that not for any purpose whatever was he to sit up in bed, but that he was to remain in the recumbent position. Unfortunately this injunction was unheeded by the patient, who, while in the act of sitting up in bed about two o'clock in the afternoon, to take a drink, fell backwards and at once expired

I made a most careful *post-mortem* examination, and found nothing to account for death; the brain, lungs, heart,

liver, spleen, kidneys, being apparently healthy. In the right side of the heart. a fibrinous clot extended from auricle to ventricle, almost including the tricuspid orifice; the left side was almost empty. Peyer's glands were much congested, indurated, and raised above the level of the surrounding mucous membrane, but there was no appearance of ulceration. Stomach and colon healthy.

Such untoward events as these appear to be analogous to the many recorded cases of sudden and unaccountable death after labour. In most of them, no information of any practical worth has been obtained by an autopsy. Paralysis of the heart is supposed to be the cause of death, and this seems to be a rational explanation. I expressed this opinion at the time of the occurrence, but it was objected to on the ground that, if paralysis of the heart was the cause of death, then the cavities would have been found distended with blood. I am not aware, however, of this having been proved. Nearly every recorded death of this kind has occurred at the moment of some sudden exertion on the part of the invalid, some effort which withdrew the aid of gravity from the weakened heart's propelling power. Does it not appear to be a reasonable assumption, that the sudden anæmia of nervous centres, likely to be produced, would lead to paralysis of the heart —of a heart propelling blood of impaired quality and reduced in quantity, the blood of a patient thirteen days prostrated by typhoid poison?

The practical lesson to be learnt from such a case is the necessity of investigating the condition of the heart in fevers, and of impressing on patient and attendants the danger of any movements calculated to overtax it, when its condition of exhaustion is evidenced by our examination.

Transactions of Societies.

BRITISH MEDICAL ASSOCIATION.

The annual meeting has been held at Newcastle-on-Tyne during the past week. On Tuesday, the first day of the proceedings, the Council met in the morning and transacted business. In the evening the first general meeting was held, when Dr. Chadwick, retiring President, handed over his office to Dr. Charlton, President-elect.

Dr. Chadwick, in retiring, reviewed the work of the year in an able address, closing in the following words:—"I must not forget that my chief duty here is to introduce you to my excellent successor. (Loud applause.) In Newcastle it would be folly to attempt his praise, even though I speak with the authority of more than thirty years' acquaintance. (Applause.) He has made for himself a position here which warrants this great Association accepting him as their President. He belongs to a class of medical practitioners well deserving consideration —a class doing much in the unostentatious exercise of their medical duties to maintain the dignity of the profession, and secure the esteem of every class of the community. (Loud applause.) Dr. Charlton is an honour to the profession of this district, and will, by the discharge of his duties as President of the Association, materially enhance his own reputation, and bring credit to the body of which, for the next twelve months, he becomes the head. (Applause.) Bear with me for a moment whilst with loving and reverent hand I would lay a memorial wreath upon the recently closed graves of those who since our last anniversary have gone "to that bourne whence no traveller returns;" for the losses we have sustained by death this year has been a remarkable one in our annals. *Facile princeps* is Syme, then follows Simpson—(applause)—and with an interval Minchy and Jeaffreson, men of mark, long familiar not only to us but to the world—with whom as associates we were privileged to hold secret converse; these will meet us no longer in our annual gatherings. It is not for me to draw comparisons, or to mete out the eulogy they each deserve. They are now beyond the reach alike of criticism and praise, but their works endure, and by these they will be judged. It will long be for us a subject both of pride and pleasure that in their lives they were of us, and that our objects secured their sympathy and approval. (Applause.)

Inaugural Address.

Dr. Charlton, the in-coming President, then delivered his inaugural address. He offered the members a cordial welcome to Newcastle-on-Tyne, to the history of which he alluded, and then went on to consider its hygienic state, and to refer to other medical and social problems. Having shown that from its position and other circumstances the town ought to be a healthy one, he observed that "unfortunately of late years the death-rate has been comparatively high; nay, about five years ago it rose so much that it seemed to confirm the idea long before put forth by the Cholera Commission of 1854, that the great mortality was occasioned by the neglect of sanitary regulations. It must be confessed that Newcastle suffered terribly in the cholera epidemic of 1853; but it was not the poorest and most wretched-looking parts of the town that were then most severely visited. By many it was maintained that the then deficient supply of water, or the contamination of that necessary fluid by overflowings and filtrations from cesspools into badly-protected wells, favoured the spread of the disease. In reality, however, cesspools are not an 'institution' in Newcastle; they hardly can be said to exist; and for the last twenty years and more, water for household consumption has been supplied from large reservoirs twelve miles from the town, and free from all danger of contamination. For ourselves, after most careful examination, we have been unable to discover the connection, in this instance, between cholera and the water supply, though we fully recognise the probability, nay, almost the certainty, of water being the great medium by which the choleraic and other poisons are introduced into the system. With the generally high rate of wages, the abundance and cheapness of provisions, and of firing, the disadvantage of overcrowding temporarily might be partially counteracted, were it not for the unfortunate and well-known fact that high wages are apt to induce a corresponding amount of debauchery and drunkenness among our labouring population. It is not of the pitmen we here speak, but of the workmen employed in our great manufactories. The pitmen form a class apart; and though many of them make it almost a rule to get drunk on the fortnightly pay day, they are, on the whole, a quiet race, and their occupation is by no means an unhealthy one; but the same cannot be said of many of the other industries followed in this neighbourhood. We have large lead works on the Tyne, both of white and red lead, and our hospital is rarely without several cases of lead disease from the white-lead factories. We often have this malady in its most aggravated forms, and it is observed that the women suffer more than the men, as it is the former who are chiefly employed in handling and stacking the carbonate of lead. It has been maintained that the greater intemperance of the male workmen acts as a prophylactic against the lead-poison; but we are inclined to refer their greater immunity rather to the nature of their work. The iron and iron ship-building works on the Tyne may be said to have existed for the last thirty years; and in these great establishments the health of the workmen ought, from the nature of their occupation, to be reasonably good. The unfortunate improvidence and drunken habits of many of these highly-paid operatives tends, however, to produce disease; disorders of the heart and kidneys are frequent, while phthisis among these men is comparatively rare. We are not advocates of total abstinence from alcohol; we recognise fermented liquors as a gift of Providence; but, under the present drinking usages of this country, they have become an absolute curse to the labouring population. We have alluded to the facilities possessed by Newcastle for drainage into the Tyne; and we confess we spoke thus with some hesitation, conscious that when in after days these words of ours may fall under the eyes of our more enlightened successors, they might wonder that such an idea could be entertained in an assembly of grave medical practitioners. We recognise daily the important part that water plays in conveying the germs of disease, and we speak of draining our town into a tidal river. The Tyne is, indeed, at present a greatly polluted stream at Newcastle; but we foresee the day when its waters will become pellucid as of yore—the day when the most fruitful in evil of all modern so-called improvements, the fœtid water-closet, will have been replaced by the dry earth or dry ash system; when the liquid sewage, too, will be utilised, and little but pure water shall rejoin the waters which flow in the parent stream. "On referring to the immediate business of the Association, he said that hitherto one great and paramount obstacle to progress was the multiplicity of sources whence licences to practise medicine could be derived. Against this

crying evil there is but one remedy—a single portal, by which all should enter the profession; a single but searching examination for the licence to practise. He then remarked on the legislation on the subject; and on the office of coroner he recommended that, with a well organised magistracy, the office of coroner might be altogether dispensed with, and be replaced by specially instructed medical inspectors in each district. Touching the work before them, he said: "We have before us the prevention of disease by sanitary laws; we have the subject of hospital improvement, so admirably inaugurated by Captain Douglas Galton at the Leeds meeting; we have the coming struggle regarding the repeal or the extension of the Contagious Diseases Act, where a band of so-called strong-minded women and weak-minded men are striving to reverse the verdict of the wisest and the best among the medical profession."

Professor Stokes, of Dublin, moved, and Dr. Paget seconded, the usual vote of thanks to the retiring President. In doing so each referred to the rejection of the Medical Bill, and expressed their regret; whereupon Mr. Husband, of York, and Dr. Chadwick protested that the subject ought not to be introduced, and it was accordingly dropped.

A vote of thanks to the Mayor and Sheriff of Newcastle was also carried by acclamation.

The Secretary read the annual report, showing an increase of members in the district, due mostly to the zeal of Dr. Phillipson. The report stated that Mr. Hutchinson had resigned the Editorship of the Journal, and that the post had been given to Mr. Hart.

The report was adopted on the motion of Dr. Beatty, seconded by Dr. E. Smith.

Mr. Watkin Williams was re-elected General Secretary at a salary of 300*l.* a year.

The accounts were submitted, and a vote of thanks passed to the auditors.

Dr. Elliott withdrew his motion to publish an annual volume of *Transactions*, as also did Rev. Dr. Bell his more important one on the constitution of the Committee of Council.

Second Day.—Wednesday.

The day opened by a breakfast given to members by Dr. Gregson, the Sheriff of Newcastle, which naturally went off with considerable eclat.

The Sheriff said, in welcoming the members to Newcastle as Sheriff of this ancient Corporation, that in its name and his own he bid them most hearty welcome. He was sure this town had just reason to be proud that this Congress was now assembled within its walls, comprising so many gentlemen of the highest acquirements, so distinguished by profound research and practical experience, from distant parts of Great Britain and Ireland, all animated by the same motive, all able and willing to impart the results of their research and experience in the noble science and art of curing and alleviating the ills to which flesh is heir. He trusted that this meeting would form a bright era in the cause of progress in the service of humanity. He also trusted that through their meeting many lasting friendships might be formed, and pleasing recollections of it may endure. He also hoped that this town would reap the first fruits of their labours in sanitary science, and that, in the arduous duties in which they would be engaged, one of the greatest blessings may not be wanting, but that all may experience "a good digestion waiting on appetite, and health on both."

After breakfast the Council held a meeting, and at eleven o'clock the second general meeting took place, in which it was decided that the next meeting should be held at Plymouth, and that Dr. Whipple, of that town, should be President.

Sir William Armstrong was elected honorary member of the Association. In the evening Sir William gave a splendid banquet to a large number of members.

At noon Dr. Gibson gave the address in Medicine, taking for his subject the treatment of gout and acute rheumatism by rest. In the afternoon the sections met, but we are compelled to postpone a report of their proceedings.

The President gave a soiree at nine p.m. to members and friends in the Town Hall. Upwards of 500 ladies and gentlemen attended. In addition to the gay decorations of the Hall, the objects of art and scientific interest exhibited were examined by many with much pleasure. Among these were a number of ornithological specimens, lent by Mr. Hancock; archæological collections, contributed by the Antiquarian Society and the President; a series of permanent photographs, illustrating Mr. Swan's "carbon process," exhibited by Mawson and Swan; and porcelain, the property of the late Charles Dickens, shown by Mr. C. Lister. The principal table was devoted to the display, under a series of microscopes, of some of the most remarkable results of modern zoological researches in the collection of deep-sea organisms, placed at the service of the President by Dr. Carpenter, V.P.R.S. During the evening Mr. Rea executed several choice selections of music.

Third Day.—Thursday.

The President of the National Temperance League gave a breakfast in the Queen's Head Hotel, at which some eighty medical men were present, and where the objects of the League were ably stated by the President, and some discussion ensued, in which Drs. Wood, Sutcliffe, Stanley, Haynes, De Mey, Rutherford, Underhill, and the Sheriff took part. The third general meeting was then held, when Dr. Waters presented the report of the Direct Representation Committee. Owing, however, to this report not having been printed, and the few members present at its reading, the discussion was postponed to the next day.

Dr. Heath's Address.

At eleven o'clock the address in Surgery was delivered by Dr. George Y. Heath, Surgeon to the Newcastle Infirmary. He took for his subject operative surgery, and spoke of its three characteristics "of audacity, its conservatism, and its success." He considered that modern operative surgery was characterised by the magnitude of its proceedings, its respect to the integrity of the human body, its reticence of the knife, and the superiority of its results. Speaking of the large extent of usefulness to which it might be applied, he remarked that it stretched out its hand in fresh regions, and dealt with organs once considered out of its reach. It hesitated not to take the greatest responsibility, if only its audacity were justified by a well-grounded hope of eradicating disease. Paradoxical as it might seem, while in one direction it was just acquiring new dominions, in other characters it was laying down the knife, or it substituted milder for more severe operations, and shrunk from any unnecessary mutilation of the human frame. In its milder and more conservative measures it realised greater and more uniform success than in former days. There were three characteristics of modern surgery which for shortness might be spoken of as its audacity, its conservatism, and its success. There would be no difficulty in recalling examples of the audacity of modern operative surgery. Operations which but a few years ago were accounted unjustifiable were now practised on a firm basis of success. The term "conservative" applied to surgery dated from 1852. He then proceeded to give examples of cases where the use of the knife had been abstained from. A friend of his had had the case in hand of a man having had his leg cut by glass. The gentleman had not his instruments with him, and consequently could not perform any operation; and he therefore endeavoured to staunch the blood by bindings; but he found it impossible in that way to succeed. It at last occurred to him to bend the knee, and, doing so, he found the bleeding so mitigated that he was enabled effectually to stop it by the application of bandages. From the results of experiments in the matter, he was led to believe that it was but fair to infer they had a blood-controlling agent of considerable power which could be applied on the shortest notice, not dangerous in itself, which certainly may be relied upon to restrain bleeding, at least temporarily. He then illustrated the success attending modern operative surgery. He produced models of a leg which had been entirely crooked at the ankle, which, he said, had been straitened by means of the removal of bones. This was twenty years ago, and he was told by the owner of the leg that, excepting a slight shortness of the limb, he experienced no inconvenience whatever from it, but, on the contrary, it was a good serviceable limb. He gave other examples, and then added:—"But we must not boast too much; we must confess that there are other foes whom we cannot yet overcome; still wide domains where the great enemy Death still remains victorious, but which it is for us and our successors to rescue from his scythe and bring under the dominion of the knife. Nevertheless, what I have been able to relate will suffice to show that operative surgery has not stood still while other arts have advanced, and that if we do not occupy the foremost place, we are at least well to the front, in that glorious race which they win who do the most to diminish human suffering, to prolong life, and to elevate the condition of man."

A vote of thanks, moved by Dr. Southam, and seconded by Dr. Wheelhouse, was accorded Dr. Heath for his valuable

address. The several sections met again in the afternoon, and in the evening the public dinner went off satisfactorily.

Last Day.—Friday.

At eleven o'clock in the morning the concluding general meeting was held, where more discussion took place than at other meetings, in consequence of it having become clear that the Council had in several particulars acted contrary to the wishes of members. The opportunity was therefore seized to bring out in other matters the differences of opinion that exist.

It was clear to every one present that the ruling body is in direct antagonism with the Association, or at any rate a large portion of it.

Dr. Ransom read the report of the committee "On the Observation and Registration of Disease."

Professor Paget moved the adoption of the report.

Dr. Waters seconded it, and it was carried.

The report of the committee appointed to obtain direct representation of the profession in the Medical Council was next read. The adoption of the report had been moved on Thursday by Mr. Husband, and seconded by Dr. Stuart.

Dr. Acland moved an amendment, "That this meeting learns with regret that a committee of this Association have refused, in the name of the Association, the offer of Mr. Forster, the Vice-President of the Privy Council, to grant a committee of the House of Commons at the commencement of next session to inquire into the question of the representation of the profession in the Medical Council: that in consequence of that refusal the Government declined to proceed with the Medical Bill."

Dr. Embleton seconded the amendment.

Dr. E. Waters opposed it.

Dr. Beatty expressed his great gratification that the bill had been withdrawn.

Professor Paget spoke in favour of the amendment.

Professor Bennett against it.

Dr. Rumsey also spoke against the amendment. He feared the profession had missed the opportunity of getting a good bill.

Dr. Hecstall Smith supported the report, as also did Dr. Southam and Dr. Chadwick.

After a few words from Mr. Husband, the amendment was put to the meeting and lost.

On the motion of Mr. Thomas Underhill, seconded by Dr. Tilt, the members for the ensuing year of the Medical Reform Committee were appointed.

Dr. Chadwick moved a vote of thanks to Dr. Sibson, the President of the Committee of Council of the Association.

Dr. Falconer seconded the motion, which was carried.

Dr. Acland moved that the grateful thanks of the members of the Association be given to the Mayor, Sheriff, and Corporation of Newcastle, the Committee of the Literary and Philosophical Society, the Directors of the Savings Bank, the Directors of the Gas Company, the Committee of the Newcastle Infirmary, the Council of the College of Medicine, the Committee of the Natural History Society, the Committee of the Society of Antiquarians, the local secretary (Dr. Philipson), the local treasurer (Dr. Humble), Dr. Arnison, Mr. Luke Armstrong, Dr. Banning, and other local officials, to the manufacturers who had laid open their works for the visits of the members of the Association, and especially to Sir William Armstrong.

Dr. E. Waters seconded the proposition, which was carried by acclamation.

Dr. Stuart moved, Dr. Hecstall Smith seconded, and it was carried, that a State Medicine Committee of the Association be appointed.

On the motion of Dr. Rumsey, seconded by Dr. Stuart, the appointment of a Parliamentary Committee was referred to the Committee of Council.

Dr. Chadwick moved a vote of thanks to the President of the Association, which was seconded by Dr. Sibson, and carried by acclamation.

Dr. Charlton having suitably replied, the business concluded, and the majority of the members present left the town to attend a special Convocation of Durham University.

Convocation of the Durham University.

This special Convocation of the University of Durham, for the purpose of conferring the honorary degree of D.C.L. on seven of the members of the Association, was the first business of the afternoon. The convocation assembled in Bishop Cosin's Library, shortly after two o'clock. The warden of the University, Dr. Lake, the recently appointed Dean of Durham, presided, and was supported by all its other officers, and church dignitaries, connected therewith. The body of the hall was filled with a gay assemblage, in a great part consisting of ladies, and the gallery was crowded with gentlemen from end to end. The first called upon to receive the degree was Dr. Edward Charlton, the president, and he was warmly applauded. The other gentlemen were all greeted with the warmest acknowledgments as they stood before the Dean, and received the distinction. After Dr. Charlton they came in the following order: — Charles Chadwick, M.D., F.R.C.P. (Leeds); Randle Wilbraham Falconer, M.D., F.R.C.P. (Bath), treasurer of the Association; Francis Sibson, M.D., F.R.S., F.R.C.P. (London); Henry William Acland, M.D., F.R.C.P., LL.D., F.R.S., hon. physician to H.R.H. the Prince of Wales, Regius Professor of Medicine and Radcliffe Librarian in the University of Oxford; George Edward Paget, M.D., F.R.C.P., Linacre Lecturer in the Medical University of Cambridge, and President of the General Medical Council; and William Stokes, M.D., F.K.Q.C.P., LL.D., Regius Professor of Physic, University of Dublin, and Member of the General Medical Council. Professor Stokes was greeted with quite an ovation on stepping forward to receive his degree, and, in the course of a highly eulogistic speech by the Rev. Warden, the hearty cheers of the brilliant assemblage were both loud and frequent.

Service in the Cathedral.

After the Convocation had been dissolved, the whole of the visitors repaired to the Cathedral, and broke up into parties, who were led by several local gentlemen compet ent to give an interesting description of the principal objects in the ancient pile. The largest of these parties was under the guidance of Dr. Charlton, and there was ample scope for his descriptive power and antiquarian knowledge. Full Choral Service commenced at four o'clock, and was well attended.

Dinner in the Castle.

A cold collation was served up in the Castle Hall at five o'clock, and upwards of two hundred of the members of the Association sat down. The Very Rev. the Dean of Durham (Dr. Lake), Warden of the University of Durham, occupied the chair, supported on his right by Dr. Charlton; the Lord Bishop of Durham (Dr. Baring); Dr. Stokes; Archdeacon Prest; Dr. Paget; Dr. Hamilton, Archdeacon of Lindisfarne; and Dr. Embleton. On his left were Dr. Whipple, President-elect of the Association; Dr. Falconer; Dr. Sibson; Dr. Chadwick; Dr. Husband; Dr. Gregson, Sheriff of Newcastle; the Rev. Canon Eade, and Professor Acland. The rev. Chairman first proposed, in one toast, "The Church and the Queen," which was replied to by the Lord Bishop of Durham, who expressed the pleasure he felt in welcoming the members, and spoke to the close union which exists between the clergy and the medical profession. Referring to the period when he was a parish priest in London, his lordship testified to the great assistance he had received from gentlemen of the medical profession, making mention of Dr. Burrows and Dr. Paget, and one for whom he had the greatest regard and esteem, who, had he been spared, would have risen to the highest position in his profession—Dr. Baly. He was killed on his way to Windsor Castle by a railway accident. There was no body of men more large-hearted and self-sacrificing.—The Chairman then gave "Success to the British Medical Association, coupled with the health of Dr. Charlton."—Dr. Charlton, in responding, referred to the manner in which they had been enabled to receive the members of the Association, with the help of friends in Newcastle and some a little further south—friends in the glorious old University of Durham. He was sure they would all carry away with them a lasting recollection of their reception by the University of Durham.—Professor Acland also acknowledged the toast, and gave the health of "The Dean and Chapter of Durham," to which Dr. Lake replied in felicitous terms.—"The Mayor and Corporation of Durham," was proposed by Dr. Husband, of York, and responded to by Dr. Boyd, of Durham.—Dr. Paget gave the next toast—"Prosperity to the Newcastle College of Medicine," and spoke of its connection with the University of Durham. He coupled with the toast the name of Dr. Embleton, who, in replying, gave a short history of the College. It was founded by Sir John Fife and Dr. Greenhow, as a school of medicine, in 1834, and became part and parcel of the University of Durham in 1852.—Dr. Charlton proposed "Prosperity to the

University of Durham," remarking that he could see a great future for it, and that it would in time become the grand scientific University of the North. Of the kindness of the Dean and Chapter of Durham on the occasion of the wind-up of their meeting, he said he could not speak but with the warmest gratitude.—The Dean of Durham acknowledged the toast in a most humorous and instructive speech.—The health of "The Distinguished Strangers" was given by the Archdeacon of Durham, and replied to by Dr. Stokes.

Registered for Transmission Abroad.

THE

MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6

" If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of

A. A. Tindall, 20, King William-street, Strand, London.

Moffat and Co., 6, D'Olier-street, Dublin.

Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—

New York—Turner and Mignard, Nassau-street.

Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

WEDNESDAY, AUGUST 17, 1870.

AT NEWCASTLE.

The British Medical Congress has occupied four days of the past week at Newcastle-on-Tyne, and even amidst the din of war we may be expected to say something about it. It was a pleasant enough time for those of us who determined to take notes quietly instead of availing ourselves of the privileges of the press, and this course is certainly justifiable in the case of an Association that supports its own journal—that, in fact, spends all its available cash on its own periodical. A good many members confided to us their notion that this was altogether an error, and were inclined to support the movement for a yearly volume of *Transactions;* yet, when the motion to consider that came on, they failed to put in a worthy appearance.

This is really remarkable in the light of the Treasurer's report, which shows out of an income of upwards of £5,000 the magnificent sum of about £15 devoted to scientific research. "Was ever a more ridiculous result?" exclaimed not a few. "But after all," said others, "the Association does not exist for scientific purposes." That is all very well to talk about to the public; but there are a dozen societies that would be glad of all the really good papers read. There are plenty of journals to publish valuable original communications, or to ventilate professional questions—it is our business to take a respectable holiday once a year, and let John Bull fancy his doctors are at their usual disinterested employment for his behoof. Besides, it is pleasant to see such an assembly of doctors, and no one who has not had the opportunity of journal observation would ever dream how few are the distinguishing characteristics of the British doctor.

It is not for us to decide these points—that is, not for us as journalists. The writer, as an individual member, has a right to form his own opinion as to the uses of the Congress, and to continue to pay his guinea a year, or to resign, as to him may seem fit. Well, he thinks Newcastle worth the money, and perhaps Plymouth may be, and that is to be the next greeting place, when he hopes to meet as many worthy members of the Profession as the Northern counties produced.

When the President, in a few graceful remarks, touched the vexed question of Medical Reform, curiosity was at once excited, and this only redoubles when Drs. Stokes and Paget, in proposing a vote of thanks, revealed how great was the difference between opinion of the leading minds in the Profession, and the committee that has assumed to represent it during the last twelve months. Such men may, as occasion requires, rise above everyday etiquette, and seize a favourable opportunity to speak a word in season; and, in spite of the reproof of the Association's leaders as to the timeliness of their remarks, we hail them as an indication that the boasted numbers of the Association are not to be allowed to over-rule independence of thought, or the small Committee of Council to arrogate to itself a position to which it is not in the least entitled. We cannot forget that the Leeds meeting, when fairly appealed to, asserted a principle which the committee has altogether evaded. In this we consider the committee to be reprehensible, and not for any number of agreeable meetings would we condone such a fault—not a mere mistake, but a deliberate determination not to listen to the voice of those who alone have the right to decide on great measures.

"Ah! but they mean right!" said one when we urged this view of the matter. "Perhaps they do; but then let them do right," reply we. Did we not hear the representatives of this Association pretend to speak in the name of the Profession, but a short time ago, to members of the House of Commons? and did not others then and there cry out against the assumption, and assure the few legislators present that such were not the views of the Profession? How well it might have been added that these gentlemen did not really represent the Association, inasmuch as they had agreed together to ignore the decision of the general members on the only occasion on which the matter was put before them. We had many other things to say of the meeting, but space fails. Those who were present need no recapitulation of the lighter matters. Those who were not will find a condensed report in another part of this number. As to practical matters, we shall gather up the fragments to present to our readers in future numbers.

Notes on Current Topics.

A Sad Story from the Cells.

At Cardiff, David Howells was sentenced by the local justices to a month's imprisonment with hard labour. He had not taken food for two days prior to his conviction, but "had the horrors"—from drink. In prison he had been placed on the treadmill, and, whilst attempting to do it, the chief warder, lynx-eyed official as he is, remarked that "he appeared to be unwell, and suffering from the effects of drink," yet he worked him till noon, and then took him to the doctor's assistant who prescribed for the prisoner, if not the "pump," something analogous to it; subsequently he was re-harnessed to the mill, and "did" his nine hours. It was on being released from the mill that David Howells became so restive and violent, that Dr. Paine, the gaol surgeon, had to be sent for. Dr. Paine and his assistant (Dr. Morgan) visited the "restive and violent" prisoner—ordered him brandy and arrowroot, and prescribed medicine. Two prisoners "with instruc-

of the night, David Howells ceased to become violent and laid aside his restiveness, for his spirit had bounded from the grasp of the vigilant guards that encompassed it—he had died!

On the body of the prisoner an inquest has been held. The verdict delivered by the empanelled jury has not met the approbation of the inhabitants of Cardiff, who demand further and fuller inquiry into the case; and justly, if the real facts be as thus represented by the local Press.

Cheap Dwellings for the People.

Now that the Education Bill has passed Commons and Lords, and that parents and guardians will in future be compelled to se that the youths of their respective charges receive—at least—the standard amount of education, it may be advisable to invite the attention of our readers to the consideration of the dwellings of many of those persons for whose interests, in an especial manner, the Education Bill had been introduced—namely, the poor, and the industrious poor! These terms not being synonymous, we thus draw the distinction, for neither in this vast metropolis nor in districts less populous is there complete freedom from that poverty induced, if not stimulated, by idleness, unnecessarily, nevertheless, persistently maintained and transmitted from parent to progeny, thus developing the street-Arab and his "dolly," besides persons of even a less reputable class.

Undoubtedly, the wretchedness and filth (superinduced by density of populace and over-crowding) of many of the residences of the poor, exercise considerable influence on their habits, and may be held forth to palliate, if not to completely excuse, their shortcomings, and, until better accommodation at *much less rent* than at present be offered for their acceptance, improvement in their condition, morally or physically, will be slow indeed. 'Tis true that an important step in advance has been made by the Peabody and the Industrial Dwellings Companies, but it is to be regretted the directors of the former look more to the realization of a large parentage for the capital invested, than to the supplying of an effective antidote for those crying evils—over-crowding and high rents.

We may be told that in London the wages of the mechanic are large, and that *he* can pay a *fair* rent for house accommodation. Very true, but let us not forget that trade in London is very precarious, and to be "knocked out of work," and for months to remain so, is an event in some trades consequent on their very nature, whilst in all trades war, peace, and the state of the money market, exercise considerable influence for good or evil; still the rents run on!

To the tradesman's auxiliary—the labourer—on his guinea, or less, per week for a portion of each year, and on his "luck" during the winter months, and oftener; to the costermonger with his barrow, blue nose, and anxious looks, depending on the "turn of the tide" to turn an honest penny on mack'rel, prawn, or mullet, and on the botanical condition of Covent Garden market, from day to day; to the industrious poor, in short, the industrial dwellings bring little benefit.

Give the London poor healthy house accommodation at rents equal to about ten per cent. on their earnings (not 25 and 33 as at present for vile accommodation), and a gigantic stride in the right direction will be made; then firm groundworks will be laid, whereon enforced, healthy, endurable, and truly philanthropic Educational Schools will be constructed, so that in a little time, following the example of that monarch who declared the walls of his city were not formed of rubble masonry, but of soldiers, and that each soldier was in himself a perfect brick; we, in humble imitation of the Royal wit, may be in a position to exclaim, "We educate, but our first lesson-books are taught at the homes of our pupils."

Certificates.

Some time ago we directed attention to the impropriety of demanding answers to a number of questions from the medical attendants of poor patients prior to admitting them into public institutions. We instanced the outrageous questions put in the certificates for the Ventnor Hospital.

The Seaford Convalescent Hospital is rather less exacting, but still requires this form to be filled up by the patient's last attendant:—

Name and age .....
Address .....
Is the patient eligible (see below), and able to bear the journey to Seaford? .....
How long convalescent, and from what disease? .....
What has been the general plan of treatment? .....
Remarks (confidential). .....
Signature of physician or surgeon who has had charge of the case .....
Date .....

CASES INELIGIBLE.

1. Children under ten years of age and helpless persons.
2. All disease requiring active medical or surgical treatment.
3. Pulmonary consumption, beyond the first stage of the disease.
4. Ulcers with copious or offensive discharges.
5. Convalescents from eruptive and other fevers of an infectious nature, contagious diseases, so long as they are capable of communicating infection.
6. Persons subject to epileptic fits.
7. Persons of immoral character.
8. Persons who have been previously guilty of misconduct in the Hospital.

Note.—The Institution is exclusively intended for convalescents.

The Horse Guards and Beards.

The *Globe* says that an order has been promulgated directing that officers are not under any circumstances to wear hair on their chins.

Is this a Ministerial preparation for a campaign? Will it encourage recruiting?

Epsom College.

The Rev. Dr. West, D.D., of St. John's College, Oxford, has been elected head-master of Epsom College. Dr. West is a Vice-president of the College of Preceptors, and took at Oxford a first in Mathematics and a second in Classics. Dr. West has been head-master of Brentwood School since 1852, and is considered to be a gentleman of considerable tact and experience.

"Mal" Midwifery Practice.

THE unqualified assistant of a Battersea surgeon has been defendant in an action instituted by a Mrs. Pike, the wife of a journeyman baker, he having persistently prescribed brandy and soda-water in a case of irritability of stomach when labour was impending. Mrs. Pike not having improved under this brandy and soda-water treatment, two practitioners were called in, who decided to bring on premature labour by giving five-drop doses of prussic acid as recommended by Churchill, and with apparent benefit in this case. Mr. Godman was condemned in £5 damages. His defence for the most part went to show that he had attended nearly 2,000 obstetric cases, which he considered sufficient to justify his treatment of Mrs. Pike.

Leeds and Vaccination.

THE Leeds Inspector of Vaccination has issued his report for the June quarter. It shows that out of 407 children born in the township during the last quarter of the year 1869, and unvaccinated up to April, 1870, 51 died before the vaccinal period; 27 had been removed from the township; and the health of 22 was so precarious as to justify postponement. Fourteen persons died (in the township) of small-pox during the year.

The Inspector's Report states that the "Unanimous desire of the Medical Profession to encourage vaccination is operating most beneficially."

"What will they do with it?"

THE *Lancet* "purposes shortly to place before the Profession the *draft* of a Bill for the *accomplishment* of the *necessary* measure of Medical Reform."

N.B.—The italics are *not* the *Lancet's*.

The Poor Law Board and the Birmingham Guardians.

THE Guardians of the Birmingham Poor have again prayed for time in order to arrange with their Medical Officers. The Poor-law Board has granted the prayer, but we greatly fear the poor of Birmingham may, for another year, suffer from the effects of such an unsatisfactory arrangement.

The Poor-law Board should at once see justice done to the Medical Officers, and permit no further procrastination. The interests of the poor demand it, and their interest the Medical Profession have sincerely at heart.

Illness of Admiral Farragut.

A SPECIAL telegram from Philadelphia states that Admiral Farragut, of the United States Navy, is very ill at Portsmouth, New Hampshire, and is not expected to live.

Medical Reform Union.

THIS body scarcely any longer possessing an existence, the late Executive have issued a "retrospect" which deserves attention. They have, indeed, fallen into a state of confusion about indirect and direct representation; but this is of little consequence. The Union pronounced the single word "representation," and did not attempt to settle off-hand the method. Their Birmingham brethren, with true pluck and rare sagacity, have done more in a year to promote Medical Reform than the more ambitious British Medical Association has done for the last decade, or is likely to do in the next. There is still a trifling balance due to the treasurer, which we hope he will not be allowed to lose. A few stamps from each who signed the memorial, but has not yet subscribed, will settle this.

Bullet Extractor.

SURGEON TUSON, of the Bengal Army, has lately described a new bullet extractor. At this time, when war is raging on the Continent, it will be a serviceable instrument to the many poor sufferers who are wounded.

Evaporated Milk.

ONE of the most recent expansions of trading speculation has taken the direction of milk preserving, and several companies have been formed for the purpose of evaporating good milk, and reducing it to a saleable and permanent state. The well-earned suspicion of the public as to the sophistication of trade preparations has, of course, been applied to preserved milk, which would, indeed, seem to be the very article in which the greatest temptation would arise to adulteration.

The *Vierteljahresschrift für Praktische Pharmacie* has by careful analysis entirely reassured us on the point, and shown that the preserved milk is really what it pretends to be, and possesses all the qualities of a concentration of the best milk. For the purpose of comparison, the analyst made for himself a standard sample of condensed milk, and on investigation found that the four bought samples were almost identical with the standard in composition, and some of them even richer in cream. We have also submitted to careful analysis the Irish preserved milk of Mr. Newnham, of Mallow, and find it corresponds exactly with the statements of the purveyor.

The Monthly Nurse.

FREQUENT complaints reach us respecting the great want experienced in country districts of properly trained and qualified monthly nurses. It is not always desirable to send to an institution for a nurse, nor at all times feasible; the circumstances of the case will not always permit it, and when they do, the newly-arrived nurse may not prove suitable in many respects—in manner, appearance (for some ladies are particular), or method of performing her duties; accordingly, it is most desirable that in each district there should be a qualified obstetric nurse possessing a midwifery diploma. Ireland is fortunate in having a strong *corps* of qualified midwives at the Rotundo Hospital, who study for six months, under able teachers, the important requirements of their office, and when educated, are admitted to examination, and if considered fit, obtain a diploma. It is not always pleasant to have a woman enlarging upon the nature of the case in technical language at the bedside of a patient; but we believe the midwives who leave the Rotundo know better than to talk "shop." These women, who are generally widows, find employment in the poor-law unions, and are valuable assistants to the overworked, underpaid, dispensary or poor-house doctor. They usually obtain twenty pounds a year, irrespective of a little private practice. They are trustworthy women as a rule, in whose charge a patient is safe. We understand many

tions" were also told off to restrain him, but, ere the close of these qualified, well-trained women experience a difficulty in getting employment. We wish there were more of them in England, and that in each district the parish authorities would appoint one. The Poor-law medical officer may object to this; but if he came to consider how much midwifery work he must do for twenty pounds, which very frequently involves a serious encroachment on his time, he would freely surrender his lower class midwifery to them, whilst in a better class of patient he would find them valuable and reliable auxiliaries. If the English Poor-law system could allow such an arrangement as to pay a uniform scale of salary to medical officers, dispense with extras, and introduce duly qualified midwives into each district, under the *surveillance* of the doctor, it would be desirable to all parties.

Medical Evidence in Cases of Railway Accident.

At the York Assizes last week a miller and a maltster named Hatfield, brought an action against the North-Eastern Railway Company for alleged injuries sustained on their line. It appears that in August of last year, whilst travelling between Redcar and York, he sustained an injury to his hip by the overthrowing of the carriage wherein he travelled. The following is a condensed summary of the medical evidence given at the trial, which bears us out to the letter in the remarks which we made only a few weeks back in these pages respecting medical evidence in cases of railway accidents:—

"According to several surgeons of eminence who were called for the plaintiff it was beyond all doubt that he was still lame and suffering. It was doubtful if ever he would get well. He would not get better, even with luck, for two or three years. According to several surgeons of equal eminence, called on behalf of the company, there never was anything at all the matter with him. He looked better and stouter than ever he was before, and *the accident seemed to have done him good.* The plaintiff's surgeons had tested the thigh by the thermometer and galvanism. The defendants' surgeons stated that these tests were apt to be illusory. The defendants' surgeons stated that the limb had not decreased in size, but the plaintiffs' surgeons said it was slightly decreased, and could not have been more so unless paralysis had set in."

We are well aware Railway Companies are frequently mulcted; but the idea of an accident injuring a man's hip seeming to have done him good is too absurd to be passed unnoticed. We wish our brethren were more united, and that at the sacrifice of a fee they would uphold the dignity of their calling more.

The Contagious Diseases Act.

We observe that a series of letters, originally published in The Medical Press, commencing in June 26th, 1867, and terminating April 6th, 1870, from the pen of a much respected correspondent, "E. L.," are now reprinted in pamphlet form. It will be remembered "E. L." was warmly opposed to the Contagious Diseases Act, and advocated the examination of men, whom "E. L." states are the true originators and propagators of venereal disease. "E. L." comments with ability upon the proceedings of the Venereal Committee of the Harveian Society; submits for consideration extracts from the writings of Jules Janin—the Charles Dickens of France—and relies upon the well-known book of Mr. Acton, and the authenticated statistics given by the *Westminster Reviewer* as sufficient to repeal the Act.

Attractions of the Navy Service.

At the Navy Medical Examination, held this week, there were twenty-five vacancies and fifteen candidates.

Jeames on the Emperor's Health.

The *British Medical Journal* assumes, in its last issue, the usual pompous affectation of special intelligence as to the health of Crowned Heads. All that the Editor knows about Napoleon's health is freely disclosed. Marvellous to relate, especially in the case of a general on the battle field, His Majesty suffers from "exhaustion and fatigue." His Majesty, also, the oracle informs us, is displaying "wonderful serenity under serious physical and mental trials." Without the inspiration of any "good authority," such as our contemporary boasts of, we can positively confirm these remarkable and unexpected revelations, though we don't think it necessary to do so with the addition of big type and extra "leading."

The Prospects of the Medical Bill.

The effect of his defeat on Mr. Forster and the Government seems to be almost the same as it has on a pettish child. Mr. Forster "won't play any more" because he has not been allowed to do exactly as he liked with the Profession. In diplomatic phrase he has replied to a question put by an hon. member that the Government cannot undertake to promise that they will introduce next session a bill for the Amendment of the Medical Acts.

This announcement may mean more than it conveys. It is as much as to say that the Government have gone out of their way to trouble themselves about the Medical Profession, and, as the doctors would not have what they offered to give them, they might do without. We advise Mr. Forster not to calculate on being let alone. By self-sufficiency, obstinacy, and apprehension of the vote of the University Member, he spoiled what otherwise might have been made a passable measure.

But the Profession is thoroughly aroused, and the Government may be assured that one or other of the half-dozen members who have taken the matter in hand, will oblige them to deal with the subject. Better no bill than a bad one. The Government Bill would have made permanent most of the abuses which now must pass away before very long.

The Medical Services of Foreign Armies.

Dr. C. A. Gordon, Deputy Inspector-General, of Portsmouth, wishes to obtain information in regard to the measures in force in the armies of civilised nations for the treatment and transport of sick and wounded, whether by the medical departments of those armies or by means of philanthropic associations. He is already in possession of information of this nature in regard to several, and is very desirous to obtain similar information in regard to all. Any of our readers who are in a position to do so would do well to communicate to him particulars of the army medical administration in Russia, Spain, Portugal, Belgium, Naples, Sardinia, Brazil, Mexico, &c., &c. Our learned military *confrère* will carefully return any manuscript that may be desired.

Dr. A. Paton, of Vincennes, recommends hydrate of chloral in cerebro-spinal meningitis.

The Asylums Board.

The Poor-law Board, having at last learned to exercise some little authority over Guardians, appears, in the painful process of learning, to have forgotten its manners, and accordingly has been treating the Asylums Board as if it were composed of Guardians. It has even been interfering with the salary of kitchenmaids. The Asylum managers cannot be expected to put up with such impertinence, and have accordingly given Gwyder House a hint to mind its own business.

Cholera.

There are serious whisperings of the cholera plague which ought to make us keep vigilant watch, and entrench ourselves from its onset. An official notice has been issued that it is epidemic at Taganrog, and cases have occurred in Constantinople.

The slave trade operations on the coast of Africa have come to an end in consequence of an outbreak there, and diarrhœa is unusually prevalent in London.

Dressing of Wounds on the Battle Field.

It is proposed to distribute to each French soldier a small packet containing a strip of calico, a square of fenestrated linen, and a portion of charpie rendered hæmostatic by imbibition of perchloride of iron.

The advantage of such a precaution is obvious. It would afford great facility in the case of a paucity of help for the removal from the field of the wounded, a large number of whom would, and do, die for want of the help which might thus be given them.

Poisoning from Glazed Dishes.

A correspondent supplies us with the particulars of an interesting, yet serious occurrence which happened in his practice on Saturday last. The wife of a brickmaker brought home from the pottery-works a glazed dish, which subsequent events proved had been improperly or carelessly glazed. Wishing to "*pot*" some herrings, she placed the fish in this dish, and finally completed the process by cooking in the oven. The "*potted*" herrings were served and eaten at tea. All who had partaken of them, namely, a family of five members, and a neighbour, a woman, were seized with symptoms of poisoning—vomiting, violent pain in the bowels, &c. Before investigation the herrings were at first blamed; but when the dish was examined, it was discovered that the glazing had "*run*," and mingled with the acid gravy (vinegar being used). From the alarming nature of the symptoms, a good deal of lead must have got into the stomach; but we rejoice to hear that no deaths have occurred, although the youngest child was seriously affected. We advise those who contemplate pickling herrings to observe the glazing on the earthenware.

A case of cholera having occurred at Constantinople, quarantine has been established in the Black Sea.

Sir John Thwaites died on the 8th, of English cholera.

Mr. W. C. Barnish, M.R.C.S., has been elected by the Town Council of Wigan officer of health for that district.

It has been suggested that the societies in aid of the sick and wounded would do well to send out large quantities of chloroform—a boon which sometimes has run short.

Dr. Martin Furniss, of Mansfield, a much respected practitioner, died on Thursday morning (August 11th), last, after three days' illness, from choleraic diarrhœa.

Dr. Burrows took the chair at the Quarterly Court of the Society for the Relief of Widows and Orphans of Medical Men, on the 13th inst., when new grants were made to two widows and four orphans.

The Mansfield Board of Guardians, at their fortnightly meeting, held last week, proposed and unanimously carried that the salary of Mr. N. Cooper, surgeon to the workhouse, be increased from £20 per annum to £40, because of long and meritorious services. This is a step in the right direction, and a precedent which we hope other Boards will follow.

The trustees of the National Portrait Gallery have secured the well-known portrait of Charles Dickens, by Ary Scheffer. It was painted in 1855, and exhibited at the Royal Academy in the following year. The countenance is manly and vigorous, a happy medium between the showy youth with exuberant brown locks, as painted by Maclise, and the rugged countenance, with grizzly beard, of his latest period.

From "simple cholera" and choleraic diarrhœa thirty-two deaths were registered in London last week. Dr. Waller Lewis, medical officer to the Post-office, recommends the following prophylactic:—Dilute sulphuric acid, ℥iij., concentrated infusion of orange-peel, ℥iij., simple syrup, ℥xij., boiled filtered water four gallons—a wine glassful for a draught. It is stated this "*sulphuric orangeade*" was employed in 1866 with good results.

SPECIAL CORRESPONDENCE.

[from our own correspondent.]

Paris, August 9th, 1870.

In the midst of the din of battle, I write a few lines on a subject which has been occupying much of the thoughts of many excellent members of the Medical Profession in Paris the last six months. I allude to the question of whether medical education should remain, as at present, entirely in the hands of a set of State Professors, or pass into the control of any person who chooses to set himself up as a teacher to enable his students to pass the final test examination. Many conferences have been held lately on this question, and many good things have been said. The programme of the friends of free education in Paris is—absolute liberty of teaching, either by individuals or association, for all citizens whether with or without degrees; without being obliged to conform to any programme of the State. Liberty for pupils to instruct themselves, and choose their instructors wherever they please; degrees to be granted by State Examiners not chosen among these Professors who teach the science, and are appointed by the State to do so.

In Paris, at present, there are about one hundred and twenty so-called "internes," or students who reside in hospital, and who, on an average, have each some hundred patients under their care. M. Dally thinks that there

should be seven times as many "internes," in order to allow a larger number of pupils to acquire clinical knowledge.

As it is, these "internes" become afterwards members of the hospital staff, and thus there is formed a medical aristocracy. In Paris there are about 110 *Médecins des Hopitaux*. They have the spirit of tradition, because they are renewed by themselves. According to M. Dally, they make few discoveries, because the competitions they are obliged to undergo prevent them from having time to follow out original researches. These same gentlemen, he asserts, get almost all the best part of the practice at Paris, and, when a hospital man has a large practice, he neglects his hospital patients. If he has one hundred beds to visit, he sees them all in an hour. Thus, there are too few "internes," and too few doctors for the hospital patients. He considers that each hospital doctor would have amply sufficient work with twenty-five patients. Then, again, these hospital doctors are named for thirty years up to the age of sixty-five, but their hospital cases do not interest them for more than ten years. A medical man, however intelligent, who has not been an hospital man, loses greatly, since provincials always are compelled to consult hospital men. M. Dally says, that the great reform required in Paris is in the "Assistance Publique." A very able physician, Dr. Berrut, asserts that the Parisian hospital men have no time for reflection, and he is inclined to do away with the hospital system as much as possible by means of polyclinics. He observes that if the statistics of mortality of the Hôtel Dieu are looked at in 1840, we see one death in nineteen patients; and, again, of those operated on, 56 per 100 died. Simpson, he remarks, said that 825 out of 2,083 operations in hospitals died; whilst only 226 died of an equal number operated on in the country. Paul Dubois, the Parisian accoucheur, was once known to remark that it was better for a woman to be confined in the street than at the Maternity Hospital. His advice, then, is that we should take as few patients into hospital as we can. Polyclinics, or visitation of patients at home, should be encouraged. At Göttingen, Dr. Baldinger created a medical school without any hospital. He collected the pupils, and brought them to the bedside of the patients; and thus founded a university. All, says M. Berrut, who, like Simpson, are convinced of the necessity of suppressing the hospitals, where patients are killed, ought at once to act. Let them take a room, a table, four chairs, and let the patient come to see them. If operations are required, the doctor must proceed to the patient's home. At the hospital the students and the doctor listen to the sibilant rhonchi, or look at the number of the patient. In the garret, they see the wife, the children and the family.

Another champion of free medical education, M. Dupré, goes so far as to say that there should be no official Faculty of Medicine, because of the difficulty that other universities would have to struggle with it. M. Pascal Dupré, another promoter of free medical instruction, mentioned in a reunion of students and teachers in Paris, that in England superior education is not absolutely free, because, even there, to succeed, there is required a charter from the State, subventions or subscriptions. The editor of the *Mouvement Medical*, M. Pascal, however, thinks that this would not be necessary in France, because France is a democratic nation. In England, he asserts, a very small number of persons belonging to the aristocracy of land or commerce frequent the Universities; but in France the immense majority of young persons frequent schools, and a great number of them take degrees. In France superior education, if free, would prosper, because there are so many students. Dr. Stopin, in speaking on the subject of free medical education, commences with an important question. He asks, in the first place, whether he has any right to advertise the fact that he is carrying on a polyclinique? and the auditors at once respond in the affirmative. He is attempting in a most laudable way to attend women in labour at their own homes, but foresees several difficulties. First of all, it will require the co-operation of several medical men to carry on such a polyclinique as this. Next, women, once having been delivered, have need of assistance in some cases—of a nurse, for instance—for some days. He thinks that recourse may be had to women who have just been confined gratuitously, or are just about to be so; or, perhaps, some charitable persons may aid in the good work and thus do away with the murderous epidemics which take place in lying-in hospitals.

It is a difficult thing, says M. Dally, to found a free university, for all countries have not, like Belgium, municipalities, which will grant subventions of £4,000. He therefore advises that in Paris they should ask for what is their own—amphitheatres, museums, &c. M. Mallez says, that the homœopaths at Paris have just founded a hospital. The difficulty in France of getting funds is that it is there illegal to ask for alms. He thus hopes much from individual initiative in this matter. Everywhere, at present, useful teaching is carried on by means of free teaching, whether in the hospital, the dispensaries, or in the *Ecole Pratique*. For instance, at a dinner party, he was asked to give an example of this, and replied—"A few years ago the official professor of midwifery in Paris had ten pupils and £480 a-year. At that time pupils crowded round the teachings of Pajot who was then a free teacher." In the same way Dr. Dally mentions that one Professor was for twenty years without teaching, being paid all the time. It appears, indeed, that so far as students of medicine and doctors are concerned, the question is considered settled, that the Faculty of Medicine has not fulfilled its functions. Dr. Delasiauve contends that the resources of hospitals should be placed at the disposition of students, and that that Professor should be paid the most who has the most students. No privileged Professors should exist. All students should at some time live in hospital.

Dr. Wasp has some good remarks on the subject in the *Mouvement Medical* of July 17. He mentions how in 1830 might have been seen in the wards of M. Chomel, in the Hôtel-Dieu, lying among the other patients, a celebrated professor of free medical teaching, Dr. Broc, who had been followed as professor for many years by 20,000 pupils, and who was the founder of the Medical School of Bogota. In the *Journal des Connaissances Médicales* there is an amusing account of the way in which many medical men and other diploma-holding gentlemen employ their time at Paris:—"Hairdressers, public house keepers, and restaurateurs, &c., now-a-days hide at the bottom of some drawer their diploma of bachelor, which permitted them to die of hunger, and assume the apron of the publican, &c. They also become grocers—not a bad trade to live by. The misplaced vanity of their fathers desired to open to these gentlemen the entry into professions which are named *liberal*, but which give nothing liberally. It was easy for them to perceive at the outset of their career that the few lucrative positions are already occupied, and that, having lost their patrimony, they can scarcely exist. They try, however, to do so, and then it is that we see honourable professions defiled by all kinds of compromises and schemes; those who find the filth too thick and black, or the poverty too great, refuse to paddle in it. Convinced by the proverb that 'Contempt never reaches those who live by it,' many of these decide to take up some calling generally far too late in life, to be able to provide comforts for their family, as if they had commenced younger. Many of these unclassed persons enter like interlopers into journalism, and become the irritable or melancholy *habitués* of the beer shops. The moral of all of which is that it is extended primary instruction that ought to be generalised and made obligatory, and then that men should be allowed free scope to their professional individuality. The State—that is, the taxpayers—owe to no one any kind of professional instruction whatever. Great men rarely are bred in the hot-houses of schools. One journal relates that several of the fashionable restaurateurs in Paris are good Greek scholars, and laureates of the University; but they pretend often not to be able to spell, in case of injuring their culinary reputation, or put to shame their best customers—some of the dissipated classes. A famous pastry-cook, too, was well known to be an excellent writer of vaudevilles."

Correspondence.

DUGONG OIL.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Several years ago I had the honour of bringing the "Dugong Oil" into use, also to the notice of London and provincial hospital physicians, for the treatment of consumption and scrofulous diseases, and the reports subsequently submitted to me proved the undoubted value of the oil in comparison with other remedies so called. One fact proved was that patients could retain this oil on the stomach when cod-liver oil was rejected, and the remarkable and rapid gain of flesh and weight in cases of far-advanced phthisis I have medical reports to vouch for. My principal object now in addressing the profession through your widely read journal is to ask my medical brethren located in tropical countries to assist me, for the cause of humanity, in procuring the oil at a cheap rate. Unfortunately, the price is high, and the public cannot afford the expense. I have spent a considerable amount of money in obtaining the Dugong Oil, to ensure our leading chemists having some on hand; and many applications to me for more oil I regret I cannot satisfactorily answer. I find the agent I employed abroad in the East either careless in obtaining the oil, or report, in consequence of its value now being known, unreasonable prices are demanded by the fishermen. To enable medical gentlemen abroad to investigate localities likely resorted to by the Dugong, I beg to give a short description of the animal, its habits, and habitation.

HALICORE DUGONG.—*Cuvier.*
HALICORE AUSTRALIS.

This species of the aquatic pachydermata tribe is considered a native of the Indian Ocean, and principally observed among the islands of the Indian Archipelago and coast of New Holland. The Dugong are frequently seen in numbers on the Coast of Ceylon, especially along the northern shore of the island, among the inlets, from the Bay of Calpenten to that part of Ceylon called Adam's Bridge, where the water is still, and there is an abundance of submarine algæ and fuci. These creatures may be observed in troops, feeding, where the ocean is clear, at a depth of three to four fathoms, wherever the marine vegetation is abundant. The position of the mouth of the Dugong, the muscular power and mobility of the lips, garnished with ivory bristles, enable them to seize and drag up their food. The Malays endeavour to capture these phytophagous cetaceans, so also do the aborigines of Australia, the flesh being exceedingly rich, and tasting like veal, therefore, as an article of food, they are eagerly sought. The Dugong obtains considerable length and size. The caudal paddle is crescent-shaped, and a large thick upper lip falls over the lower. The skin of the body is thinly set with short prickly bristles; the anterior limbs, or flippers, are destitute of nails, and the eyes are very small. Eight or ten gallons of oil may be obtained from an ordinary Dugong. The animals, male and female, are very affectionate to each other, and especially so to their offspring. When the latter is killed, the mother scarcely leaves her enemies, and falls an easy prey. I am under the impression that the animal exists in other tropical localities of the Western World, and I should think them likely to be seen in the estuaries connected with the River Parana, South America, also the bights on the West Coast of Africa.

I am, Sir, yours most obediently,
J. McGRIGOR CROFT, M.D., M.R.C.P. Lond.,
Late Staff-Surgeon to H.M. Royal Army.

Mandarin Villa, St. John's Wood,
August 10, 1870.

P.S. The oil is exceedingly pleasant to taste or take, and a bottle of it retained its properties, and fit for use, three years after I got it, though opened frequently to exhibit to medical and other gentlemen.

ENGLISH SURGEONS FOR THE GERMAN ARMY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—As I have frequently been asked about the possibility of joining the German Army Medical Service for the time of the War, it may be of interest to your readers to learn that the North German Government is ready to admit British medical men as volunteers in their army hospitals provided that they speak German, that they have the licence to practise medicine and surgery in the United Kingdom, that they place themselves unconditionally at the disposal of the North German Government, and that they have the permission of the English Government to serve as volunteers in Germany, and that of the North German Embassy, or Consulate General. The English medical volunteers will at first, at all events, not be employed on the field of action, but only in the lazarettos in the rear of the armies: this, however, would probably not prevent their seeing and doing important surgical work.

The services of English medical volunteers will be regarded as probationary during at least a fortnight, and they will receive no payment during that time, and no reimbursement for the expense of their journey; but if their services prove satisfactory, they will probably be engaged, and receive payment at the rate of from six to nine shillings per day.

I am &c.,
HERMANN WEBER.

10 Grosvenor street,
August 9, 1870.

CITY OF DUBLIN ELECTION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Thursday next is to determine whether or not Sir Dominic Corrigan will represent the City of Dublin in Parliament. I, as well as hundreds of other medical men throughout Ireland, will anxiously and earnestly hope to see every member of the medical profession in Dublin record his vote on that day for the distinguished and honoured head of our profession in this country. Those who withheld their votes and influence in 1868 under the slender excuse of pressure on political and religious grounds, have now an opportunity of healing the sores they then created, and the wrong they inflicted on our profession at large, by manfully going forward on Thursday and voting for Sir Dominic Corrigan.

I am, &c.,
F. J. DAVIS, A.B., M.D.

Cremona, Swords,
Aug. 13, 1870.

Medical News.

Society for Relief of Widows and Orphans of Medical Men.—A Quarterly Court of the Directors of the above Society was held July 13th. The President, Dr. Burrows, took the chair. Fresh applications for relief were received from two

widows and four children, and grants were made to them in accordance with the necessities of the applicants. There are now fifty-eight widows and fifty-six children receiving assistance from the Society. The sum of the grants for the half-year amounted to £1,406, being an increase of £26 on the amount voted last year.

Indian Medical Service.—The Military Secretary, India Office, presents his compliments to the Editor of the MEDICAL PRESS AND CIRCULAR, and begs to enclose a list of the Candidates of Her Majesty's Indian Medical Service who were successful at the competitive Examinations at Chelsea, in February, and at Netley, in August, 1870, after having passed through a course at the Army Medical School, Netley. J. F. P. M'Connell, London and Aberdeen, 5,855 (has been awarded the "Herbert Prize"); J. O'Brien, Dublin and Cork, 5,215; J. O'M. M'Donnell, Galway, 4,878; J. Reid, Glasgow, 4,683; P. G. Mackenzie, Edinburgh, 4,418; C. Sibthorp, Dublin, 4,119; J. A. Laing, Edinburgh, 4,065; H. D. Cook, Edinburgh, 3,988; R. A. Peterson, Dublin and Galway, 3,941; T. S. Weir, Dublin, 3,681.

The Scotch Universities.—MM. Demogeot and Montucci, who were appointed by the French Government in 1866 to examine the different systems of teaching in Great Britain, have just issued their report. A previous volume was devoted to the examination of the system of secondary education; in the present one is a long and detailed account of the system pursued at her different Universities. Special attention was paid to the Scotch Universities, and the verdict of the French Commissioners is decidedly favourable; but they call attention to a grave defect. The entrance to the Universities is too easy. This, MM. Demogeot and Montucci consider, "lowers the character of the teaching, and it is necessary to give quite elementary lectures in Greek, and Latin Grammar, in Euclid and Algebra, in order that they may be within the comprehension of the ignorant classes who listen to them. The result of this is, that a great many good mechanics are spoilt in order to make of them bad men of learning. The already overstocked professions are recruited with inferior men, who would engage with far more advantage to themselves and others in some kind of trade or handiwork; and the Universities are lowered without any corresponding advantage accruing to the country." On the other hand, in noticing the superiority of the Scotch to the old Universities of England, these gentlemen say:—"In Scotland, men do not come to the Universities to win boat races and run into debt, but to work hard and put themselves in a position to earn their living."

NOTICES TO CORRESPONDENTS.

*** Correspondents not answered in the current number should look at the notices in the following week.

NOTICE TO SUBSCRIBERS.—*The Publishers beg respectfully to remind those Gentlemen who have not paid their Annual Subscription, now overdue, that the most convenient mode of remittance is by Post-office Order, or cheque, which should be made payable, in England, to Albert Alfred Tindall; Ireland, Moffatt and Co.; Scotland, Maclachlan and Stewart.*

Mr. DONOVAN.—We have not been able to obtain accurate statements on all points, but can state that vaccination in Prussia is compulsory, that every child on being admitted into a school, must produce a certificate of vaccination, and that, on the whole, the law is carried out satisfactorily. Re-vaccination is, in the upper classes, very general at intervals of from 15 to 20 years, and is compulsory on entering the army.

DR. L. W. L., Salop.—If either of the individuals whose names are attached to the testimonials you sent us, have any existence whatever—which we doubt—they belong unquestionably to the *Genus homo* quacks. As their names do not appear in the *Register*, the parties who vaunt such articles with the assumed high recommendations of medical men should be compelled to prove that such individuals have an existence, and that they *are*, what they wish to convey, legally qualified practitioners.

To the Editor of "The Medical Press and Circular."

SIR,—The following advertisement I cut out of the *Daily Telegraph* columns of last Wednesday:—

"TO CHEMISTS and MEDICAL MEN (sine diploma).—A registered SURGEON, of experience, will CO-OPERATE with either of the above for establishing a PRACTICE in a populous district.—Address Alpha, Post office, Southampton road, N.W."

Who can this Surgeon of *Experience* be who is thus seeking to lower his Profession? Some quack perhaps. The Pamphlet also enclosed has been extensively circulated around here, and people seeing no names of medical men to it, generally give it a trial. One of the gentlemen named, I see by the Directory, lives at the address given, and although he is styled Surgeon, he is only *L.S.A.* If he has given this testimonial I think he should be called upon for an explanation, and if not, he should prosecute.

Yours truly,

Aug. 13, 1870. VERITAS.

"GREENWICH UNION."

To the Editor of "The Medical Press and Circular."

SIR,—I read with combined feelings of admiration and indignation your remarks relative to the rscent election of a Workhouse Medical Officer by the Guardians of the above Union—admiration at the candid manner in which you set forth the whole affair, and indignation that there is not some check whereby Boards of Guardians could be prevented from misleading the Profession. Can the Guardians of the Greenwich Union for one moment imagine that the public will believe that an M.D. of the University of Edinburgh of 1869 was the best-fitted candidate for the appointment out of forty applicants? If so, I fear you must be in error as to the diplomas, testimonials, and experience of the others.

A short communication from that Board as to the grounds on which the election was made would, I should think, be very acceptable to the unsuccessful candidates.

I am, Sir, your obedient servant,

Plymouth, August 13th, 1870. JOHN TURNER, M.R.C.S.

To the Editor of "The Medical Press and Circular."

SIR,—You seem to forget that the Board of Guardians at Greenwich may be a very liberal Board indeed. Seeing the miserable salaries that are offered by many Boards of Guardians for the services of medical men, £300 per annum is not to be sneezed at.

I would not wonder but that the successful candidate was the *most recently qualified* of the forty who applied, accordingly, he in a greater degree requires to gain experience, and with a large spirit of liberality the Guardians of the Greenwich Union not only give him a fair remuneration for his services, but afford him the sick wards of the workhouse as a field for gaining practical experience.

Whether so important an office should be entrusted to the sole charge of a medical gentleman of only one year's standing is, I believe, a question which the Guardians are alone empowered to decide.

If the rumour regarding canvassing be correct, I think the case is one into which the Poor-law Board should make inquiries; if it be incorrect, and if none of the Guardians were canvassed, either directly or indirectly (in the broad sense of the term), they might, I consider, without any injury to their own dignity, direct their clerk to write to the MEDICAL PRESS AND CIRCULAR, denying the rumour, and I feel certain you would gladly insert their letter.

I am, Sir, your most obedient servant,

Aug. 12, 1870. RUSTICUS.

STRYCHNINE IN FATTY DEGENERATION OF THE HEART.

To the Editor of "The Medical Press and Circular."

SIR,—In reply to the query of your correspondent, Surgeon Smythe, respecting the after treatment to be adopted in those cases of fatty degeneration of the heart wherein liquor strychnine was exhibited, I beg to remind him or refer him back to the communication itself on the face of which it is stated, that I combined the iodide of ammonium with strychnine in the hope that this drug would act as an absorbent, which I believe it did.

I consider the continued employment of this medicine—the iodide of ammonium—in mixture with some bitter tonic will constitute a judicious treatment after strychnine is fairly pushed in cases of fatty heart, and that it will be found more satisfactory in its effects and more suitable generally than liquor potassæ.

I hope this communication conveys the information your respected correspondent seeks and requires from me, and should it not I shall be happy to write to him upon his addressing me.

Your obedient servant,

J. WARING-CURRAN.

Osman House, Sutton, Notts, August 10th, 1870.

FEES FOR SUCCESSFUL VACCINATIONS.

To the Editor of the "Medical Press and Circular."

SIR,—I read in the *Lancet*, page 135, July 23, 1870, that the Lords of Privy Council have awarded gratuities of £8 4s. 8d. to Mr. Thos. C. Roberts, Tattershall district, Horncastle Union, and to Messrs. Kelly and Clapperton, of Market Deeping, Lincolnshire, £6 14s. for successful vaccination. On August 10th, the MEDICAL PRESS chronicles other similar instances. Now, these gentlemen are public vaccinators and paid at a rate much higher than we are paid in Ireland, and, I have no doubt, earn their money well; but I do not see why similar rewards are withheld from us in this country. I can show, and I am sure many others can do the same, that every child born since the 1st of January, 1864, in my district remaining resident and alive at six months of age, has been vaccinated, and that fully 90 per cent. of these has three good cicatrixes. I doubt if any union or district in England can show more perfect work than that, and yet I get no gratuity.

Portlaw. JAS. MARTIN.

FREE TRADE IN SURGICAL INSTRUMENTS.

To the Editor of "The Medical Press and Circular."

SIR,—I have read Mr. Atherton's plea in your last and crave leave to reply. I entirely agree with the spirit of your remarks and look upon the President of the Notts Chemists' Association as desiring to levy a toll on the passage of articles needed by general practitioners, from wholesale depots to their surgeries. He gives up instruments to free trade, but wants to tax my plaisters, lint, bottles, pill-boxes, and numberless other articles.

Now, Sir, what are plaisters and lint to chemists in comparison with surgeons and apothecaries! I use more bottles and pill-boxes than any chemist near me, and yet forsooth in times of "free trade," I am to be deprived of buying except through a local tradesman who will "stick it on" because I am a Professional and fully occupied, and who will use the knowledge he gets from me to snare my patients to his counter for various things, and, perhaps, for "pills and draught," without my advice.

No, Sir, I never will deal with a local chemist, and if Maw is to be frightened out of trading with me I will buy my bottles, boxes, &c. at various depots as I have done for years.

I am, &c,

APOTHECARY.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 24, 1870.

CONTENTS.

Original Communications.

ON SNUFF-TAKING:

ITS UTILITY IN PREVENTING BRONCHITIS AND CONSUMPTION.

By John C. Murray, M.D., F.A.S.L.

The literature of snuff-taking is remarkably meagre. During the classical era of English history, the practice is often spoken of as an established usage of society, especially among ladies and gentlemen of *ton*. At the present period it is the custom only of individuals who are conceived to be in arrears of the times, consequently it is thought a dirty, disgusting, and pernicious habit, which, from having nothing whatever to recommend it, must cease in two or three generations. Why, then, come to the rescue? Why aid in redeeming this bad habit from well-merited disuetude.

Such is apparently the sentiment of authors with regard to this subject. From strong feelings of conviction, I beg leave to break through the reticence which has for a long time been observed upon this now unfashionable foible, having something new to advance in its favour, which, for reasons to be by-and-bye submitted, cannot be said equally of tobacco-chewing and smoking, viz., that an *habitual snuffer seldom, I had almost said never, dies of consumption.* This remarkable proposition I have suggested to not less than 500 snuff-takers, many of whom are in the Medical Profession, and all that I have hitherto learned has only strengthened my conviction in the truth of my theorem. One Medical friend, himself a snuffer, writes "with regard to snuff I know no facts on the subject, but can see nothing, physiologically or pathologically speaking, in the use of snuff, which can render it beneficial in or prophylactic of phthisis." Since snuff has been taken out of the list of remedies, and become an article of luxury, it is difficult to see how it can so act, and for belief requires observation. Another gentleman, partial to the same weakness, writing from the snuff-consuming county of Lancashire, having given my affirmation his earnest attention for six months, was at last enabled to bring forward a case of a snuff-taker succumbing to consumption. As he was indefatigable in his search, and had excellent opportunities for observation, I look upon his single case as only confirmatory of the rule, especially as circumstances were against the patient. A correspondent from Dumfries writes:—"Since you first bruited your singular idea about snuff, I have interested myself to find whether there is anything in it; the result is, I have frequently observed that those who snuff are ruddy, look, and are, strong; on the contrary, that smokers frequently are pale, thin, and cachectic." He also gives it as his opinion, "that phthisis is much more prevalent in this neighbourhood since smoking took the place of snuffing. The average quantity consumed by those still addicted to the practice of snuff-taking is two ounces per week, but only one person carries a box now for ten in my grandfather's time, the revenue being, however, more than made up by the extraordinary extension of smoking." Since the receipt of this letter, I have daily observed the ruddy appearance of snuffers, and recently, as a tedious case, it was singularly corroborated by an old lady of charming complexion and full contour, who, between her sniffs, and without my introducing the subject, said "it is surprising what a good colour snuffers generally have." This lady had been recommended to snuff by the late Dr. Bleasby for continuous pain in the back of her head and weakness in the eyes, ailments which she told me she had not suffered from since adopting the remedy. A Liverpool surgeon, after giving the question his best attention, said he "could not name a case of a snuffer who was phthisical, but he might say he had observed that those who partook of snuff, as a rule, attained old age." Upon incidentally stating my assumption to a very intelligent gentleman connected with the Profession, he said he "could not confute it; on the contrary, he was the only one in his father's family that consumption had spared, and, at the same time, the only one who took snuff. One of his brothers, who regaled his nostrils with an occasional pinch, survived

the longest." A similar concurrence was lately seen by myself, that of a well-to-do family, some members of which have already died of consumption—of those who remain only one, and he not the eldest, snuffs and is strong. Many of those referred to could not, at the moment, remember any instance of a person fond of snuff dying of phthisis. The idea had never occurred to them, but should a case present itself in their practice they would let me know. From a considerable number of these I have since received letters stating that, after observation and inquiries, they are inclined to believe that there is more truth in my theory than at first sight appeared to them, for they have not as yet been able to oppugn it.

The *Tobacco Trade Review* of April 9th, 1870, in a leader replying to a letter of mine, asking the editor or any of his readers for corroborative or adverse facts in point, says, "We have failed, so far, to trace a single instance in support of Dr. Murray's views, that regular snuffers never die of consumption, because we have not found an instance of a person of a consumptive tendency who could take snuff under any circumstances." In addition, I am led and inclined to believe that the capability or inclination for snuff-taking may prevent and check tubercle in the lungs, indicate its absence, or, if present, a tendency to recovery in the same way that being able to eat fat is known to do. The editor also states in his reply, "The taking of snuff excites two sensibilities, the sensibility of smell and the sensibility of taste. To a regular snuffer, snuff is really food, and he derives the same gratification from its use that he would from taking food." Everyone will coincide with the editor in this, who has been in the habit of indulging his olfactories.

I have *not* had an instance in my own practice of any one who enjoyed his snuff falling a victim to phthisis pulmonalis, but, in contradistinction to this negative testimony, I *have* had six cases of recovery from phthisis after the exhibition of its most reliable signs and symptoms, some of them even in the second stage, one each in the years 1860-62-64-65-66-69. The first three commenced of their own accord to snuff with avidity, as if they had been favoured with a special revelation upon the subject, or, as frequently happens in medicine, experienced a longing for that which would benefit them. In the fourth and fifth cases I advised its use. The last had been a light snuffer; he is now more intemperate. Five of the number are strong and active members of society, bearing their share of the fatigues and exposures of busy life, and evincing remarkable stamina—the sixth is following his avocations, and daily gaining strength. Three other patients, whose lungs for some time have not been in a satisfactory state, have during the current year purchased tabatieres, and are giving the "dusty god" a trial. The latest bulletin is, "they are doing as well as can be expected." Further, I have attended some, and know others, who have thrown off the consumptive malaise, after acquiring a taste for snuff, from taking occasional pinches from the box on the desk before them, in the case of a clerk, or, *pro bono publico*, in that of a traveller, but who do not wear a reservatory, and, consequently, may not be entitled to primary rank.

I have been guarded in recommending the adoption of a practice now so generally disliked, and so enslaving as that of snuff-taking, but during the last three years I have had many opportunities of observing that, in hopeless cases of consumption, patients could not stand snuff; on the other hand, when they were able to tolerate it, they have recovered from that attack, although it may be premature to say that they are permanently restored to health. It is with great diffidence, and only after due consideration, that I venture to moot the pungent statement coronal to this chapter. The individuals who have tried snuffing through my almost reluctant advice are too few, the practice of one medical man is too limited, and I am aware that it is no novelty for a person to have such a bias for anything of his own conception, as to be but an indifferent guide to others. However, having now the honour of broaching the question, I trust our friends from Scotland, and the great snuffing centres of Lancashire and Yorkshire, will avail themselves of the opportunities which are so open to them, and corroborate or condemn the tenet that snuff-taking is nearly incompatible with, and, in some degree, preventative of consumption. Some more facts are desirable, seeing that a patient may recover from a number of attacks of phthisis, only to sink from one at last, and that other, and more orthodox, treatment was pursued in each of my cases.

It being difficult, in this smoking age, to collate sufficient evidence to be quite unimpeachable that snuff is curative of phthisis, I will, therefore, content myself with showing that the habit in question is, in some degree, preventative of consumption and its frequent concomitant bronchitis. By titillating the lining membrane of the nostrils, snuff acts as a powerful derivative and counter-irritant, and the mucous discharge which follows its use will tend to preserve the more important and susceptible pulmonary mucous membrane from evil. The sneezing which succeeds the unaccustomed application of the errhine, or agitates even an old and seasoned nose, when a new titillant is tried, and the cough which is induced when, by chance, some of the lighter particles get into the throat, may be of some avail in effecting the elimination of albumenoid matter (the precursor of tubercle) from the lungs, ere it has had time to fill the air-cells and minute bronchi, and coagulate, in like manner, as sea-sickness is believed to do. The majority of medical men, when recovering from a common cold, will take a pinch in order to "speed the going guest." If good to expedite the departure of a cold, I have no hesitation in affirming that it will be better still as an expedient in altogether preventing the catarrh, *e. g.*, if, when on a journey, you experience a succession of chills, in due time you may expect an attack of bronchitis, an infiltration of pneumonic, or tubercular plasma, or illness in some other form, each tending to reduce the powers of life, and, consequently, liable to set up consumption in those predisposed. If a sufferer, you relieve the discomfort by having recourse to your box, from which after gently tapping you proceed to take a pinch of the agreeable, and in this case useful, stimulant. The exercise, slight though it be, the engrossed attention, the pleasurable sensation, the diaphoresis, and the smart glow which is at once diffused throughout your system by the pungent divertissement, the generally welcome conversation which the acceptance or refusal of a proffered sneeze is likely to elicit, materially serve to ward off, and make you forget, the dangerous chill. Should it return, nothing is more easy than to repeat the excitation.

It may be said that a cigar, a pipe, or some alcoholic refreshment, would be more potent and effectual as a preventative of cold, but snuff is emphatically a stimulant. Tobacco, although useful, is more strictly a sedative; besides, smoking is only practicable to the initiated, and, where permitted. Wines or spirits—although excellent as a prophylactic of catarrh, when only taken medicinally, upon an occasion like the one suggested—are apt to unhinge for the day's business, and their frequent use has a tendency to engender disease of the liver, kidneys, blood-vessels, brain, nervous exhaustion, indigestion, and consumption itself.

I do not agree with those who say that a practised snuffer ceases to sternutate; that he is too inured to the sternutant for the blunted olfactory nerves to react. Such cannot be the case until he has exhausted the 50 (more or less) kinds of the pulvil. I have seen men, who have known nose-hunger for 50 years, get three hearty sneezes out of a new kind of naso-palatine food. But even if the connoisseur has been accustomed to variety, and his run of snuffs have at least failed to be errhine sternutative, or even exciting, he has reason to be grateful. He must be thirty-eight years of age, and whatever else he may die of, it will scarcely be true tubercular consumption of the lungs.

Since the foregoing was written I find that in France, where tobacco is grown under State supervision, and manu-

factured by Government, in nearly equal proportions, into tobacco, cigars, and snuff, the health of the ouvriers has been made the subject of official report, of which the following summary may not inaptly be given here. The workmen in tobacco factories of the State do not suffer from any disease which the tobacco could be imagined to occasion; on the contrary, the employes seem to have had an immunity from typhus fever, as at Lyons; from dysentery, as at Morlaix; from miliary fever, as at Tonneins; and from cholera everywhere. The majority of physicians to the state factories believe employment among tobacco to be instrumental in preventing consumption in the lungs, and may even restore consumptives to health. As the paternal Government of France have taken up this question, I hope at some future time to be enabled to give the result of extensive observations upon this important point. Having made inquiries of many manufacturers, and surgeons in charge of tobacco factories in England, I find that, as far as they could say, the opinion of M. Parent Duchatelet and his medical confreres is borne out in this country; but, as tobacco hands are a migatory class of men, little reliance can be put in English statistics.

HYPODERMIC INJECTION OF MORPHIA IN TEDIOUS LABOUR FROM RIGID OS UTERI.

By Chas. W. Shaw, L.K. & Q.C.P.

Seeing, some short time ago, in an American Medical Journal, an account of the successful treatment of several cases of rigid os by means of morphia internally administered, and being favourably impressed with the arguments there used, I determined, if I should have an opportunity, to put its utility to the test.

The first case in which I saw an occasion for its profitable use was a *primipara*, æt. thirty, of sanguine temperament, who had been forty-eight hours in labour, membranes having ruptured some four days previously, and the os not larger than a florin, thin and undilatable. Having suffered so much, and being in a very nervous state, she was desirous of my remaining with her. I waited in the house for about six hours, and when the pains, although strong and frequent, were not producing the desired effect on the os, I determined to try the morphia treatment, more desirous of obtaining sleep for my patient than of hastening the labour. Having been called in unexpectedly to see this lady when I was out driving, and unprovided with any of the usual supplies, and being some six miles from any place where I could obtain a preparation of opium, I was rather nonplussed at first; but, fortunately, seeing some paregoric elixir, I gave her half an ounce, which, for twenty minutes or half an hour, appeared to produce no sensible effect, except diminishing the severity of the pains, though they continued as frequent and as long as before, till my patient called me, and said she thought the child was nearly born. I found the head pressing on the perineum, and in a few minutes delivery was accomplished—the placenta came away naturally, and everything went on favourably. The time from the administration of the paregoric till the conclusion of the labour was forty-five minutes.

On the 2nd July I was asked to visit another lady, æt. twenty-three, also *primipara*, who had been strong in strong labour thirty-six hours. At the time of my visit—three o'clock—I found the head presenting, and the os not larger than a shilling. I advised waiting, and left. Was sent for at five a.m. next morning, when I found everything almost *in statu quo*, but my patient extremely exhausted. Having a syringe in my pocket, at six a.m. I injected 0·25 gr. of morphia, and had the pleasure of finding the os dilating rapidly, and labour completed favourably in about three hours from the time the morphia was used.

Again, on the 9th August, at one a.m., I was called to visit another case, æt. thirty-five, who, although mother of three children, had not been pregnant for twelve years. She had been in labour for more than twenty-four hours; and, as all her previous confinements had been easy and rapid, she was considerably alarmed as to the result this time. Finding the membranes sound, with the pains moderate, and the os barely dilated, I left. Seeing her in the course of the evening, when I found slight change. Next morning, at six a.m., I was sent for, membranes having ruptured from the violence of the pains; but the os not larger than half-a-crown. At this time she also complained of pain a little to the right of the umbilicus, where there seemed to be a thickening of the wall of the uterus. Partly to relieve the pain, which she complained of most bitterly, but chiefly to expedite matters, I injected 0·40 gr. of morphia, and in the course of two hours the child was born. The placenta was adherent just in the place where the hardness was perceptible after the escape of the liquor ammonia.

I think the moderate use of any of the preparations of opium, either internally or hypodermically, would be productive of the happiest results in those cases where the rigidity of the os proceeds from an extreme amount of nervous irritability.

ON THE FORCIBLE INTROSPECTION OF WOMEN BY GOVERNMENTS.*

By Charles Bell Taylor, M.D., F.R.C.S.,

Surgeon to the Midland Eye Infirmary.

Dr. Taylor first questioned the right of Government to forcibly introspect women. He admitted the propriety of State interference in times of pestilence, or of great public danger when people could not help themselves, and suffered from no fault of their own; but even in such cases three essentials were needed—first, the necessity for interference must be undoubted; secondly, the law must be limited to the shortest possible period; and, above all, it must be impartially applied. He pointed out that the living a loose life and catching disease was a voluntary act, for which no citizen has any right to call on the State to protect him. He asserted that there is no adequate necessity in this country for any legislation on the subject of venereal diseases, because these diseases have for years, prior to the enactment of the Contagious Diseases Acts, been declining in extent and virulence, both in the Army and out of it; also, because there is only one disease of venereal origin—true syphilis—that affects the constitution, or can on any pretence be considered a matter of State concern; because true syphilis constitutes but a small fractional proportion of the mass of cases which are classed under this head; and because, in the language of Mr. Simon, in an enormous majority of cases this worst form of venereal disease is not of more than transient importance to the person attacked; because, also, the milder forms of venereal maladies (nine-tenths at least) though unimportant in themselves, are still great checks upon incontinence, and, consequently, the means of saving thousands from the more serious malady. Dr. Taylor dwelt strongly on the injustice of the Acts as applied to women only, as though they had spontaneously generated an affection which must have been previously communicated by a man. There was abundant evidence to show that men (notably soldiers and sailors), are equal, if not greater, sinners. The Doctor questioned the wisdom of State interference with prostitution as a trade with a view to supply men with a good article for their money. There could be no trade without a buyer, and if the trade was immoral, buyer and seller were equally guilty, nor could Government virtually or actually licence it without being implicated in its immorality. He asked what would be said if a deputation of prostitutes waited on Parliament to demand despotic and

* Abstract of a Paper read at the meeting of the British Medical Association, Newcastle-on-Tyne, August, 1870.

indecent laws against men only, on the ground that they communicated disease to them and their children?

After proving by quotations from Parliamentary evidence that modest women were grossly interfered with by the police employed to enforce the Act; also that milliners, dressmakers, servant girls, and labourers' wives, were classed as prostitutes for the purpose of the Act; and that one Parliamentary witness had declared that the Act would never succeed if it were confined solely to those who got their living by prostitution; Dr. Taylor proceeded to state that the means proposed are sure to fail in the attainment of their object—1st. Because absolutely healthy women, by mediate contagion, communicate infection; 2. Because the examination cannot be carried out in a large proportion of cases; 3. Because it is impossible to distinguish numerous affections to which most respectable women are subject from venereal diseases; 4. Because the women examined are exposed to great danger of infection from contaminated instruments; 5. Because the examination and restriction of one sex only, for a disease common to and propagated by both sexes, is not only a cruel injustice, but a delusion and a snare; 6. Because the system calls into existence, and fosters, a numerous class of clandestine prostitutes, who, from fear of detection, conceal their diseases, and become permanent sources of infection; 7. Because true syphilis can so rarely be detected in the female, that the examination, by giving a false security, offers a direct inducement to thousands (especially married men) to contract disease. Dr. Taylor quoted a mass of evidence in support of his sanitary objections to the Act. He referred to the statistical table of MM. Puche and Fournier, which show that of 873 men who contracted syphilis in Paris, 625 owed this worst form of infection to intercourse with registered and regularly inspected women. He also called attention to the following statement from M. Lecour, the head of the Parisian police employed in carrying out these regulations—"We may fairly consider the 9,500 patients, who are treated in the hospitals, as representing certainly not more than one-fifth of the venereal patients in Paris. We thus reach a total number of 47,500, a formidable number, although it is probably *below the truth.*" Dr. Taylor contrasted this statement with the fact that in London, with a population double that of Paris, we find, from the careful investigation of Mr. Wagstaffe, and the report of the Medical Officer of the Privy Council, that among a poor population of a million and a half there are only 455 cases of syphilis, a proportion of which, as stated by Mr. Simon, cannot be held so large as to call for exceptional action on the part of the Government. Dr. Taylor quoted statistics compiled by Dr. Balfour, showing that venereal diseases in the Army were declining at a rapid and satisfactory rate previous to the passing of the Act, and that since the Act was put in force, the decline had in no case been so great as formerly, but that at certain stations there had even been an increase of disease. Similar evidence came from Holland, Bengal, and Bombay, to prove that interference for the prevention of venereal maladies made matters worse instead of better. Finally, Dr. Taylor stated that other means entirely unobjectionable, Christian, merciful, and in full accord with the free spirit of English institutions, would suffice to check the spread of disease, in proof of which he gave evidence to show that women are most eager to apply to hospitals for treatment when diseased; and asserted that there was no need whatever for police spies, disgusting periodical examinations of healthy women, or the infamous degradation of the sex generally, which is too surely accomplished by the present law.

From simple cholera and choleraic diarrhœa twenty-five deaths were registered last week in London. This shows a marked decline on last week's returns. During the week there were eleven deaths from variola and 118 from scarlatina.

CLINICAL MEMORANDA.

CIRRHOSIS OF LIVER; VIOLENT PAINS IN EPIGASTRIUM; DIMINISHED HEPATIC DULNESS; JAUNDICE.

Reported by John W. Martin., M.D., M.Ch.

Case.—Michael Meehan, æt. about fifty, shoemaker. Notes taken July 10th, 1870.

History.—Occupation sedentary. As a young man was very fond of dram drinking, drunk freely, and "racked" himself to a great extent. About ten years ago gave up drinking, and since then has been very temperate. Circumstances impoverished. Frequently sits up all night at work. Drinks freely of strong tea. General appearance that of a pale, ill-nourished, unhealthy-looking man. For some time previous to the date on which these notes were taken, he was complaining of pain and uneasiness in the epigastrium, and constipated bowels. Treatment not relieving him, a closer examination elicited the following—

Symptoms.—Violent pain felt at the epigastrium, with a feeling of oppression. Abnormal resonance on percussion over area of præcordial dulness. First sound of the heart exaggerated, giving the idea of a "click;" no friction sounds, or endocardial bruit. Exaggerated resonance on percussion over the lungs. Respiratory sounds normal. *Hepatic dulness* diminished 2¼ inches vertically, and all over the area of dulness abnormal resonance most marked. No special tenderness or pressure complained of over the region of liver or gall bladder. Palpation revealed nothing. Bowels been always very constipated, frequently not being moved for a week together, and then the motions are hard and scybalous, and very dark in colour. Frequently suffers from headaches, from which he gets no relief until he has vomited a fluid, which he compared to "the skimmings of mutton broth." Tongue weak, furred, and indented. Anorexia, restlessness, and inability to sleep.

Treatment.—For some days previous to date of notes, had frequent turpentine stupes and sinapisms applied over the epigastrium, and was taking aperients, tonics, and anodynes. On the evening of the 9th, one-third of a grain of solution of muriate of morphia was injected into the right arm at the insertion of the deltoid; felt a warm, pleasant glow, and general tranquillity for an hour subsequent to operation. Again became restless, was attacked with pain, and spent a bad night. Early on the morning of the 10th, a dose of Battley's sedative, ʒss., was given, and at half-past ten o'clock, finding him no better, a blister, 4 + 3, was applied to epigastrium, to be left on for nine hours. At nine o'clock in the evening felt better; pain greatly diminished; blister rose well; tongue clean and firmer looking; felt inclined to take some bread and milk. Again injected morphia, quarter of a grain

July 11th.—Slept quietly and well until two o'clock—after that was somewhat restless. *No pain* to-day. Eyes jaundiced. Urine deep saffron yellow. Presence of bile shown by the reaction on testing with nitric acid, and the characteristic stain on steeping a piece of linen in it. No sugar or albumen. The discharge from the blistered surface also imparted the characteristic bile stain to linen. There has been no change in the dark colour of his stools.

July 12th.—Improved. Ordered nitro-muriatic acid mixture. Jaundice clearing.

July 14th.—Convalescent.

Remarks.—In the above case there was evidently that condition of liver known as "dram drinker's liver," cirrhosis. Both my father and self felt some hesitation in determining to what we were to ascribe the violent pain felt at the epigastrium; the probabilities were in favour of its being due to the passage of a gall-stone, but against this supposition were the following:—

1st.—The pain did not come or go abruptly.

2nd.—Seat of pain, not that usual in cases of gall-stone.

3rd.—No gall-stones have been detected in the motions since; though they have been carefully washed and strained through muslin.

In the above case, also, we have a good illustration of the use, however empirical, of counter-irritation; for, undoubtedly, relief *gradually* followed the application of the blisters, though some are unable to explain the *modus operandi* of counter-irritation, and, therefore, are sceptical of the benefits to be derived from its use. I am sure there are few men of large experience who will not agree with me, that its abandonment as a therapeutical agent would be most unjustifiable.

Transactions of Societies.

BRITISH MEDICAL ASSOCIATION.

In our last number we gave a report of the general meetings. We now furnish a condensed account of the proceedings of the different sections:—

Section A.—Medicine.

Dr. Embleton, president, in opening the proceedings, delivered a brief inaugural address, in which he welcomed the meeting to Newcastle, and made allusion to some of the characteristics of the town and neighbourhood. He afterwards proceeded to state that there had been a school of medicine existing in Newcastle since 1834; and the Newcastle Infirmary enjoyed a reputation similar to that of the West Riding—the Leeds Infirmary. Among the first to require that clinical teaching, which had now become imperative upon all medical regulating and licensing bodies, was the University of Durham, in conjunction with the College of Medicine. At this time of change and progress, they endeavoured to progress with the age, and were persuaded that this great gathering would give them a powerful impulse and advance. He then referred to the discovery of the successful application of anæsthetical remedies, the intricate researches into the origin of life, and the propagation of zymotic diseases, and the wonderful rapidity and extent of the advance of medical knowlege. Much had already been achieved, but much yet remained to be done, and he was sure that the present meeting would not be less successful than those that had preceded it. Dr. Paget moved, and it was seconded by Dr. J. C. Murray, that a vote of thanks should be accorded to the President for his address—carried. Dr. D. Embleton read a paper "On the Shoulder-tip Pain in Liver Diseases," Dr. Howell, F.R.C.S., read a paper "On the Treatment of Paralysis;" Dr. A. E. Sansom read a paper "On the Sulpho-carbolates, and the Antiseptic Method in Medicine;" and Dr. Wiltshire read a paper by Dr. George Oliver, on the "Therapeutics of the Seaside."

This terminated the first sitting.

On the second day, Dr. Henry Barnes, Carlisle, in the absence of the President, took the chair. Dr. R. Renfrew read a paper on "The Treatment of Scarlet Fever," on which there was a short discussion. Dr. Murray read a paper on "Snuffing: Its Utility in Preventing Bronchitis, Consumption, &c." This paper our readers will have the opportunity of judging by our fuller report. The papers of Dr. T. C. Allbut on "Functional Hemiplegia in Child-bearing Women," and Dr. Whitehead on "Mucous Disease," were taken as read.

On the following day this section concluded its business, when Dr. Embleton once more occupied the chair. Dr. Philipson, of Newcastle, read some notes on a case of biliary fistula, which had come under his treatment at the Newcastle Infirmary. A paper entitled "Remarks on the Beneficial Effects of Combination Tonics with Aperients in Chronic Constipation" was read by the Rev. Dr. Bell, M.D. The following papers were taken as read:—"Syphilis in Physicians' Practice," by C. R. Drysdale, M.D. "The Case of a Man who had a Vesicular Eruption in the Abdomen, which discharged at times great quantities of a Chylous Fluid," by Mr. Roberts, M.D., of Manchester.

Section B.—Surgery.

In the absence of the President and the Vice-President, Mr. Henry Power took the chair, and, without any introductory remarks, called upon Mr. William Adams to read his paper "On the Subcutaneous Division of the Neck of the Thigh-bone, as compared with other operations for rectifying extreme distortion at the hip-joint with bony ankylosis." Mr. Adams advocated the subcutaneous division of the neck of the thigh-bone, and detailed a successful case which he had made upon a man in London. Mr. F. Jordan made a few remarks upon a portion of the paper. Dr. John Russell, of Newcastle, read a paper on "A case of Femoral Aneurism cured by rapid pressure in the Newcastle Infirmary." Dr. Russell, at the conclusion of the paper, said that the treatment of aneurism by rapid pressure was not receiving that attention in other parts of the kingdom that it was in Newcastle, where several cases had been successfully treated. Newcastle, he said, was the birthplace of the rapid pressure treatment, which he recommended in contra-distinction to slow detriment. Mr. Lawson Tait considered that the Newcastle school could scarcely claim as being the first to introduce the rapid pressure treatment, and thought that, if any school was entitled to the claim, it was Dublin. He differed from Dr. Russell that this particular mode was not practised by medical men in other parts of the country, and quoted several cases which he had had under his notice. Dr. Russell, with all deference to Mr. Lawson Tait, still adhered to his statement that Newcastle was the birthplace of the rapid pressure treatment. Dr. Gregson and the Chairman also took part in the discussion. The Secretary read a paper by J. C. Gibb, M.D., Newcastle, entitled "On a successful case of Ligature of the Superficial Femoral Artery in Popliteal Aneurism, on Lister's Plan." A paper "On a New Form of Elevation for Depressed Cranium in Childhood," by Frederick Waterhouse, M.R.C.S., was read by the Secretary. Mr. Anthony Bell, M.R.C.S., Newcastle, read a pamphlet "On Notes of a Case of Epilepsy of sixteen years' duration from Parietal Depression of Cranium: Trephining: Recovery." The Chairman, at the conclusion of the paper, and after putting several questions to the patient, who was present, remarked that the treatment had been extremely satisfactory in its results. Mr. R. Walker, L.R.C.P.Ed., read a paper entitled "Operation for the relief of Contracted Toe."

On the second day, the chair in this section was taken by Dr. K. King, of Hull. Mr. Furneaux Jordan, of Birmingham, read a paper "On the Treatment of Enlarged Cervical Glands." In the discussion that followed, the Chairman, Mr. Hutchinson, Mr. Spencer Watson, Dr. Heath, of Newcastle, and Dr. Wilson took part. Mr. Hutchinson read a paper entitled "On Xanthelasma Palpebrarum as a Symptom of Diathesis." The paper was illustrated by drawings. A paper on "Spermatorrhœa," was read by Mr. W. F. Teevan. Mr. Spencer Watson read two papers "On the use of the Seton in the Treatment of Vascular Ulcers of the Cornea," with illustrated cases and drawings; 2. "Cases of Traumatic Ophthalmitis" Dr. Legat, of South Shields and the Chairman took part in the discussion that followed. Mr. Teevan gave a condensation of his paper on "Twenty Cases of Stone in the Bladder." Dr. Arnison and the Chairman made some remarks on cases upon which they had operated. The Secretary read a paper from Mr. Fairlie Clarke on "Some Rare Forms of Opacity of the Cornea."

At the third meeting, Dr. Heath, of Newcastle, occupied the chair. Dr. Protheroe Smith read a paper on "Diagnosis and Treatment of Tumours and Effusions by means of Exhausting Needle Trocars." Dr. Smith exhibited an apparatus of his own invention, and explained the manner in which it was to be used. A paper "On the Treatment of Hæmorrhoids" was read by Dr. Daniel McLean, of Glasgow. The next paper was by Dr. Heath, of Newcastle, "On the Rapid Treatment of Aneurism." Dr. Gammage, of Bishopwearmouth, and others, took part in a full discussion on this important paper.

Section C.—Physiology.

Dr. Andrew Clark, President, occupied the chair at the first meeting of this section, and delivered an introductory address, in which he said that Medicine is the art of healing, whereby we endeavour to preserve health, cure disease, and alleviate inevitable suffering. Physiology is the science which investigates the conditions or laws of healthy, bodily, and mental life in man. It was the business of medicine to consider health as well as disease, and the consideration of health involves—1st, the regeneration of physical growth and development by means of food, exercise, air, and the like; 2nd, the regulation of mental growth and development by

means of education in its literal and highest sense; 3rd, the conservation of health and energy—the prevention of disease by personal hygiene; and 4th and lastly, not merely physical and mental development as it now exists, but the advance of physical, mental, and moral development of which we believe man in time to be susceptible, through the influence of agencies for ever at work and capable of control. It was only through physiology that medicine could accomplish any or all of these objects, and, in whatever light considered, they are truly the greatest that science can achieve for men. Mr. John Couper read a paper on "The Diagnosis of Astigmatism by the Ophthalmoscope." Dr. Milnes Fothergill, of Leeds, read a paper "On the Preservative Agency of Lowered Vitality," and a discussion followed, in which Professor Bennett of Edinburgh, and several other members took part. Dr. J. A. Bolton, of Leicester, then read a paper entitled "The Naked Man and his Photograph, *in re* the Turkish Bath," which was well received; Professor Bennett, Dr. T. E. Hayden, and others expressed a wish that more certain information should be collected, with a view of ascertaining whether the Turkish bath should be more generally used in medicine.

At the second meeting of this section, Professor T. Hughes Bennett, of Edinburgh, took the chair, in the absence of the President, Dr. A. Clark. Dr. B. W. Richardson read an instructive paper "On Anæsthetics," after which Dr. Elliott, of Carlisle, read a paper entitled "Lobelia as a Poison; evidence from eighteen inquests, with *post-mortem* examinations." After some remarks from Professor Bennett, and Dr. Waters, of Liverpool, Dr. Elliott said he had a volume with him containing a large amount of information with respect to experiments on the lower animals with lobelia, which might form the subject of a second paper that might be prepared and read at some future time. Professor Bennett hoped that Dr. Elliott would prepare such a paper, and he then proposed that the section should meet again punctually at nine o'clock the next morning, when he would demonstrate by experiments on two rabbits that chloral and strychnine were antagonistic poisons. This adjournment was at once agreed to.

At the concluding meeting of this section Dr. Waters presided. Professor Bennett read his "Interim report of committee appointed to investigate the antagonism of strychnine and chloral." He experimented upon two young rabbits purchased for the purpose. He injected into one of the animals a solution containing the 150th part of a grain of strychnine, while to the other he administered in a similar manner a like quantity of strychnine and twelve grains of chloral. The first rabbit speedily displayed great restlessness, and was subject to slight twitching, while the other became remarkably still. Presently the first leaped up and instantly fell into convulsion, expiring within a few minutes afterwards. About the same time, the other one commenced to stagger as if under the influence of intoxicating liquor, and seemed to have been seized with an overpowering drowsiness. A few more minutes elapsed, and it fell upon its side in a deep sleep. The Professor then explained that these rabbits were much younger and lighter than those he usually experimented upon, therefore, he was not sure that the sleeping animal would not ultimately die; but he expected it would wake up in about two hours perfectly well. Dr. McVail read a paper on "Respiratory Mechanics," and Dr. McKendrick read a paper on "Exhibition of a new Barometer by Bergson and Kastaus."

Section D.—Midwifery.

Dr. Robert Barnes presided, and delivered an opening address in this section on the first day. Dr. Henry Bennet read a paper "On the influence of Inflammation in the production of Uterine Displacement." Dr. Renfrew, of Glasgow; Dr. J. H. Aveling, Dr. Martin, from Australia; Dr. Thomas Chambers, and other gentlemen spoke on the subject.—Dr. Tilt then read a paper "On Uterine Pathology and the Change of Life and after the Menopause," which produced an animated discussion, taken part in by the President; Dr. Beatty, of Dublin; Dr. Bennett and others.—Dr. Mellor, of Manchester, proposed a vote of thanks to the two gentlemen who had read papers, and it was agreed to.—Dr. R. Barnes, of London, then spoke on "A Case of Retro-Uterine Hæmatocele," and "A New Operation of Embryotomy by the Wire Ecraseur," and illustrated his lecture by operating on the body of a child.

At the second meeting, Dr. Barnes, the President, in the chair, Dr. Aveling, of Rochester, read a paper "On the Advantages to be derived from curving the Handles of Midwifery forceps," and Dr. Graily Hewitt, of London, papers—"1. On a New Instrument for securing the Pedicle in Ovariotomy;" "2. On Strangulation of the Uterus." The section then adjourned until the morning.

At the concluding meeting, Dr. Barnes again presiding, Papers were read by Dr. Smith "On the Pelvic Band;" Dr. H. Miller, "On the Diet of Parturient Women;" and Dr. James Boyd, "On a case of Puerperal Convulsions successfully treated by Chloroform," &c. Dr. Keiller exhibited various instruments.

Section E.—Public Medicine.

At the first meeting of this section, Dr. W. H. Rumsey, Cheltenham, the President, delivered an inaugural address, in which he expressed an opinion that the Profession sustained a loss in the rejection of the late Bill; condemned the agitation against the Contagious Diseases Acts; and alluded to the interest in public health displayed by the late Charles Dickens. Dr. Arthur Ransom, of Manchester, read a paper "On the Registration of Disease, and Meteorology in Manchester and Salford during the ten years 1861-70." The paper, which was an ably written one, showed the rise and fall of disease in the above districts for the past ten years, and at its conclusion, Professor Stokes, of Dublin, testified to its merits, and moved a vote of thanks to the author.—G. H. Phillipson, M.A., M.D., next read a paper "On the Health and Meteorology of Newcastle and Gateshead during 1868 and 1869." The purport of this paper was to show the respective number of deaths in the two boroughs during 1868 and 1869, from what cause they occurred, and the increase and decrease in the respective diseases. During last year, the paper stated, no cases of small-pox occurred in the towns, whilst in the previous year a large number of deaths occurred from the disease. In 1868, 728 deaths took place, and in 1869, 736, showing an increase of eight during the latter year. The paper concluded by stating that the Medical Association of Northumberland and Durham would not after the present year continue to publish the registration of deaths in the districts in consequence of the decrease of the funds of the Society.—The President thought that the authorities ought to publish the registration of deaths, and not to leave it to an individual society.—Dr. Stewart, of London, also spoke on the advisability of the public registration of deaths, and brought forward many arguments in favour of his views.—The next paper read was by Mr. Armstrong Leonard, of South Shields, on "The Difficulties in applying Sanitary Laws." This paper spoke of the unhealthiness of South Shields, from impure air arising from smoke and noxious vapours, causing respiring impediments and respiration imperfectly performed. The paper stated that the sanitary laws against nuisances would remain a dead letter so long as they remained under the administration of local authorities, because most of them were interested in such matters, and would deal as lightly as possible in cases that affected themselves.—Dr. Stewart remarked that smoke could be completely consumed without damaging the manufactories, and also agreed with Mr. Armstrong, that so long as the sanitary laws remained in the hands of persons whose interest it was to evade the law, it would not be carried out. He thought the administration of the laws should be in the hands of disinterested persons, who would compel the offenders to attend to the sanitary regulations.—The President suggested that a resolution should be passed, based on Mr. Armstrong's paper, and presented to the general body of the association. He remarked that the above questions would be considered by the Commission on which his friend, Dr. Stokes, was sitting, as to the means whereby the produce of smoke and alkaline vapours might be prevented.—Mr. Armstrong then moved the adoption of the following resolution:—"That, in future sanitary legislation, the smoke nuisance, and other gaseous pollutions of the atmosphere, may be dealt with by compulsory measures, to be carried out by authorities independent of the district, and instructed by competent inspectors unfettered by local interest and feeling."—Dr. Robinson, of Gateshead, seconded the motion, which was carried unanimously.

On the second day the learned and indefatigable President again occupied the chair. The first paper was read by Dr. J. W. Eastwood, of Dinsdale Park, near Darlington, and was "On Intemperance, in its Medical and Social Aspects." The gist of the papers was that the extreme opinions often put forward by temperance advocates had retarded the progress of temperance itself, and deplored the apathy of the Medical Profession, with respect to the common use of intoxicating

beverages.—Dr. C. B. Taylor then read his paper "On the Forcible Introspection of Women by Governments." Some discussion resulted, and both sides were supported.—Dr. Johnson remarked that the measure appeared to be considered a primitive measure. He thought it ought not to be looked upon in that light. It was hardly a punishment to cure a person of disease. He agreed with Mr. Taylor about the inadvisability of trusting the work to the police. He had had a good deal to do with the police, and he knew that the less the Profession had to do with them the better. Another point, he thought the lecturer attached less importance to venereal disease than was usually attached to it. His idea was that it was a most serious matter, not only for the persons suffering from it, but for their posterity.—Dr. A. Bell stated that there was one good result to be derived from the Contagious Diseases Acts. In Newcastle they could not go through the streets during the period between the hours of ten and twelve without being molested at every corner, and perhaps some half-dozen other times, by some low prostitute. He had been at Paris for about a week, and while there had occasion to be out at late hours. Yet during the whole of the time he was there he was not once insulted by any of these women, and he never saw a woman who he could say was a prostitute. If the Acts were passed to-morrow in Newcastle, what would be the effect upon the women? They were not so low as they were made out to be in some cases, and he thought three quarters of them would prefer remaining in their houses at night carrying on clandestine prostitution to parading the streets, and thus have to submit themselves to inspection. He did not consider that the Acts would increase the immorality by affording a false security, because, if the temptation were got rid of, so half the sin and immorality ceased. As regards the frightful state the constitution was reduced to by the disease there could be no doubt. They treated the disease in a different manner to what they used to do, and yet they could not visit a skin disease hospital in London without witnessing a most frightful state of things in both women and children. He believed if the Acts merely got rid of the women from the streets, and thereby removed the greater part of the temptation, they ought to be brought into operation. People would not like to go to a house, and ask if it were a house of ill-fame. Besides the dissipated, boisterous strumpets, who drank to excess, there was another class which did not drink much, and he considered that while this class was on the street they were a great temptation to young men.—Dr. Reid stated that the Almighty, in enunciating his commandments from Mount Sinai, used words to the effect that he would visit the sins of the father on the children to the third and fourth generation. He thought in Great Britain, with respect to this special disease, it was carried out. That disease was the means of producing scrofula and other affections. With regard to the opposition given to the Acts by several ladies, he thought they would have done much better to attend to their homely duties than enunciating such nasty things as they did.—The Chairman stated that this was a subject that went to the heart of our social life. A number of statistics, gathered in Manchester, showed results directly opposed to those brought forward by Dr. Taylor. Five women had twenty-five children, fourteen of which were miscarriages, and eleven premature births. Those born prematurely died shortly after birth. These children suffered in consequence of the disease of the mothers. What the women said themselves was that they came to the hospital when they were thoroughly infected. They knew nothing about it—it was often difficult to make out. These women were infected by their husbands. It was high time that something was done to eradicate the disease. — Dr. Stewart said he was in doubt as to whether they should call in the intervention of the police in their endeavour to remedy the pitiful state of matters. When persons in the full possession of all their faculties voluntarily deserted the principles of morality, he thought it would be exceedingly perilous to get a soldier or a policeman to interfere in order to prevent him. Whether they could put a stop to it by legislative enactments was to him a matter of the greatest doubt. What was wanted was greater morality. He did not think that petitioning against the Acts would have much weight. They had been got up in a careless manner, and had done much mischief by bringing such matters before people that otherwise would never have thought of them.—Dr. Armstrong combated the idea that prostitutes had increased in towns where the Acts had been applied. He further stated that it was not common policemen that were to do the work, but a special intelligent corps of men.—Dr. Acland said that the first course to be pursued by those who got up the agitation against the Acts, was not to seek absolutely to remove the law, but to show where it required amending.—Dr. Campbell Black read a paper "On Certain Circumstances which contribute to impede the Progress of Scientific Medicine and Surgery." Dr. Tessier read a paper "On Remarks upon an Epidemic of Intermittent Fever in the Mauritius, during 1866-7-8."

At the concluding meeting, Dr. Rogers read a paper "On Dispensaries and Medical Relief," on which ensued a discussion.—The next paper, "On the Climate of Algeria," was read by Dr. Henry Bennett.—Mr. Topley read a paper "On the Distribution of Disease in the Northern Counties."

Section F.—Psychology.

The President, Professor Laycock, M.D., of Edinburgh, opened this section by an address introductory to the papers which were about to be read, after which he called upon Mr. Thomas Laycock to read a paper "On the Practical and Scientific Investigation of the Relations of Body and Mind;" 2. "Case of Epileptic Chorea of Right Arm." R. H. B. Wickham, L.R.C.P., Ed., then read a paper on a "Case of Rhythmical Chorea of the Right Arm and Palsy of the Leg." A slight discussion followed the reading of these papers, after which the section adjourned.

The Psychological section met again the following day, and proceeded in an omnibus to the Borough Lunatic Asylum. The party were conducted over the Asylum and grounds by Dr. H. Grainger Stewart, the medical officer of the Institution. They then partook of luncheon, after which they returned to town, and with Professor Laycock, M.D., in the chair, the regular business of the section was resumed in the Corporation Committee Room, Town Hall. Dr. H. G. Stewart read a paper "On Syphilitic Insanity," instancing three severe cases which had come under his notice, all of which had many peculiarities in common with each other. The President also described a case of the same disease which had come under his knowledge; and after some discussion, taken part in by Dr. Sankey, of Cheltenham, Dr. Clouston, and Dr. Stanley Haynes, of Laverstock, Salisbury. the President, first addressing a few observations on this form of insanity, proposed a vote of thanks to Dr. Stewart for his paper, which was agreed to.—Dr. G. Clouston then read a paper recommending "The Use of the Thermometer in the Diagnosis and Treatment of Insanity," which was followed by appreciative remarks from Dr. Sankey, Dr. Stewart, and Dr. Needham, of York. The President before leaving the chair decided that the section should meet at nine o'clock the next morning, when an hour and a half would be devoted to an important question, which he would introduce, viz.—"How far Alcoholic Stimulants are Necessary for the Treatment of Ordinary Cases of Delirium Tremens."

At the concluding meeting, the first paper was read by Dr. Sankey, of Cheltenham, "On the Etiology of General Paresis."—The next paper read was by Dr. W. Richardson, on the "Psychological Reading of some of the Phenomena of the Emotions."—The last question introduced was by the President of the section, Professor Laycock, named "How far Alcoholic Stimulants are Necessary for the Treatment of Ordinary Cases of Delirium Tremens."

Literature.

MICROSCOPICAL MANIPULATION.*

The subject-matter of this work formed originally the basis of a course of lectures which were delivered before the Queckett Microscopical Club in the early part of last year. The author has now published them, with additional observations and illustrations, in a very useful 8vo. form of 250 pages as a hand book to students. In this work the author has not trenched upon the ground so well occupied by Drs. Beale, Carpenter, and others, but brings their opinions into juxtaposition with his own, as authorities for the views he himself advances. Mr. Suffolk, in accordance with the title of his book, almost rigidly confines his remarks to the uses of the various instruments employed,

* Microscopical Manipulation. By W. T. Suffolk, F.R.M.S. London: Hy. Gillman.

and their structural peculiarity in scientific research, whilst the chapters on mounting and the preservation of objects will prove very excellent guides to the students of this favourite branch of science. Of the illustrations, especially the plates—which are chiefly the author's own productions—too much cannot be said in praise; they are all lithographed from carefully-finished drawings of objects easily obtainable by the student, and place the author not only high upon the list of microscopists, but also establish for him a claim as an artist of undoubted ability.

In conclusion, we would add that the book is well got up in every particular, and although there is little originality of thought displayed, yet, what there is, is sound; and may be safely and profitably put into the hands of many an advanced student.

THE PARISH LEECH.*

This "Medical Metrical Medley," as the author is pleased to dub the work before us, consists of forty-eight pages of "metrical" matter, and sixty odd pages of "notes and references." The "Leech" is the hero of the former. The author takes him up at the age of sixteen, "when passed the thraldom of a country school;" runs him through a full course of medical study and professional examinations, and does not drop him until long after his suspension by the "board's decree;" and *in transitu* submits him to the punishments ordinarily inflicted by caprice and bad laws on parish doctors. "This time only" shall we accept the author's excuse for an occasional limp in the metre he has selected—namely, want of a "musical ear," and beg of him also to remember the old saying, "Porta nascitur non fit." He, however, deserves much credit for the great industry he has displayed in the collection of "Notes and References." They ought to be in the hands of every medical officer, whilst to medical statists and reformers they will be found invaluable for their diversity, and the sources whence they were obtained, data for most of them being appended.

SPECIAL CORRESPONDENCE.

THE WAR IN FRANCE.

[FROM OUR OWN CORRESPONDENT.]

PARIS, August 15th, 1870.

Were I to write you on any other topic than that of the war you would, I am sure, think that I must hear little of what is going on in this great city. In every hospital the only talk is, what is going on with the Army? How many beds shall we have to furnish for the wounded? The "internes" and "externes" of the hospitals are now few in number, and everyone seems to think only of this deplorable and fatal encounter with the modern conquerors of Europe, the Prussians. For my part, I feel a horror for everything connected with battles, and the wounding and destroying of members of our unfortunate race, so that I retain, I trust, sufficient interest in the question of curing diseases, however slight, to allow me to report to you what is going on out of the fields of butchery, which the ambition of a few, and the mad vainglory of the many, have prepared for so many poor men.

In the first place, then, small-pox is greatly on the decline in Paris. In great measure, I believe, this is attributable to the fact that so many persons have recently been revaccinated, and given up the heifer as a delusion, and contented themselves with matter from healthy infants. The *Assistance Publique*, however, is incurably stupid here. It crowds together the poor hospital patients in small cubic space, and, in addition to this, has, during the whole continuance of the epidemic of small-pox, taken cases of that fell contagion into the ordinary hospitals, although it has feebly attempted to do some little towards segregation of the patients, by devoting an old ramshackle hospital in the Rue de Sévres to this disease, and has sent convalescents to Bicêtre. But you are well aware how far back our French brethren are in questions of hospital hygiene. Let us hope that things will mend.

The year 1870 will again prove that abnegation and devotion are virtues inherent in the Medical Profession; for the past eight months there has reigned an epidemic of variola, which, at Paris, has killed several thousands, and physicians have ceaselessly devoted themselves to their duties, whither, with lancet in hand, they have vaccinated the inhabitants, to render them safe against this formidable malady; or, at the bedside of the patient, they have tried to snatch as many victims as possible from this terrible scourge. Hardly was the war declared than the International Society of Succour to Wounded Soldiers, at the head of which are placed Doctors Nélaton, Chenu, and Lefort, began to employ itself in collecting gifts of all kinds, and form ambulances in the American fashion. Without any resources when it commenced, this Society is now enabled to send to the Rhine several ambulances, each of which has forty horses at its disposal, several tents, containing each twenty-four beds, a number of little tents, and innumerable boxes of linen, besides three hundred beds, with supports for the transport of the wounded beneath the tents. Each ambulance comprehends the following medical staff engaging itself as volunteers:—A chief surgeon, several surgeons and assistant-surgeon, either doctors or hospital "internes," and assistants taken from among the students. It has been calculated that in each battle one ambulance can dress 1,500 to 2,000 wounded men. Some doctors here think and write that the value of the International Society has been greatly exaggerated. It is to be hoped that they will weigh and judge before making up their minds. Let us all give both material and moral encouragement to a truly sublime work, since this society has for its aim to alleviate the sufferings of the soldiers of both armies.

The Strasbourg Medical Society has shown an example we cannot too highly praise and applaud, and has decided that each member should immediately go to work to form a committee with their fellow citizens for succouring the wounded. The aim of these committees should be to found in private houses small temporary hospitals, and to assure the reception of the sick or wounded among the inhabitants of these houses. This society should immediately call on all the Profession in Strasbourg and the adjoining department, and engage their services in helping on the common work, and founding in the different centres of the towns and villages temporary hospitals where sick and convalescents can be taken in. M. Sedillot goes as Surgeon to the Army.

In the New Free Medical School for women, recently founded at Paris by the Empress, there are to be three years of study, with the following provisional programme for the first year:—"The first year shall be principally devoted to the study of the sciences, which are the basis of medicine; natural history, chemistry, physics, studied on their application to the art of medicine, and anatomy. During the first six months pupils will attend the lectures at the Sorbonne for the secondary instruction of young girls, and having for object—1. Elementary notions in physics—Professor: M. Jamin, Member of the Institute. 2. Elementary notions of chemistry—Professor: M. Riche, of the Superior School of Pharmacy. 3. Elementary course of botany—Professor: M. Tieghem, Master of Conferences at the Upper School. 4. Elements of animal anatomy and physiology—Professor: M. Bert, Member of the Faculty of Sciences. 5. Elements of mathematics—Professor: M. Philippon, Secretary of the Faculty of Sciences.

In the second six months students are to study—1. A special course of pharmaceutical and medical chemistry. 2. Spinal lectures on human anatomy and physiology, con-

* The Parish Leech. By a Parish Doctor. London: Nicholls Bros., Great James Street, W.C.

sidered in their relation to medicine, and having principally for their object the functions of digestion, respiration, circulation, and innervation. 3. Elementary lectures on pathology, especially on the diseases peculiar to children, and lectures on hygiene. After this second six months, the students will frequent the hospitals which will be appointed for them. Supplementary conferences and demonstrations will take place by special demonstrators. During the first year, and the following years, those students who desire to practise in any Mahommedan country are to have, each week, three lectures in Turkish or Arabic. At the end of the year there will be examinations for passing into the higher courses. The editor of the *Revue Medicale* truly says that, if women are to become doctors, they ought to pass the same examinations as the men do. He is in favour of suppressing the degree of Officer of Health in order to have equality among all doctors in France, and in the same way he desires that women should take the same rank as men doctors. Miss Garrett and other ladies are, I think, of the same opinion as the professor.

By the way, I omitted to say, in speaking of the International Society, that the uniform of the officers of the ambulances is the naval tunic, waistcoat of blue cloth, called "gilet d'Afrique," trousers of blue cloth, soft boots, white cap, or blue caps with the International red cross. Each ambulance has 40 horses, 12 of which are for the transport of the materials, which comprehend 8 carriages, 17 great tents with their beds, 51 small ones, and innumerable linen chests. The tents are 6 metres broad, and 8 metres long, and contain 24 beds in each. They can be erected in 10 minutes. For the transport of the wounded beneath these tents each ambulance has 300 beds, armed with supports. The expense of one ambulance is said to be, all included, 15,000 francs, £500.

It was said some time ago in the *Journal des Debats* that "more than 900 students of medicine, having 12 inscriptions, that is, three years of study, had inscribed themselves at the Hospital of Val-de-Grâce to serve the Army in campaign, and to take care of the sick and wounded. And, in virtue of a recent decision of the *Faculty of Medicine*, all the young men who are sent to the ambulances are exercised in operative medicine by prosectors under the direction of Doctor Lannelongue. Lectures have also been delivered by Dr. Maurice Raynand and Constantin Paul on the Epidemics of Armies.

From July 31st to 6th August, 1870, there were in Paris 151 deaths from small-pox, 9 from scarlatina, 18 from measles, 26 from typhoid fever, 5 from erysipelas, 42 from bronchitis, 48 from pneumonia, 78 from diarrhœa, 2 from dysentery, 5 from cholera, 6 from diphtheria, 6 from croup, child-bed 5, other causes 725. Total 1,126. We see, then, that the war and small-pox do not go well together. Paris is not so crowded as it was, and I see scarcely any English here.

At a recent sitting of the Academy of Medicine, on the 9th August, the room was almost empty. Everyone asked for news, and spoke about the soldiers. The doctors are great patriots here—thus the eminent academician, Dr. Barth, told how he had wished to engage his son as a volunteer (16½ years of age); but he was found at the Mairie to be too young, so that M. Barth was obliged to content himself by contributing money. M. J. Guerin said that he was putting up 20 beds in his house to nurse the wounded at his own expense, and he was loudly applauded. Then M. Piorry related his experiences, which went as far back as the Peninsular War under Napoleon the First, and the meeting dissolved.

M. Lefort went to the war a fortnight ago. M. Liegois set off a week after, and I am continually meeting with *confrères* who are just going off to the scene of horrors. Let us be thankful that we belong to a profession which alone in this terrible hour of affliction is able to render consolation to the unfortunate victims of modern warfare. Verily, the trade of the soldier and of the doctor are the most opposed of all trades. *We* endeavour to blow up the expiring embers of an exhausted vitality; *they*, on the contrary, take care to destroy the strongest lives by every stratagem, by every kind of cunning invention. Pray tell me how we can reconcile such opposite acts? Which is the true one? I fondly believe that *our* task is the noble one; and that it is a disgrace to the philosophy of France and Prussia that they, and other nations, should still desire to destroy in a moment so many healthy existences. But, our time, *cher compère*, is not come yet. The counsels of the doctor are not heard as yet by the rulers of nations. How many of your representatives in Britain are doctors? How many here? Spiritualism, superstition, and love of glory yet reign supreme, and we thus have here to bewail in tears the loss of our best and dearest friends. We expect to hear of a fearful carnage this very day, or in a few days. You will know all by telegraph long before you can print this letter.

[FROM OUR SPECIAL CORRESPONDENT.]

LAUSANNE, August 16th.

THE war spreads its indirect ravages as far as Switzerland. The Helvetic Confederation, so proud of her liberty, always depends, to some extent, for supplies on Germany and France, which extend on both sides. The interrupted communications very much increase the value of foreign goods—sugar, coffee, cocoa, wines, corn have all doubly augmented even where we continue to receive them. Add to this, all the Swiss hotels are deserted because everybody has returned to his own country, while the harvests have been totally destroyed by long and extraordinary drought, and you will have an idea of the dull position in which our inhabitants are placed. Yes, the war is a real abomination; and, if we did not know that the interest of our country requires the success of the French arms, we should not know on which side to turn our resentment. There are such black clouds on the horizon that we dare not say our thoughts! Our fathers have experienced the same calamities, and we could not hope to be more favoured than they.

Picture to yourself butter at five francs a pound, and other things in proportion; and in some parts water being sold at one or two sous a litre, and you have some idea of the horrors of war to innocent neutrals on the borders of contending countries.

FROM OUR SPECIAL CORRESPONDENT.

AMPHION, NEAR EVIAN, SAVOY,
August 12th.

YOU should make your readers acquainted with this charming refuge, now that so many continental resorts are inaccessible. Besides the alkaline and chalybeate waters, the lovely scenery, the healthy temperate climate and other things make this place very attractive. At the end of July, when the heat was most oppressive in all parts of Europe, the maximum here was 73 or 74 degrees, while I hear that the mean in Florence was 100, in Paris and London 95. There is a fine establishment here, of which Dr. De Pascale, so well known by English visitors to Nice, where he spends the winter months, is the medical officer. I am told he visited the springs eight years ago, so he must know their value.

We are situated here nearly opposite to Lausanne, where, as most travellers know, is the finest Swiss hotel. We are in a fine shady park which contains three good hotels, where, besides the powerful mineral waters, you may find every comfort for a summer home.

Invalids come from long distances. English and American travellers abound here, and all your friends who are driven from the German watering places would find this quite as good. As to the mineral waters, I will send you further particulars in a future letter.

Registered for Transmission Abroad.

THE
MEDICAL PRESS AND CIRCULAR
Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
,, If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 24, 1870.

THE NEW M.P. FOR DUBLIN CITY.

Sir Dominic John Corrigan, of Cappagh and Inniscorrig, county of Dublin, who was elected M.P. for the city of Dublin in the Liberal interest, in the place of Sir Arthur E. Guinness, unseated on petition, and whose seat has remained vacant for eighteen months, is a physician of great eminence in Dublin. He is a son of the late Mr. John Corrigan, an eminent merchant of Dublin; his mother was a Miss Celia O'Connor. He was born on the 1st of December, 1802, and graduated M.D. at the University of Edinburgh in 1825 and at Dublin in 1849. He became a member of the College of Surgeons (England) as far back as 1843. He has been President of the Pathological Society in Ireland, and Physician to the House of Industry Hospitals at Dublin, from which he retired in 1866. He was appointed one of the members of the Senate of the Queen's University in Ireland, at its first establishment in 1847, and was five times in succession elected President of the Royal College of Physicians in Ireland—an honour never before him bestowed on any of its Fellows. He holds the post of one of Her Majesty's Physicians in Ordinary in Ireland, and is the author of numerous contributions to leading medical journals. He was created a Baronet in February, 1866, in recognition not only of his very high and distinguished professional position, but also of his great and gratuitous services through many years to the cause of health and education in his native country. Sir Dominic, who had long been known in Dublin as one of the most zealous, but at the same time truly Liberal, members of the Roman Catholic body, married in 1829 Joanna Mary, daughter of the late Mr. William Woodlock, of Dublin, by whom he has had two daughters and three sons. His eldest son, who was captain in the 3rd Regiment of Dragoon Guards, having died in 1866, his heir is his grandson, John Joseph, who was born in 1859.

Sir Dominic Corrigan has won his seat in Parliament not without repeated battles and his full share of election *desagremens*, and it is in the highest degree honourable to him that a constituency so extensive, and so evenly divided in political feeling, should have chosen him. The representation of Dublin is just in that condition of even balance that the personal merits of a candidate have considerable influence on his success, and may be sufficient to turn the scale by getting him a few votes or by rendering personal friends, and political foes, indisposed to oppose his election. Sir Dominic Corrigan has suffered more or less from the undeserved opprobrium of being a "mere doctor;" indeed that disqualification was repeatedly urged against him by one of the Dublin papers; yet he has managed to step out from his professional character and make himself a public man principally by the force of his personal qualifications.

It affords us great satisfaction that one more member of our Profession—one more representative who can teach the House of Commons a little much-lacked wisdom on matters medical—has been sent forward to the deliberations of Parliament. It is only a few years since we uttered a lament over the entire absence of medical men in the House of Commons—Sir John Gray and Dr. Brady being then the only members having any connection with medicine. From year to year the number of medical candidates has increased, and of the many who have essayed the *escalade* of the fortress, several have had the luck, or the merit, to find themselves inside.

Believing, therefore, that the neglect which medicine and its affairs have met with at the hands of Parliament has been in the greatest measure owing to the infinitely small proportion of its constituent members which medicine supplies, we rejoice that a medical man, and one so thoroughly experienced on past medical legislation, should be added to the strength of the contingent of our Profession; and we plume ourselves on the occurrence, not only in anticipation of actual work which may be done in the interest of our Profession, but as an evidence of an awakening amongst medical men. Within a few years ago it was part of the creed of our Profession that doctors should be doctors *et preterea nil*, and that curing disease, or at least success in conciliating patients, was incompatible with the possession of a political judgment. Doctors made a boast of knowing and caring nothing about those public questions which interest all the world else; and, so far from daring to ascend the hustings or to avow decided politico-religious views, they occupied in political matters no more admirable *rôle* than that of Serjeant Eithersides.

A very few general elections have changed all this, and the Profession, without embarking in political agitations or professional discussions, has shown that its members have their own opinion, and will no longer allow subserviency to the ideas of their clients to forbid the expression of their views. While Sir Dominic Corrigan is thoroughly identified with medicine, and may be expected to throw his whole influence into the progress of medical matters in the House of Commons, yet he owes nothing of his new position to the Profession. He neither courted nor obtained the support of his Profession, and he takes his seat not at all identified, as Dr. Playfair is, with medical interests, but as the representative of the Radicalism of Dublin. His first appeal to the constituency gave great offence to his brethren, by omitting the least reference to medical matters, and he was feign to make a tardy reparation by the issue of a second address special to his own Profession.

Perhaps this omission materially increased the opposition which his candidature met with from the medical men; at all events, a very large proportion of the Profession thought fit to step forth from public neutrality and disavow any participation in his political views; and this protest has perpetuated its influence at the recent election in the entire ignoring of the Profession by Sir Dominic Corrigan, and the voting against him of very many of his medical brethren.

Considering Sir Dominic Corrigan's election with reference to the Medical Reforms now on the anvil, the advantage to the Profession of his voice in the matter is a question on which very different views will be entertained. The new medical M.P. will bring to the subject long experience, anxious thought, great administrative and discriminative power, and considerable eloquence; and if he enters Parliament without bias or prejudice, he will be acknowledged to possess qualifications of the greatest value in the settlement of the matters at issue. But he is a member of the Medical Council, thoroughly ingrained with University and Corporation sentiments, and, as readers of the proceedings of the Medical Council know, entertaining very strong and peculiar views. He has shown himself, moreover, persistent and unyielding in his opinions, and the Profession must, we fear, expect, therefore, to see Medical Reforms moulded to a certain extent in accordance with his hobbies.

Sir Dominic Corrigan's will be the loudest medical voice in the Legislature. Whether his powers will be exercised for the permanent benefit of the Profession in its relation to the public, remains for the experience of next session to show.

THE DISAGREEMENT AT NEWCASTLE.

We regret to see that a contemporary takes exception to the action of Drs. Stokes, Paget, and Rumsey at Newcastle, and considers their conduct as interfering with the freedom of the Association. We look upon this as a great mistake. These eminent Members of the General Medical Council could scarcely do less than proclaim their dissent from the opinions of the leaders of the Association.

It is well known that these leaders do not represent the members of the Association, and we are surprised that our contemporary should speak as if they did. Every one who opened his ears at Newcastle might hear the word "clique" spoken in a most contemptuous manner on every hand, might almost, without asking, satisfy himself that feelings of indignation are gradually accumulating that will either sweep away the existing organization, or compel it to give way to something like a really representative system. To say that "the action of the Direct Representation Committee has the entire approval of the members of the Association" is to display absolute ignorance of the sentiments of the Profession. It would be far more correct to assert that the general apathy of the many, and their absorption in other pursuits, has enabled a few men to carry out their wishes with the apparent concurrence of the Association.

Very few practitioners look upon this as a vital question, still fewer really understand it, therefore the committee has been suffered to do much as it pleased. But it must not be forgotten that the only time the Association has ever been appealed to, its judgment was in direct opposition to that committee. That judgment could not be gainsaid, but the committee obtained from its own clique permission to ignore it, and thus, in a manner that we believe has never been paralleled, it has been allowed to override the deliberate expression of the members of the Association. Such conduct would have been well met by a vote of want of confidence, but, as we have often said, there are the apathetic majority who would rather let things "slide," and therefore the committee still amuses itself.

As a political body, the Association does not exist. It in no way represents the Profession, and its own executive is not representative of its members. Yet that executive pretends to speak in the name of the Association. The thing is altogether ludicrous, and was quite condemned at the meeting of Members of the House of Commons, when it was, as we have already said, shown that in pretending to represent the Profession it was putting forward a claim to which it had no title whatever. This is a public question, and we, therefore, speak freely. We might go into other matters, as to the Council's report, and the many objections we heard urged against it; but it is scarcely worth while. Like almost everything else at Newcastle, the whole was accepted as a part of the holiday. Men go and look, and leave from year to year. They grumble about the names that year after year keep their places among the officials; but they will not take the trouble, or will not disturb the hollow harmony that the holiday time requires by insisting on some change for the better.

It is thus that a numerous society, pretending to advance the art of medicine, has degenerated into a mere co-operative printing association. The journal is all that results from the organization—a medium for printing the papers read at meetings, but which does not accomplish that end, as the branches find their proceedings growing "small by degrees and beautifully less," to make room for the productions of a few men, mere gossiping paragraphs, sensational reports, or stale portraits. There is no longer a deference to Science; but the worship of success in a commercial sense. Would it not be as well to change the name of this Society to that of "Medical *Journal* Association?"

As the opinion of Drs. Stokes, Paget, and Rumsey cannot but be respected, we rejoice that they said what they did, and only wish they had gone a little further; then, perhaps, the spirit of *laissez faire* might no longer control all.

REGULATION OF PROSTITUTION.

A measure has come into operation at St. Louis which is more stringent than might have been expected from the western world. All houses of ill-fame and of assignation within the city boundaries are at once to be reported by the police to the Board of Health. Then it is provided that—

"The said Board of Health shall divide the city into districts, and for each district shall appoint a physician, whose duty it shall be to visit, at least once a week, each of the houses of ill-fame, and rooms used or occupied by prostitutes, in his district; a list of these, together with a list of all prostitutes and their places of living, shall be furnished to him by the Board of Health, for his sole use and inspection. Such physician shall then carefully inquire into the sanitary condition of the prostitutes, and, if necessary, subject them to an examination; shall make all necessary orders and give all proper directions for their sanitary management: he may order the removal of any of the inmates to the hospital hereinafter designated; and in any case where there is danger of infection he shall order such removal, or such action as shall

remove such danger. He shall furnish weekly a full report of his action, and of the condition of all such houses and their inmates, to said Board of Health. The keeper or person in charge of every such house shall pay to such physician the sum of one dollar for each inmate, weekly, which money shall be delivered to the clerk of the Board of Health, subject to the order of the said board. Any person violating or disobeying the order of such physician, or obstructing, hindering, or preventing him from discharging his duties as herein prescribed, shall be deemed guilty of misdemeanour, and be fined not less than twenty dollars, provided that any person may, within three days, in writing, after its issue, appeal from any order of said physician to the Board of Health, which shall thereupon grant a hearing to such person, and its action thereupon shall be final in the premises, and disobedience of any order therein made be punishable as in this section provided."

Further, houses of correction and lock hospitals are to be provided, contagious sexual diseases are to be excluded from other hospitals, and the police commissioners are empowered to suppress any brothel at the request of the Board of Health.

It will be seen that at St. Louis it is not proposed to adopt any half measures. It remains to be seen whether so stringent an enactment will prove practicable. If so, perhaps the St. Louis Board of Health will request the police commissioners to suppress *all* the houses of ill-fame, and so put an end to the evil of clandestine prostitution. That, we suppose, will not be easy to suppress. This enactment makes the medical man the collector of the money, a point to which most would take exception, and yet the sixth clause repeats this which, we do not like. Thus :—

"Each physician appointed by the Board of Health, as prescribed by section three of this ordinance, shall, in addition to the examining fee, collect such sum from each keeper of any house of ill-fame, and from each prostitute, as may be fixed or prescribed by the Board of Health jointly with the Board of Police Commissioners. Such fees shall be known as hospital dues, and shall be paid to the clerk of the Board of Health, who shall hold the same subject to order of said board."

The measure is a bold one, but something like it has been proposed in this country. Dr. H. W. Williams, some time ago, proposed in our columns a scheme by which the expenses could be paid of regulating prostitution and subjecting it to medical supervision. We think, indeed, the scheme of Dr. Williams was a better one than has been adopted in America, and we, therefore, commend it to the St. Louis authority.

Notes on Current Topics.

Medical Officers, Greenwich Hospital.

The School of the Greenwich Hospital is to be remodelled. A superintendent and a medical officer have been appointed. The latter is to diagnose, dispense, operate when necessary, act occasionally as superintendent (in the absence of *that* gentleman), and in every way become the recognised "smart boy" to the establishment. Are "My Lords" really sincere in their arrangements? Have they consulted the Medical Director-General in the matter of their medical appointment, and does that experienced gentleman recommend that *one* medical officer only be selected to discharge the duty of professionally attending to the medical and surgical wants of 800 scholars, independent of the other duties allotted to him?

Health of the City of London Police.

Mr. P. Childs, F.R.C.S., has issued the annual report of the sickness and mortality of the City of London Police.

The strength of the *City* section of the force averages 700 men, of whom about one-fourth are unmarried, and more prone to sickness than their married comrades, yet their mortality has been less.

During the year 340 men were admitted to hospital, six died, and the average duration of illness was 11·45 days.

Rheumatism and catarrh appear to be prevailing disorders, and the men on night duty suffer from bad health much more than those on day duty.

During the year 148 candidates for admission to the force were examined, out of which number 47 were rejected. Compared with other "arms of the service," the City of London police contrasts favourably.

Report on Chelsea Hospital.

The committee appointed to inquire into the establishments of Chelsea and Kilmainham have issued their report. Chelsea Hospital accommodates 538 in-pensioners. No candidate is admitted under fifty years of age, unless suffering from the effects of a disability contracted in the service, or specially fitted for some employment in the hospital. The age of the oldest in-pensioner is ninety-four; there are 169 pensioners over seventy and under eighty, and 58 between eighty and ninety. The average cost of each pensioner is 2s. 3d. a day. The committee laud the general arrangements in the hospital and the infirmary attached to it. Although the men might consider an increase of out-pension as superior to the advantages to be derived from residence within the walls of the building, it would seem that there are several considerations to make the committee hesitate before acceding to this. In the first place, a large number of in-pensioners are either patients in the infirmary or require frequent medical attendance; and it is almost certain that in many of these cases no amount of increased pension would enable them to be cared for outside the hospital better than they are at present. It is also thought probable that if the men were out-pensioners with increased pensions, many of them would find their way to workhouses, or become the prey of lodging-house keepers. The committee are not prepared to recommend the abolition of the system. They think that some reduction might be made in the administrative staff without impairing its efficiency; and that its monastic character might be overcome by making some arrangement for the reception of a limited number of married pensioners, with their wives, within the institution. The committee make other recommendations; and it is gratifying to find that the condition of Chelsea Hospital contrasts favourably with that of other establishments. The report of the committee so far deals exclusively with Chelsea Hospital.

War.

All the assistants of the Berlin Chemical Laboratory have gone to the war as apothecaries. Great numbers of students have also gone forward. The University classes have been closed. Some of the higher schools have actually sent their elder pupils into the field.

"All at Ninepence-Ha'p'ny."

The above *odd* sum is the charge lately made by a London "practitioner" (registered) to a patient of considerable means for *advice, four-ounce mixture,* and *one powder.* O tempora! O mores! What next?

Since we penned the foregoing, a circular—the copy of which we submit—has been placed in our hands:

——————— Street.

SELF-SUPPORTING DISPENSARY.

This Dispeusary was opened by

Mr. ———, M.R.C.S. and L.S.A.

To afford Medical and Surgical relief to the necessitous and deserving.

Attendance every morning from nine to twelve, and every evening from six until nine o'clock.

Each Patient must bring a clean bottle, also a gallipot and bandages if required.

To meet the working expenses, the charge for each Patient will be Fourpence in the morning and Sixpence in the evening.

The charge includes advice, medicine, and *every other requisite.*

A visit to any Dispensary Patient within a radius of two miles will be One Shilling.

Of *such* are the ills to which the flesh is heir.

Rennett Extracts.

The allegation has been made—with what truth we know not—and generally believed, that the essence of rennett usually sold contains no pepsine whatever, knows nothing of the calf's stomach, and is little else than vinegar and water. There is obviously the greatest temptation to sophistication, inasmuch as the genuine article would cost much time and trouble, and the adulterated one—which, as far as the consumer could judge, would serve its purpose as well or better—would involve none at all. The separation of the curd is, however, the smallest part of the duty of essence of rennett, and for medical purposes any composition not containing the peptic principle would be worse than useless.

Messrs. M'Master and Co., of Dublin, have commenced the manufacture of a new essence introduced by Mr. Warren. We have made an examination of it, and we find that it is but faintly acid, and contains only a very small quantity of chloride, which, we take for granted, is common salt. It coagulates milk very readily, and appears to be in every respect what it professes to be. Dr. Cameron, the analyst of the City of Dublin, has also examined it, and certifies in the strongest terms to its purity.

Contagious Diseases Act at Portsmouth.

The Director-General of the Naval Medical Department, Dr. Armstrong, during his recent official visit to Portsmouth, was engaged in investigating the working of the Contagious Diseases Act at that port, and it is believed that one result of his inquiries will be that the medical duties will be entrusted to a surgeon belonging to the naval service, instead of to a private practitioner, as is at present the case.

Anæsthetics, their Relative Safety.

From a careful examination of the statistics of 209,893 cases, Professor E. Andrews gives in the *Chicago Medical Examiner* the following estimate of the relative danger from different anæsthetics:—Sul. ether, 1 death to 23,204 administrations; chloroform, 1 death to 2,723 administrations; mixed chloroform and ether, 1 death to 5,588 administrations; bichloride of methylene, 1 death to 7,000 administrations; nitrous oxide, no death in 75,000 administrations.

Somnambulism.

We have observed of late several accidents which have befallen somnambulists announced in the daily papers, occurrences which we consider should never have happened had the disease been understood in its details by the people around the unhappy sufferers. In order that the malady may be more properly understood, we briefly allude to the subject in the form of annotation, guarding ourselves against any personal allusions to particular cases, one of which that has just come to our ears being singularly painful to the respected family of the unfortunate victim; unfortunate in the twofold sense of suffering from somnambulism, and in being ignorantly neglected. We do not purpose referring to the *symptomatic* or morbid somnambulism, which is met with in the course of certain nervous diseases, and which either accompany the malady to its termination, or yield with it to a judicious treatment; nor to the *artificial* somnambulism aroused into action by the mesmerist or animal magnetizer; but our duty is connected with *essential* somnambulism, which is the particular disposition of the nervous system of persons in other respects perfectly healthy, intimately connected with the train of phenomena developed in the act of dreaming, insensible to external agents, but obedient to a consciousness centred in the brain and spinal cord, which can no more be cured by the physician than the act of dreaming can be dispelled by those who suffer so severely from nightmare. However healthy the *essential* somnambulist may be in his waking moments, it is the doctor's function to advise against a danger which is always impending, and to which every sensible minded patient should unmurmuringly submit. The treatment must be preventative; the sufferer from this grave infirmity should be compelled to occupy a secure room, spare of furniture, with barricaded windows; the door should be secured from without by the occupant of a neighbouring chamber, and the patient made alive to his ailment. There is no object of good resulting in concealment. All the accidents which occur are due to thoughtlessness and carelessness, and a studied eagerness to conceal from the patient the fact he is a sleep-walker, which is a mistaken kindness, for this want of candour and precaution have plunged many a family into mourning, and sent many a victim to an early grave. The treatment during a fit, when sensibility is extinguished, should never be to awaken the somnambulist at once; the shock has been known to produce lamentable consequences; but we should try to enter into the course of ideas followed by the patient, save him from danger tenderly and studiously, and endeavour to guide and direct him gradually into wakefulness and reasonableness. Whilst the great object should be prevention, we must guard also against those exciting causes most likely calculated to produce heavy sleep, nightmare, and disagreeable dreams, as heavy suppers, wines, &c.; and we must also counteract all irritability of habit and system, and quickly remedy every morbid condition of stomach that may present itself; but even when least ex-

pected, and the patient's health is best, sleep-walking takes place, and, if no precautions are taken, we have very sad and deplorable accidents occurring.

Water-Cress.

Several severe cases of diarrhœa, traceable to eating water-cress, came under our notice last week, and intractable they proved until the cress was dislodged from the intestinal tract. Allowing that water-cress, when young and seasonable, is a harmless luxury, we are surprised inspectors of markets allow at this time of the year such an importation. We suppose water-cress always sounds as it should eat, and poor people never trouble about thinking until infected by disease, that those plants which live entirely on water, and which require a preponderating quantity as the medium of their existence, become injured during protracted drought, acrid owing to the stagnant, muddy water which barely gives them life—accordingly, most unwholesome and deleterious. We think inspectors of markets, for the sake of the health of the people, should possess the power to prevent unseasonable vegetables and fish being sold, in the same way as they have the authority vested in them of seizing decomposed food.

The Holbeach Board of Guardians.

We observe the Holbeach Board of Guardians are sorely perplexed by one of the Medical Officers, who returns the diseases of his sick paupers in a nomenclature too difficult for their comprehension. They want a standard and classified nomenclature specially for themselves, since such diseases as icterus, ascites, enlarged bursæ, &c., puzzle them no little. If we err not, it was a member of this worthy community who, hearing a few weeks ago that one of the sick was having chlorodyne, became angry in his horror, whilst he failed to catch the correct word, at such wilful extravagance as giving *Collared kyne* to a pauper, which he insisted upon was nothing more or less than a luxury. With all due respect, then, to our friends in the fenny district, we don't believe it possible to frame a nomenclature that would either please them, or that they could comprehend. "A little knowledge is a dangerous thing," so they had better leave matters to their Medical Officers, and remain in the *Nephalococcygia* of Aurora Leigh, which is a territory in the clouds assigned to cuckoos for the building of their nests, and where the inmates of the Holbeach Workhouse possess their estates.

Death from Fright.

We noticed a few weeks ago in the daily papers the case of a child recorded, who was frightened at night by a servant, which, ultimately, terminated fatally. This foolish frolic, out of which no good can arise, should be sternly discountenanced; but the instance before us, considering the influence sudden fright exercises upon some people, makes us ponder and ask ourselves the question how many of those sudden deaths may not be attributed to fright, so generally accounted for by a diseased heart. We knew a gentleman a few years ago whom we heard repeatedly assert that, if he ever saw any unaccountable phenomenon, he believed it would kill him directly. Strange to say, this man went out fowling one evening, and, as he did not return, his relations went to seek him, when they discovered him on his knees at the back of a ditch with the gun resting on his right shoulder and on the edge of the ditch as in the act of taking aim at some object, but quite dead. He never suffered from organic disease previously.

The Climate of Ireland.

A writer in *Nature*, under the initials W. D. C., refers to the climate of Ireland, and points out, on scientific grounds, the peculiar reference of the question to the agricultural prosperity of that country. He says—"It has been stated in the House of Commons, as a proof of the retrograde condition of Ireland, that its production of cereals has of late years diminished, while its pasture lands have increased. To this it ought to have been answered that the decreased cultivation of cereals, and of wheat in particular, was a proof of improved knowledge. It is commonly stated that Ireland has a very wet climate. It has, undoubtedly, a humid atmosphere, owing, perhaps, in some measure, to a large extent of undrained surface. But the total quantity of rain that falls in Ireland, little, if at all, exceeds the rainfall of England. In its distribution through the year, however, it differs much from the latter The vicinity of the Atlantic gives Ireland, in the highest degree, an oceanic and, to some extent, an equatorial climate. Winter in the Green Isle is extremely mild. The southern and western coasts, though seldom free from wind and drizzling rain, never experience severe cold. Vegetation remains in mid-winter brilliantly green and undepressed. As spring advances, everything seems to flourish; crops of all kinds promise abundance, and already (in May) harvest seems to be close at hand. But now the scene changes—there is little or no dry summer. When the sun is highest in the meridian, there is a constantly clouded sky and no sunshine. Rain begins to fall in June. The rainfall in July is the heaviest in the year. In August the rain begins to abate; but clear skies and bright sunshine cannot be reckoned on till September, when the shortened days and the sun's declination have much reduced the solar heat. From this it will be seen that the character of the Irish climate is, that under it everything grows well, but that the process of ripening is painfully slow and uncertain. Now, to cultivators of cereals the success of this process is of the utmost importance. The corn harvest in Ireland falls late in the year, September and October, when the days are short and nocturnal frosts not unfrequent. The plains of Southern Russia, or of the Red River in Canada, with a comparatively rigorous climate, far excel Ireland as wheat-producing countries, because their short summer is one of uninterrupted fierce sunshine. Under these circumstances it is evident that the Irish farmer ought to cultivate cereals no further than is requisite for the economy of his farm, and to look to other productions for his profit. Fortunately, there is a husbandry for the pursuit of which he enjoys peculiar advantages. In green crops no country can compete with Ireland, where, nevertheless, they are still little known or esteemed by the multitude."

The Pathology and Rationale of Cholera.

The results of the Army Sanitary Commission on Dr. Murray's Report on the Treatment of Cholera have been published as an appendix to the *Gazette of India*. Drs. Hope Grant, Galton, Sutherland, Massy, Murray, Baker, Martin, and Rawlinson have decided that the cause of

cholera is still unknown, and that it may result from anything; and that the best thing to be done, when it appears in one place, is to remove to another. All are agreed that from the moment the first symptoms appear, even in their mildest and most simple form, treatment is of vital importance.

On, St. Pancras!

A SHORT time since we cautioned the Guardians of St. Pancras Parish against entertaining the very absurd suggestion made to them of reducing the number of district medical officers, and stated that the requirements of the poor demanded rather its increase than its diminution. In our views of the case we felt certain the Poor-law Board would heartily join, and that the intelligence and common sense of the Guardians themselves would likewise cause them, in a little time, to be with us. It now affords us very great pleasure indeed to be able to state that an *increase* of district medical officers has been decided on, and with the sanction of the Poor-law Board—*de bonne grâce*.

To complete the scheme, and to make it truly effective, the Poor-law Guardians of St. Pancras Parish should now boldly decide on giving their district medical officers remuneration at the rate of £350 per annum, and thereby enable them to devote their time *exclusively* to parish duties.

We shall feel extremely glad to hear that the Guardians of St. Pancras Parish take the initiative in this matter; for, to see the district medical officers of the Metropolis attend to parish duties solely, is just a question of time; and, should the Guardians act on our suggestion, they will simply be the precursors to a beneficent change that must come!

Dr. Wilson, R.N.

BY the decease of this honourable physician to the Queen there is a vacancy to that appointment, and to a good-service pension.

The "Lancet's" Inconsistency.

OUR cotemporary's, the *Lancet's*, inconsistency on the insane, and upon the subject of Lunatic Asylums generally, is only to be equalled by the editor's series of editorial articles on the treatment of sexual disorders; or, to be more accurate, spermatic diseases. Lately we drew attention to the dangerous nature of the remedies advocated, and this week we are glad to notice that our observations are not lost upon even our cotemporary. After recommending matrimony as a physiological remedy for incurable cases of masturbation one week, it is surprising to find the next week, after our severe strictures on this point, that not only is the formerly preached doctrine revoked, but it is held that matrimony, entered into by a man of questionable power, is an immoral and unmanly act. The virtue of the deceived wife is held up to cloak former remarks. Sexual diseases in the woman are also accounted for by these imprudent marriages. We ask, in the name of common sense—allowing that the *Lancet* has taken advantage of our articles, and made reparation this week—why preach on the 23rd of July last—"The last cases, those in which there is generally libidinous direction of the mind, are the most difficult to treat, since they usually imply the existence of some mental vice or infirmity—often a nature that is distinctly, even if remotely, akin to insanity. Words of counsel or warning are thrown off by such patients as water by a duck's back. *For them the physiological remedy of regular intercourse is probably the only one that would be available;*" and this week advocate the very opposite? This it was aroused our anger, and made us so severe upon our cotemporary; that he has rectified his error we freely acknowledge, but at the cost of wonted inconsistency on his part.

"The Haunted Baronet."

THERE is being published in the columns of *Belgravia* a serial tale, from the pen of a well-known and clever novelist, Mr. Le Fanu, under the title of "The Haunted Baronet." We have nothing to say against the general plot of the story, but we object to the manner Mr. Le Fanu introduces one of his characters, Doctor Torvey, and still more do we regret the unreal manner of dealing with an imaginary Medical practitioner. In describing a character there is nothing like keeping to reality, and, accordingly, to truth. There is not a Medical man of the present day in ten thousand would approach the bedside of a patient thus:—"Here you see, poor fellow, here's cadaveric stiffness; it's very melancholy, but it's all over, he's gone; there's no good trying any more. Come here, Mrs. Jeliper. Did you ever see anyone dead? Look at his eyes, look at his mouth. You ought to have known that with half an eye, and you know trying anything more is all my eye." This over, a man, to all intents and purposes, dead from drowning. All pronounce him deceased. The doctor regales himself with some wine, and remarks—"You have got him very straight, straighter than I thought you could; but the large joints were not so stiff. A very little longer, and you would hardly have got him into his coffin. He'll want a very long one, poor fellow. Short cake is life, man"; and a lot more rubbish of this sort carries us half through the night, when the corpse wakens, gets out of bed, and frightens almost to death the watches at his wake! We don't know where Mr. Le Fanu got his Medical character; it is a poor make-up; spoils the story by an impossible occurrence; and shows the reader Mr. Le Fanu is absolutely ignorant of the way a Medical gentleman does his duty. If Mr. Le Fanu knew more of the country practitioner and his work, he would not have the heart or excuse to slander him—even at the expense of ruining his tale.

It is not too late for Mr. Le Fanu to modify the character he has selected; but, in making a change, we recommend him to adhere to the Medical man of the present day, to inquire into his method of practising, and make himself acquainted with his habits. No doctor that we can know ever acted as this Doctor Torvey, the offspring of Mr. Le Fanu's fertile but, in this instance, unjust imagination, which is nothing more or less than a cruel slander upon an overworked, underpaid class of professional men, who are not valued as they deserve, although their lives are ever at the disposal of their patients, and all risk in contracting disease set aside in the demand of duty. We hope the continuation of the tale will show that our hint, for Mr. Le Fanu's own sake, and that of *Belgravia*, since his remarks cannot injure our brethren, has been acted upon.

THIRTY-THREE ladies have been dubbed Bachelors of Arts at Vasser College, U.S.

Diarrhœa is decreasing in London, but not in the other large towns.

The baby-farming case has been postponed to next session.

A death from chloroform at the Liverpool Infirmary is reported.

The foot-and-mouth disease is spreading in several parts of England.

The Twelfth Report of the Medical Officer of Health, to be issued immediately, will contain some account of the Medical Reform efforts of the Privy Council.

In the Medical Department of Harvard University, Washington, are twenty-three coloured and seven white students.

Mr. Solly has declined to deliver the next Hunterian Oration at the Royal College of Surgeons. It will probably be delivered by the President.

318 members of the Profession attended the late meeting of the British Medical Association in Newcastle, of whom Ireland contributed only eight.

Mr. H. Pownall, late Chairman of the Middlesex Sessions, submitted recently to the Committee of the Society for Aid to the Sick and Wounded a sample of very finely picked oakum, which has been used in some of the London hospitals, as a substitute for lint in dressing wounds.

In the St. Pancras parish lately, a young married woman, named Cox, committed suicide by means of her husband's pen-knife. The gash extended from ear to ear, dividing the superficial vessels, the attachments of the os hyoides and glossal muscles, and exposing the posterior wall of the fauces. Neither sterno-mastoid muscles nor carotid arteries were injured. Hereditary tendency to insanity is attributed as the cause of this sanguinary deed.

The Thirtieth Report of the Petition Committee of the House of Commons shows that Dr. Brady's Medical Superannuation Bill did not receive from the Poor-law Medical Officers of England that active support which the efforts of its introducer, and the objects of the measure, deserved. In favour of the Bill 276 petitions were presented, of which 9 emanated from Corporations or Associations, and were officially signed by the responsible officers. These 276 petitions had only 722 signatures, or not 3 for each. Against the Bill 6 petitions, all from Boards of Guardians, were presented.

The *United Service Gazette* hears, upon excellent authority, that steps are being taken to remodel what remains of the old Army Hospital Corps. At present the subordinate staff of a military hospital is furnished partly by the Hospital Corps, numbering about 300 men, and partly by the regimental establishments, consisting of an hospital sergeant and two or three orderlies, according to whether the regiment is cavalry or infantry. It is contemplated to bring about a fusion of these two elements, so as to make one large corps that shall be movable at will from one regiment to another, and which, in the event of an outbreak of war, would form the nucleus for a large body of trained hospital attendants.

The Thirtieth Report of the Committee of the House of Commons on Petitions tells an eloquent tale of the feeling of the Profession towards the late departed, but not lamented, Medical Bill. Three Petitions were presented absolutely antagonistic to it, containing 343 signatures; 351 Petitions praying for alterations in its provisions, to which 9,025 signatures were attached, several of which represented, officially, Corporations or Associations of the Profession. Not a single voice was raised in its favour; and even the Homœopaths thought so little of it as a protection against quackery that they paid it the bad compliment of asking to be included in its provisions. One petition, with 140 signatures, was presented in furtherance of this object.

It appears unnecessary to go beyond these facts in condemnation of the Bill. Even from Universities, in whose interests it forsook all its principles, it received no favour; and it is obvious that, while it might have been tolerated by Licensing Bodies and the Medical Council, for the same reason that the Irish Land Bill was tolerated by the Irish landlords, because it was not so bad as was feared, it was received by the Profession with unalloyed dislike and distrust.

We wonder whether the Members of the House ever hear, even in the aggregate, of the petitions which are directed to lie on, or rather under, the table.

Experiments on the Absorbent Power of the Bladder.

Physicians and physiologists are by no means agreed on th power of absorption possessed by the mucous membrane of the urinary bladder. While some assert that the excrementitious substances of the urine would constantly be carried back to the circulation if this absorption took place, others deny this fact. M. Beclard asserts that the fluids contained in the excretory reservoirs (the urinary and biliary bladders) are in the process of absorption. We should remember that the epithelial lining membrane of these viscera consists of stratified layers of pavement epithelium, which is less easily traversed by fluids than the simple membrane of the serous cavities. Nevertheless, a slight absorption takes place in these organs. The morning urine, which has remained a part of the night in the bladder, is of a darker colour than the urine of the day, and also than that which has been passed after taking fluids.

Recent experiments of Bert and Joylet confirm those of M. Ségalas, and demonstrate the fact that the bladder in health rapidly absorbs certain substances introduced into it. A solution of strychnia, one part in one hundred, was carefully injected into the bladders of several rabbits, causing their death at the end of four minutes, although a few milligrammes only of the salt had been introduced, and a part of this had been removed by injections of water on the first appearance of symptoms of poisoning. Autopsy showed that the mucous membrane of the viscus remained healthy. Injections of a solution of atropia did not kill the animal or sensibly diminish the pupil.

The possibility of causing certain substances to be absorbed by the healthy bladder offers a therapeutic resource of considerable importance; in cholera, for instance, where medicines cannot be absorbed by the stomach and intestines, advantage can be taken of the circumstance that the bladder is habitually empty, for the injection of certain solutions which experience has shown to be absorbed. During an epidemic of cholera, M. Brown Séquard injected into the bladder of several patients laudanum and alkaline carbonates, and he was convinced that these substances were absorbed in considerable amounts. Experiments of a similar character have been tried in Germany and Italy.—*L'Union Méd.*

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the MEDICAL PRESS.)

No. I.

OUR readers will remember that last month we published *in extenso* the remarkable paper on "The Prospects of the Sewage Question," read by Dr. Letheby before the Metropolitan Association of Medical Officers of Health, and that we followed this up with a full report of the discussion that took place.

This important contribution to our knowledge of the most urgent sanitary question of the day has brought out further discussion in various quarters. Since then, too, another blue book has appeared by the Royal Commissioners on the Pollution of Rivers, and the Health Department of the Social Science Association has arranged that the first special subject for discussion at the Congress next month shall be the best method of disposing of sewage and excreta.

For the above and other reasons this has appeared to us a peculiarly favourable time to take up in earnest the great questions relating to sewage—questions which, whether regarded from a hygienic, agricultural, or commercial point of view, cannot be too thoroughly sifted, and which in all their phases can only be grasped by medical men.

We therefore determined to employ the machinery at our command for the preparation of one of these special reports for which the MEDICAL PRESS has long been well known. The duty of our reporters is to collect and lay before our readers in the simplest form the most important facts, so as to furnish a complete digest of the results that have been attained, from which we may afterwards draw such inferences as the inquiry may justify.

As the chemical investigations must of necessity be of the utmost importance in such an inquiry, and as Dr. Letheby has spent much time in these special investigations, and his authority upon every point likely to turn up is second to that of no living man, as soon as we had determined to issue a special report, our chief London editor applied to his learned colleague for permission to peruse some of his notes on the places he had visited—a permission that was more than accorded, for the Doctor at once freely placed at his disposal the whole of the notes he had taken on the actual condition of the sewage farms of this country, and of all the works where chemical processes are employed for the purpose of defæcating sewage. This generous offer was at once accepted, and these notes will accordingly furnish the basis of this report; for we shall publish a condensed summary of the whole, so as to provide our readers with a reliable account of what has been done at every place where any attempt has been made to cope with the sewage question.

Our staff having also been promised the assistance of other competent observers who have visited the various places, we trust that the facts we have to submit, and the conclusions we may have to deduce, will take rank as of permanent value, and assist in the solution of a great national problem. The plan of our report is simple: we shall commence with an account of the several sewage farms, continuing them from week to week, and afterwards proceed to describe the various precipitating processes. In our next we shall report on the

ALDERSHOT SEWAGE FARM.

SCOTLAND.

WE regret to record the death of Dr. John Adamson, who for many years occupied a prominent position as the leading medical practitioner in the City of St. Andrew's. The respect in which he was held is evinced by the universal expressions of regret which his death has called forth.

Summary of Science.

(Specially edited for the MEDICAL PRESS AND CIRCULAR.)

BY C. TICHBORNE, F.C.S., M.R.I.A.

Mem. Council Royal Geological Society of Ireland, Chemist to the Apothecaries Hall of Ireland, &c., &c.

ON THE DIFFERENCE BETWEEN A HAND AND A FOOT.

Dr. HAUGHTON, in a fourth communication upon animal mechanics, considers this subject in connection with the flexor tendons. "The fore feet of vertebrate animals," says the author, "are often used merely as organs of locomotion like the hind feet, and in the higher mammals they are more or less cephalized or appropriated to the use of the brain. The proper use of the hand is to grasp, that of the foot to propel by the intervention of the ground." In a hand proper the strength of each portion of a tendon is proportioned to the force it is required to transmit, and we should, therefore, expect the strength of the tendon above the wrist to be greater than the united strength of the finger-tendons. Conversely, in a foot, we should expect the united strengths of the flexor tendons of the toes to exceed the strength of the flexor tendons above the heel. The author gives the result of his investigations in connection with some thirty-six animals. All the animals realized the typical idea of a true foot with a variable amount of friction at the ankle-joint, this friction disappearing altogether in the Boomer Kangaroo, whose method of progression realizes absolute mechanical perfection, as no force is consumed by the friction of the flexor tendons at the heel. The only animals whose feet deviate from the typical foot were three—viz., the Alligator, Porcupine, and Phalanger; in these the foot has the mechanical action of a hand, and the flexor tendons above the ankles exceed those below.

Dr. Haughton operates in the following manner: He measures the relative strengths of the deep flexor tendons of the hand above and below the wrist, and the relative strengths of the long flexor tendons of the foot above and below the ankle in the following manner: He weighed certain lengths of the tendons above the wrist and ankle and compared their weights with the weights of equal lengths of the flexor tendons of the fingers or toes, assuming that the weights of equal lengths are proportional to their cross sections, and then again proportional to the strengths of the tendons at the place of sections. The difference between the weights above and below the joint represents the sum of all the frictions experienced by the two tendons between the points of section.

CYCLOPIC ACID.

This is the name applied by Mr. Church to a substance which he has procured from the *Cyclopia Vogelii*. When dis-

solved in soda it gives an intense greenish yellow fluorescence. The fluorescence, however, is not permanent, and disappears in some hours. It is soluble in ether, alcohol, and water, and is purified by crystallization from alcohol. The author gives it the formula—

$$C_7 H_8 O_4$$

and the ammonium salt as having the composition—

$$C_7 H_6 (NH_4)_2 O_4$$

PREPARATION OF SODA FROM SODIUM.

Cosmos gives the following as the method pursued in preparing pure soda which is now largely made in England: A silver vessel is used for making it of a deep semi-spherical form, and having a capacity of about forty litres of water, a few drops of distilled water are introduced and a piece of sodium is added cut in a square of about half a cubic inch. The silver vase is turned round, a stream of cold water flowing at the same time round the exterior of the vessel. By this arrangement an explosion of the liberated hydrogen is avoided, fresh fragments of sodium and water are alternately added, until a considerable quantity has collected; the mass is then evaporated to dryness and fused.

INVESTIGATIONS ON THE NERVOUS SYSTEM.

Dr. Augustus Waller, in the Croonian Lecture for May, 1870, says that it is known that, after a nerve has been disconnected from the central organs, its medullary part undergoes a series of changes. The tubular medulla, or white substance, is disintegrated, and finally converted into a dark granular matter. On this alteration Dr. Waller founds his method of investigation, as it enables the inquirer to distinguish the altered from the sound fibres. The author applied his method to the elucidation of the functions of the ganglions or swellings found on the origin of many nerves. On dividing the roots of the spinal nerves it was found, after a certain lapse of time, that on the posterior root, which is alone possessed of a ganglion, the central segument remaining in connection with the spinal cord became disorganized, and its elements passed into a state of granular degeneration, whereas, in the distal segments remaining in connection with the ganglion the nervous elements retain all their normal structure, evidently showing that continuity with the spinal cord does not prevent it from becoming disorganised, whereas, its connection with the inter-vertebral ganglion suffices to preserve its integrity of structure. In the divided anterior root the phenomenon takes place in an exactly inverse manner from the former. The author arrives at the conclusion that the spinal cord confers on the anterior root that unknown vital power whereby its elements resist granular disorganization, whereas, for the posterior root, on the contrary, the preservative power is no longer an attribute of the spinal cord, but resides in the ganglion. The author pointed out the important bearing these results had on pathology, that henceforth, in diseases of the spinal cord and of the brain, experimenters had to endeavour, in pathological examinations of those parts, to ascertain in each case how far the alterations could be referred to the separation of a part from its tropic centre.

The author then treats of the vagus, which, at its origin, is formed by roots springing from the medulla oblongata, to which is added afterwards a considerable branch from the accessories which joins and mingles with the pure vagus, and with which its fibres become intimately blended. The problem to be solved, therefore, is the precise functions of each or of either (the accessories or pure vagus) before their anastomosis. Professor C. Bernard had succeeded in entirely destroying the power of the accessories by evulsion of its roots, and had arrived at the conclusion that all the fibres of this nerve are distributed to the laryngeal muscles, whose functions are connected with the production of vocal sounds, whilst, other fibres from the pure vagus govern certain nutritive or organic functions connected with respiration. In order to separate the functions of the one from the other it is requisite to destroy all the fibres of the accessories by Dr. Waller's process, and leave the others intact, which has been done most effectually by Dr. Waller's plan, first disconnecting the accessories from the medulla on Bernard's plan, and afterwards allowing the animal to live sufficiently long for fatty degeneration to take place. The vagus then having been galvanized at every part of its length it was found impossible to affect either the action of the heart or the stomach, and the only result is to cause slight movements of the larynx. The author then proceeded to the consideration of the pneumogastric and sympathetic nerves in man in health and in certain affections of the nervous system, and, lastly, referred to the effects of collapse and syncope produced by the irritation of these nerves. In general, the effects are confined to a state of depression more or less strong, which may be moderated by graduating the degree of irritation applied. He believed that this fact may be taken advantage of and applied as a means of inducing astenia or debility for the purpose of facilitating certain operations in surgery, such as the reductions of fractures, or even hernia, in lieu of the administration of other anæsthetics such as chloroform, &c., which present a certain degree of danger not attending the compression of the vagus.

Dr. Waller then cites a case of dislocation of the head of the humerus beneath the clavicle by a fall down stairs. After numerous unavailing attempts to reduce the luxation, chloroform was sent for to facilitate the operation by inducing anæsthesia, but in the meantime an attempt was made, assisted by compression of the vagus. One applied compression, whilst the other two operators performed extension and counter extension. In two or three minutes, just as the carotids ceased to be felt to beat, a sudden click indicated the return of the bone to the cavity.

Correspondence.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—The case recorded by Mr. R. L. Johnson, in your last number, recalls to my mind a somewhat similar one which fell under my observation some years ago.

I had been in attendance for some time previously on a poor widow woman in a far advanced stage of phthisis, and was hastily summoned by her one day to see her daughter, whose arm she (the daughter) said had been broken by a blow of a ruler, or some such instrument, inflicted by the poor invalid. This child, about fourteen or fifteen years old, was a very wayward girl, and gave her poor mother a great deal of annoyance, and on the present occasion had provoked her to inflict the blow referred to. On examining her wrist, she directed my attention to a projecting body under the skin, covering the lower end of the radius, which the girl positively said was the end of the broken bone. However, from its mobility and sharpness, I did not believe this to be the fact. Having my pocket-case about me, I had not the opportunity of showing such readiness of resource in devising *impromptu* surgical dynamics as Mr. J. I cut down on the projecting point, and with a forceps laid hold of the object, which proved to be a long darning needle, which the young urchin had forced under the skin and up the arm so as completely to imbed it in the subcutaneous cellular tissue, only to use it as an instrument of torture for her poor mother! A strange phase of juvenile depravity! There was no evidence of any hysterical derangement to warrant any conclusion more favourable to the morals of the girl.

I am, &c.,

E. P. SHARKEY, M.B.

Ballinasloe, August 12, 1870.

The Public Health in New York.—The Fourth Annual Report of the New York Board of Health has been published. The volume contains an astonishing amount of sanitary lore. There are separate reports from every official of the board, upon his own specific branch of administration. We must be content to note the fact that, in addition to the sanitary reports, the volume deals with many other subjects coming within the province of a sanitary board. For instance, reports on the Sources of Unhealthiness in crowded assemblies and places of popular amusement, on the Quality of the Milk-supply of the City, and on Poisonous Cosmetics. The New York Board of Health has control over the water, food, and gas supplies of the city, over the management of tenement houses, and over offensive trades and quarantines. The Home Secretary, Mr. Bruce, has promised to deal with the government of London, and it might be well that he make himself acquainted with the manner in which the requirements of sanitary science should be met.

Gleanings.

The Correlations of Temperature, Pulse, and Respiration in Phthisis.

By Assistant-Surgeon Boileau, M.B., 29th Regiment, Quebec.

(From the *Army Medical Department Report.*)

(Continued.)

Corporal T. P., aged twenty-four, service six years, was admitted into hospital on the 9th of April, 1867. He had had fever of eleven days' duration in January of the same year. Shortly after his discharge from hospital, he got a cough which troubled him every morning and every evening. It was at first "quite dry," but latterly he expectorated, pretty freely, a "yellowish matter." Within the last month he has had hæmoptysis, but it occurred once only. He appears to be rather a healthy young fellow, but he has decidedly lost flesh. Both his parents died of consumption, and one of his sisters at the age of nineteen. His skin is soft and delicate. The thoracic movements are not expansile; temperature, 99·4 deg. pulse, sitting, 92, and standing 100. Percussion gives a shade of dulness over the right infra-clavicular region; and here the systolic sound is very audible—more so than in the corresponding opposite region. There is no rough breathing, but the expiratory murmur is prolonged, and is quite equal in length and intensity to the inspiratory. There is, at the end of every forced inspiration, a moist râle in the right lung.

Within ten days I brought this man before an Invaliding Board, the members of which confirmed my diagnosis of phthisis. Nine days after admission, I find the following remark in my case book:—"The sputa is puriform, dulness marked, and deep inspiration produces sonorous râles."

The first observation gave an elevated temperature, 99·4 deg. but subsequently I took 23, morning and evening, with the result that it varied from 98 deg. to 98·8 deg.

On the 2nd of May (twenty-three days after admission) he left Malta for England, and was eventually discharged the Service from Netley Hospital.

Here we have a case in which, for eleven days certainly, a man's temperature was normal, Now if during that time he had been examined by one who believed that elevation of temperature was the constant accompaniment of phthisis, he would have been pronounced free from the disease, whereas he not only had tuberculosis, but some softening of the morbid deposit.

As a further example of the correlation of temperature, pulse, and respiratiou in phthisis, the following are specimens of a large number of observations made on a woman aged thirty, the wife of a soldier in Malta. Her disease extended over a period of four years. The observations were made at various times within eighteen months of her death.

Temperature, 100·8 deg.; pulse, 116; respiration, 48. Symptoms: great debilty, progressive emaciation, dyspnœa, cough, hæmoptysis, anorexia, nausea, vomiting, sputa puriform and mummular, sonorous sibilant, and muco-crepitating râles.

Temperature, 101·6 deg.; pulse, 120; respiration, 44. Symptoms: ditto.

Temperature, 100·6 deg.; pulse, 108; respiration, 42. Extremely weak, stomach very irritable, no hæmoptysis.

Temperature, 100·6 deg.; pulse, 120; respiration, 48.

Temperature, 100·8 deg.; pulse, 112; respiration, 44. Suffers from severe rigors; has occasional pain between the scapulæ.

Temperature, 100 deg.; pulse, 108; respiration, 48.

Temperature, 99·6 deg.; pulse, 100; respiration, 48. Pulse scarcely to be felt; it is so weak and small. Percussion gives, and has always given, an extraordinary clearness of sound, probably due to diminished amount of blood in lungs (Stokes), and in part to the emaciated condition of thoracic parietes (Dr. Clarke).

Temperature, 100 deg.; pulse, 120; respiration, 44.

Temperature, 100·8 deg.; pulse, 120; respiration, 52 Rigors very severe, followed by burning heat of extremities.

Temperature, 98 deg.; pulse, 90; respiration, 48. Wonderful improvement in all her symptoms, which improvement lasted a few months.

Temperature, 99·6 deg.; pulse, 112; respiration, 44.

Temperature, 100 deg.; pulse, 124; respiration, 40. This last recorded observation was taken about six weeks before death, when she was in very marked hectic, and vomicæ were found in several places in the lungs.

Notwithstanding the acceleration of this woman's pulse and respirations, her temperature never exceeded 102 deg. This, one might attribute to the very chronic nature of her complaint; but during the same month in which she first asked my advice, I had under my treatment No. 3,479, Private T.K, aged thirty two, service 15 years, who died of acute tuberculosis in 23 days, in the regimental hospital of the 29th Regiment; and the man's temperature, taken twice daily, never exceeded 102 deg. In fact, reverting to the case, I find this note made on the 20th April, 1867:—"Until the 12th of the month, or the 10th day of his disease his temperature was always normal in the morning, and his evening temperature never exceeded 101·6. Since the 13th inst. it has generally been over 100 deg., but never rose higher than 101·4 deg."

After death we found both lungs closely studded, in every part, with grey miliary granulations very equally distributed. Anteriorly, both organs were emphysematous, but posteriorly both organs were congested (*post-mortem* 32 hours after death). A few nodules of yellow lardaceous tubercle, from one-fourth to one inch in length and breadth, were found isolated in various parts of the upper lobes. Both pleural cavities were completely obliterated by adhesions which had not the character of recent formation.

But in general I have observed that—excepting the times of intercurrent attacks of bronchitis, pneumonia, &c.—the temperature of the patient is not so high as we would expect it to be from the persistent rapidity of the pulse and the respirations. I have taken a temperature of 100 deg., and a pulse of standing, 172—lying, 144; in a case of phthisis (No. 3,102, Private D.F., 29th March, 1866) of seven month's duration, where there had not ever been any diarrhœa. The observation was taken a fortnight before death. Again, in a case (944, Private D. O., 29th Regiment) which was under my observation for five months before death, the highest temperature I observed was 100·2, whilst his pulse was 154, and respiration 50.

During the first 23 days that this man was under observation, his average morning temperature was 98 deg., average evening temperature 99 deg., and average pulse 100. And herein I find again a confirmation of the opinion which I hold, that tuberculosis may exist without elevation of temperature. At this period of his disease he had had hæmoptysis; his voice was very weak and husky; and the sputa was purulent, but not excessive. His skin was so fair and delicate that a most reasonable assumption from inspection alone, was, that this man was phthisical. This was in June 1866. In July there were small crepitating râles throughout the left lung, and he had a return of the hæmoptysis. In September I find that the emaciation had progressed very much; he was suffering from diarrhœa; that his appetite was bad, and that his temperature ranged from 99·4 deg., to 100·2 deg.; that marked dulness of the left infra-clavicular and mammary regions existed, and that here the râles were larger and more numerous than they were a month ago. The breathing sounds of the right and posterior left puerile in character. Pulse was now almost invariably over 140, and respiration over 40. On the 27th of the month a cavity was diagnosed towards the acromial end of the infra-clavicular left region, gurgling being distinct. On the 28th I find that at 5 P.M. his temperature was 98·8 deg.; and on the 2nd October, temperature, 99·0; pulse, standing, 13—lying, 120; respiration, 52; gastric irritation very great. On the 19th, temperature, 9·8; pulse, 120; and at 5 P.M., temperature, 99·4 deg. On the 20th, temperature, 98·6 deg.; pulse, 112; respiration, 40. On the 22nd I notice, "His average temperature for the last week has been 98·5 deg." He had had severe diarrhœa for some time, and a systolic murmur had become developed. He died on the 23rd, and we made the autopsy 24 hours after death. We found the lungs so adherent to the parietes that both pleural cavities were almost obliterated, especially the left; the adhesions for the most part inextensile, and difficult to break through. The lungs on surface and on section presented innumerable granules of miliary tubercle, closely but separately imbedded in every portion of both organs, excepting a small part of the lower lobes. These granules were prominent, firm, grey in colour, and irregular in shape; the large majority appeared, however, to be round or oval. On section through the apices, a vomica was discovered in each; that in the right was lined by a smooth, apparently pyogenic, membrane and communicated with several bronchial tubes. In the opposite

viscus, the vomica in the apex might have held half an ounce of fluid, bounded superiorly only by the pleura. About an inch below this, and under the acromial end of the infra-clavicular region, there existed a large and multilocular cavity; it was not lined by any membrane, but its wall consisted of broken-down lung tissue. Throughout the two upper lobes, very many anfractuosities were seen. The most careful examination failed to detect a single nodule or tubercle exceeding the eighth of an inch in diameter, nor did there seem to be any fatty or calcareous degeneration; even in the apices, the nodules were grey, firm, and separate. Mitral valves were diseased. Small intestines congested, but no loss of substance.

The above was a well-marked case of phthisis of five months' duration, in which the temperature was always low, frequently normal, whilst the pulse and respirations were very much accelerated. And with this case I will conclude my demonstration that, fully recognizing the value of the thermometer to the clinical observer, it must be admitted great care is demanded of us in the interpretation of the information it affords; and that in phthisis especially we must not be carried away with the idea that the thermometer will enable us positively to say, in a doubtful case, whether the patient is suffering from the disease or not. Its positive evidence is of very great value; its negative evidence must be admitted with considerable reservation.

Hydrate of Bromal.

THERE is a valuable article by Dr. E. Steinauer, of Berlin, in the last volume of "Virchow's Archiv," on the action of the hydrate of bromal on animals and on man. The experiments were made in the Berlin Pathological Institute, and were under the immediate observation of Liebreich himself. The hydrate of bromal, according to the observations detailed, when administered to animals, undergoes a similar change to that undergone by chloral, being converted by the alkalies of the blood into bromoform. But this change goes on slowly, for at the end of an hour and-a-half there was found in the blood in addition to bromoform still some undecomposed bromal. The substance is further oxidized and evacuated in the urine as bromide. The symptoms produced by bromal on animals (frogs, rabbits, guinea-pigs) were first a stage of restlessness, followed by imperfect sleep and anæsthesia, and finally dyspnœa and death with or without convulsions. After large doses, both in frogs and rabbits, the heart was found after death relaxed and distended,—whereas, after smaller doses, it was contracted. In the former case there is probably direct paralysis of the heart by the bromoform, such as occurs after large doses of chloroform. The preliminary stage of restlessness, which has no equivalent after administration of chloral, is ascribed to the action of the bromal aldehyde itself, the decomposition occurring, as stated above, more slowly than is the case with chloral. The author observed a stage of restlessness, after a hypnotic dose of chloral, in a patient suffering under gout, and he ascribed this to the acid state of the blood preventing the usual decomposition into chloroform. With this view he administered alkalis to the patient, and after a few days the same dose of chloral produced the usual hypnotic effect. Proceeding from this, he applied the same principle in his experiments with bromal. Having injected carbonate of soda subcutaneonsly in rabbits, he then injected the hydrate of bromal, and found that the stage of restlessness was entirely absent. The author has administered bromal to man in only a few cases. He has found good effects from it in epilepsy, and in soothing the pains of tabes dorsalis. The method of administration which he has ultimately employed is, first, in the morning and at mid-day a powder containing about 14 grains sodæ bicarb.; then in the evening two to four pills, containing each from ½ grain to 1½ grain of bromal.

Medical News.

A Word for Tobacco.—Dr. A. W. Saxe, of Santa Clara, Cal., in the *Pacific Medical and Surgical Journal*, relates the case of a gentleman who, after abandoning the almost life-long habit of chewing tobacco, was attacked within a year by profuse glycosuria, and who after suffering from this disease for about a year, was immediately and to present appearances permanently cured by resuming the habit. The writer explains the case as "one of vicarious function—the kidneys undertaking to do the work of the salivary glands, and overdoing the matter to a hazardous extent." The fact may be; the explanation scarcely.

Carbolic Acid.—*Nature* tells us that a remedy has been found for the "borer" that ravages Indian and Ceylon coffee plantations, by applying carbolic acid before the eggs are hatched.

Cinchona.—We learn from *Nature* that cinchona culture has now so far advanced in Madras that the Government is preparing to deal with it as an annual crop; and also that the Indian Government has selected the Khond Hills for cinchona experiments. If they succeed the cultivation will be thrown open to private enterprise, with the view of further promoting employment and cultivatien among the Khonds.

Naval Medical Service.—The following were the successful candidates who passed the recent competitive examination for admission into the Naval Medical Service, held at the London University, between the 8th and 11th of August, in the order of merit in which they passed, and the number of marks obtained:—

	No. of Marks
Samuel Haslett Browne, M.D., Queen's College, Belfast	2435
William Henry Colahan, M.D., Queen's College, Galway	2235
Christopher Harvey, Westminster Hospital	1905
Thomas Johnson Alloway, M'Gill University, Montreal	1875
Charles Henry Haines, M.D., Queen's College, Cork	1795
Robert Gilmour M'Calman, M.B., University of Aberdeen	1770
John Campbell, M.B., University of Glasgow	1745
Frederick Taylor, M.B., University of Dublin	1395
Nicholas FitzHenry FitzMaurice, Queen's College, Cork	1325
Frederick William Laslett, Guy's Hospital	1321

NOTICES TO CORRESPONDENTS.

*** Correspondents not answered in the current number should look at the notices in the following week.

NOTICE TO SUBSCRIBERS.—*The Publishers beg respectfully to remind those Gentlemen who have not paid their Annual Subscription, now overdue, that the most convenient mode of remittance is by Post-office Order, or cheque, which should be made payable, in England, to Albert Alfred Tindall; Ireland, Moffatt and Co.; Scotland, Maclachlan and Stewart.*

MR. MORGAN, F.R.C.S.I.—The continuation of your communication, entitled "A new cause of Venereal Contamination," with illustrations, is unavoidably postponed till our next issue.

THE VACCINATION CONTRACTS.

To the Editor of "The Medical Press and Circular."

SIR,—I believe the Profession owe you no little for your manly and commendable efforts in stirring up the Privy Council authorities who rule over the vaccine establishment in requiring all Boards of Guardians to contract with their medical officers under the last Act, and pay them the fees prescribed. I know a very proud and obstinate Board forced to comply since your articles appeared. A *confrere* just tells me of another. Both of us unite, and the body of medical men benefited should join in the cry, of thanking you most earnestly for the work you have so boldly and so ably done. The victory is yours. Every prosperity then attend the old MEDICAL PRESS—the only journal of spirit and independence we possess, and may you long continue to tread the ground the representatives of cliques and parties fear to enter upon, *miserabile dictu*. I am, Sir,

Your humble servant,

Nottingham, Aug. 20th, 1870. JUSTITIA, M.D.

APPOINTMENTS.

ALLEN, P., M.D., F.R.C.S.Ed., Aural Surgeon to St. Mary's Hospital, Aural Surgeon of the Royal Society of Musicians.

BROWN, W., M.R.C.S.E., Resident Medical Officer and Apothecary to the Eastern Dispensary, Bath, vice A. Wm. Coppinger, L.R.C.P.Ed., Resident Medical Officer at the Mineral-water Hospital, Bath.

CARTER, H. F., M.D., Hon. Physician to the London, Brighton, and South Coast Railway Provident Society, vice Thomas B. Phillips, M.D., deceased.

DAVY, R., F.R.C.S., Demonstrator of Anatomy to the Westminster Hospital School.

EAGER, T. C., M.R.C.S.E., Resident House Surgeon at the Westminster Hospital, vice C. M'Cann, M.R.C.S.E., whose appointment has expired.

ELLERY, R., L.R.C.P., &c., of Ridgway, Plympton, Certifying Surgeon of Factories for the District of Plympton, Devon.

GALPIN, Mr. R., House Surgeon to the Royal Berkshire Hospital, Reading, vice Wm. Alex. Slater Royds, L.R.C.P.L., resigned.

MARTIN, E. N., L.K.Q.C.P.I., Medical Officer to the Anglo-American Telegraph Establishment, Newfoundland.

PARMITER, Mr. H., House Surgeon and Secretary to the Staffordshire General Infirmary, Stafford, vice Geo. Rolph Raine, M.B., resigned.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 31, 1870.

CONTENTS.

Original Communications.

A NEW CAUSE OF VENEREAL CONTAMINATION — TESTED BY PRACTICAL OBSERVATIONS AND INOCULATIONS FROM A HITHERTO UNRECOGNISED SOURCE — INOCULATION AS A MODE OF TREATMENT.

By Mr. Morgan, F.R.C.S.I.,

Professor of Surgical and Descriptive Anatomy, R.C.S.I.

Surgeon to Mercer's and the Westmoreland Lock Hospitals.

(*Continued.*)

Series No. 8.—*Inoculation from a sore of the second descent from the vaginal secretion of a patient while suffering intense syphilitic intoxication* (Series 3), *on another patient intensely syphilitic—Production of characteristic pustule and soft sharp-edged sore, secreting abundant pus—Immediate relief of the symptoms.*

Patient, aged twenty-eight, No. 1,163, admitted June 7, 1870 ; broken down and thin, having been delivered of a dead child about two months before. Is now covered over with papular rash, and suffers severely from pains.

June 7.—Inoculated from her own vaginal secretion, which was hardly purulent, without result.

June 10.—Inoculated from the pustule of 988, Series 3, the second generation of the vaginal discharge on her own person, producing a characteristic small pustule, with non-depressed centre, having a well-marked sharp-edged ulcer, I have no doubt indefinitely communicable, and in every way resembling a contagious sore.

The alleviation in the symptoms of the patient since the formation of the artificial sore is most remarkable. The rash has immensely improved. She is, however, phthisical.

Series No. 9.—*Primary sore—Double suppurating buboes—Pains—Copious papulo-squamous rash—Intense cachexia and debility—Inoculation from a sore the artificial product of a vaginal discharge—Inoculation from the patient's vaginal discharge producing a sore on another patient.*

Case No. 1,000, admitted March 26, 1870, aged nineteen. Left home ten months ago, and has been since on the town. Only two days before admission observed a sore on the labium. At this date it is large, painful, pus-secreting, and without the slightest induration. There was a tender gland in the left groin.

This gland was leeched, &c., failed to be resolved, and was opened on April 25th, giving exit to a large quantity of pus. I inoculated with this on the side, producing only an abortive pustule.

On April 30 I made a speculum examination, the parts having been before this too sore to allow it. There was not the least ulceration of the vagina or uterus, but some muco-purulent discharge.

April 30—I inoculated from the second artificially-produced pustule of a male patient, the second generation from a sore on the prepuce, but with negative result.

May 2.—A copious rash began to make its appearance over the entire body, and she became profoundly cachectic —in fact, a specimen of syphilitic taint.

At this date I inoculated from her own sore with negative result. The patient continued in a very prostrate and cachectic condition. Tonics, stimulants, good diet, iodide of potassa, iron, and creasote being used.

On June 3 the patient had decidedly improved in general health, but another large suppurating bubo was forming in the opposite groin. I opened this, giving exit to a large quantity of thick healthy-looking pus. I also inoculated the abdomen the same day with this pus, but with a negative result.

June 8.—I inoculated with her own vaginal muco-purulent discharge, but failed, though there was a slight attempt at a pustule.

June 10.—I inoculated from No. 1,118, Series 2. This

produced a pustule and specific ulcer by the 13th, which became a regular chancroid.

June 12.—I inoculated the opposite side from the same source, No. 1,118, Series 2, producing also a specific sore.

On June 15 I inoculated No. 1,098, a strong woman, covered with papular rash, from her vaginal discharge, and produced a tolerable but not well-marked pustule. This same patient, 1,098, was specially difficult of inoculation from other sources. From this date the symptoms steadily improved, the use of tonics and good diet being alone superadded in the treatment.

It is remarkable that I failed, on April 30, to produce a pustule on this patient from an inoculated sore on a male patient, which I produced artificially from a preputial sore; yet, on June 10 and June 12, I succeeded in doing so from the case, 1,118, Series 2, whose sore was the descendant of a vaginal discharge

On July 7 I inoculated from case forming Series 12, producing a well-marked pustule.

SERIES No. 11.—*Auto-inoculation from vaginal discharge—Transmission of the auto-inoculation to other patients—Inoculation from the vaginal discharge almost without a failure—No rash, pains, or marked constitutional signs.*

A girl, aged twenty, No. 1,185, was admitted June 1, 1870, and gave the following history, which has been several times tested, but always with the same result :—

In August last she cohabited with one person belonging to a regiment, with which he left in September. About the first week of September she felt irritated and sore, and got a discharge, but was never aware of a sore beyond irritation. This discharge continued ever since, very profusely, now about ten months. She states positively that she never cohabited since then with anyone, and that about two weeks before admission the labia became swollen while she was hard worked as a servant. On admission there was considerable tumefaction of the labia and a few mucous patches about the posterior part of the vulva, and considerable thin purulent discharge. She has no rash, pains, &c., but she is pallid and cachectic. Assuming the history true, which I have reason to believe it is, (and that the chief annoyance had been the vaginal discharge), I carefully tested its capability of producing chancroids or pustules as follows :—

On June 27, I inoculated this patient on the abdomen, from her own vaginal discharge, producing a most well-marked pustule by the 30th.

On June 27, inoculated No. 669 unsuccessfully.

On June 27, inoculated No. 911 most successfully; now July 4) a regular chancroid.

On June 27, inoculated No. 1,169 most successfully.

On June 27, inoculated No. 1,112, producing a pustule on the third day, and now (July 6) a regular chancroid.

On June 27, inoculated No. 1,098, producing a pustule on the fourth day.

On June 29, inoculated No. 1,098, producing a pustule on the third day.

On June 30, inoculated No. 1,093, producing a pustule in twenty-four hours.

Only two failed of all the inoculations I tried from this case.

June 29th.—I inoculated, from the pustule produced on the patient's own person, on a patient No. 1,167, who had resisted hitherto several attempts at inoculation from other sources, and produced a regularly formed and acute pustule in twenty-four hours; now a chancroid (July 6).

June 29.—Inoculated 1,138 from the vaginal discharge, producing a pustule and sore by the 7th July.

July 4.—Inoculated from her own mucous patch unsuccessfully.

June 29.—Inoculated 921, from the vaginal discharge, forming a pustule which dried up by July 6.

June 30.—Inoculated 1,189, forming a pustule.

Some of these patients had inoculations on them at the time, viz., Nos. 1,112 and 1,093.

Nothing could be more potently inoculable than this discharge; the figure of the resulting pustules was most characteristic. The patient up to July 6 had no signs beyond the mucous patches, but then got a severe gummatous ulcer of the nates. On the other hand, I have inoculated several patients from a case in hospital, suffering from vaginitis and discharge, but never succeeded in producing a pustule or even moderate irritation.

SERIES No. 12.— *Vaginal discharge only—No primary sore — No marked constitutional signs — Inoculation from vaginal discharge.*

No. 1,220.—An uncommonly fine healthy-looking girl of twenty-three, was admitted July 6, 1870. She had been in hospital during the last two years.

On June 1st, 1868, from several soft sores.

On October, 1868,—From a sloughing phagedenic sore of the nates of a secondary character, patches, papules, and finally by ecthymatous spots here and there over the body.

The ulceration was most acute, and was cured by the use of escharotic and local applications.

She remained without a symptom till about ten days before admission, when she got a discharge with some pain and tenderness, and a sore formed, apparently secondary in character, at the cicatrix of the former sore near the nates; the stains left by the ecthymas are still very evident; also a wound on the arm, made six weeks ago presents a deep coppery stain.

On careful examination with the speculum, no ulcer whatever is to be seen, but there is a tolerably thick purulent vaginal discharge.

I inoculated with this on herself, on July 7, producing, by the 11th, a well marked pustule, becoming a sore shortly afterwards.

July 7,—I inoculated No. 1,193—suffering from copious patches, alopecia, and pains—and produced, by the 11th, a characteristic pustule and sore.

On July 7,—I inoculated No. 921 (who was at this time partially under the influence of another inoculation), and produced, by the 11th, a perfectly formed umbilicated pustule. This patient was intensely syphilitic at the time.

On July 7,—Also inoculated No. 988—who was almost free from syphilitic symptoms, having been frequently inoculated, as referred to at Series 3—but produced only a small ill-formed pustule and superficial sore.

July 7,—Also inoculated No. 1,000 (referred to at Series 9), who had already been several times inoculated, and produced a specific, but not vigorous pustule.

July 7,—Inoculated No. 1,075 (referred to at Series 4), and at the time suffering from a vigorous chancroid; produced a perfect pustule and small chancroid.

This case is very interesting, as there was no rash, and the secretion from the sore could not possibly be mingled with the vaginal discharge. The sore had not the character of a primary either in appearance or secretion, and the patient might otherwise have been looked on as a specimen of rude health, but as evinced by the stains and the discolorations left by the wound occurring within two months, together with the reopening of the original cicatrix, the venereal taint was, though latent, still as active as ever.

These cases I have selected from many others under treatment, and where the inoculations have been made so as to test the question of the source of the soft-chancroid, or usual variety of sore. It seems to be essential that the system shall be under the influence of the constitutional poison in order that the vaginal discharge may be capable of producing the characteristic pustule and sore. My inoculations, I think, tend to this conclusion; but I hesitate to pronounce it as a definite rule.

I am compelled to doubt if purulent discharges before the evolution of any constitutional sign may not be capable of producing a sore when inoculated, though I

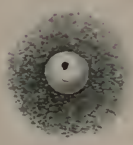
ARTIFICIAL CONTAGIOUS SORES

PRODUCED BY INOCULATION.

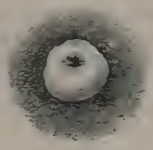
By Mr. MORGAN, F.R.C.S.I., &c.,

SURGEON TO MERCER'S AND THE WESTMORELAND LOCK HOSPITAL, DUBLIN.

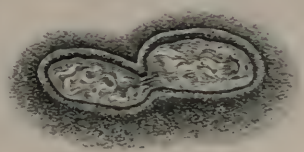
PLATE II.



SERIES 11.
Pustule produced by inoculation from the patient's own vaginal discharge (three days old).



SERIES 12.
Pustule produced by inoculation from the patient's own vaginal discharge (four days old).



SERIES 6.*
Chancroids resulting from the coalescence of two inoculations from a vaginal discharge.

have, as I mention, tested cases of what appeared to be ordinary vaginitis or gonorrhœa, but without success; I have on the other hand inoculated most successfully in other instances, as in Series 12, where no sore or sign was to be found, and the immediate history at the time referrred to gonorrhœa only.

I have inoculated from the mucous patches at the anus of a child two years old, with inherited syphilis, and produced a characteristic inoculation on the side, and from this another on the opposite side; hile in some of the cases detailed, as well as in others, I have inoculated from the mucous patches, but did not succeed. I have also failed in inoculating from large soft pus-secreting pudendal sores, but succeeded in the same instance with the vaginal discharge.

If the mucous patch can be the progenitor of the soft sore, as proved in the case of the child I refer to, and a vaginal discharge, in order to be inoculable and productive of the soft sore, seems necessarily to be coexistent with constitutional symptoms (latent though they may be), it may be reasonably concluded, though contrary to the theory entertained by many authorities, especially on the Continent, that the chancroid or soft sore is not the result essentially of contact with a special virus, or derived from an untainted system, but rather may be developed from the secretions of an individual who is thoroughly under the syphilitic influence; and by its very formation indicates this tainted source.

(To be continued.)

CASE OF PUERPERAL MANIA BEFORE DELIVERY—CRANIOTOMY—RECOVERY.

By R. Harrison Supple, M.B., T.C.D.
Physician to the Collon and Grangegreith Dispensaries.

On the evening of the 18th of June, I got a visiting-ticket for Mrs. W——, of Collon, aged eighteen years, a primapari. When I arrived I found the os uteri dilated to about the size of a florin, the membranes entire, but no pains then; the woman who was with her, informed me she had severe labour all the previous night and part of the day. As she considered her making no progress, and the pains ceasing, she became alarmed, and sent for me. I gave a dose of ergot which brought on the labour again; with the escape of the liq. amnii, the funis presented. In returning it, I found such considerable narrowing of the brim of the pelvis that I considered it a hopeless case for natural delivery or the forceps. Deeming a second necessary, I sent for Dr. McGusty, of Slane; previous to his arrival *mania* came on to such an extent, that she could, with difficulty, be kept in bed, although there was *an entire cessation of labour*. When Dr. McGusty came, he perfectly agreed with me our only alternative lay in craniotomy. So he gave chloroform, and I operated. I never saw so much narrowing in my life, for after I had removed the head, bone by bone, I had to eviscerate, and it was even then with the greatest difficulty I completed the delivery. I think this case fully illustrates the admirable working of the Irish Poor-law System, as, without the able assistance I met with, it would have been impossible to have saved the woman's life.

P.S.—I forgot to mention that the *mania* ceased upon delivery.

ON A CASE OF FRACTURE OF THE LOWER EXTREMITY OF THE HUMERUS THROUGH THE LINE OF JUNCTURE WITH ITS EPIPHYSES.

By Francis E. Clarke, B.A., M.B., Dub., &c.

Apropos of the editorial comment on "*the Bone-setter*" in the number of this Journal for August 3rd, I think the following case may perhaps be interesting to the Profession, and may add another warning to the credulous public of the nineteenth century, who, in every rank of life, seem prone "to lend an ear" regarding matters-medical to the amateur or quack, and occasionally even disregard the advice of a scientific practitioner in order to pursue the *wholesome regimen* (?) advocated by their old friend, Mr. A., or perchance, by the antique Mrs. B., or yet again, by the village *Bone-setter*, or other charlatan who vaunts in the happy termination of the cases which he treats, and of the *success* which eventuates from his skill, until, alas! a death occurring checks his progress for a time. Should this be so? Should ignorance beneath the cloak of hypocrisy he permitted to play with medicine at the expense of human beings' lives? So long as charlatanism or quackery of any kind or degree exists, our voices both individually and collectively should never cease to resound throughout the length and breadth of the land; we should one and all, like true physicians, labouring for the promotion of public health and the public welfare, endeavour vigorously to repress those great and dangerous monsters—medical and surgical hypocrites—

"Sit mihi fas audita loqui; sit numine vestro,
Pandere res alta terra et caligine mersas!"

In the autumn of the year 1868, a boy, aged about twelve years, living in the county Donegal, was thrown when wrestling with a companion, and sustained a compound fracture of the humerus through the line of juncture of the epiphyses of the lower extremity with the shaft of the bone, or, as it is commonly described, an epiphysary fracture of the lower end of the humerus. From the statement of a girl who happened to be present at the time of the occurrence, it appeared that the lad when he found himself falling put out his right arm with a view of saving himself or "breaking his fall," and that his antagonist, who also "got a toss," fell across the extended arm and thus gave rise to the very serious injury which the boy sustained. On being brought home and his coat removed the bone was seen to protrude through the skin. A *Bone-setter* of local reputation and erudite accomplishments (according to his own estimation!!) was sought, and on arrival about ten hours subsequent to the accident "set" the broken limb (with splints which he cut for the purpose) *in a kind of way*, but not, I fear, *secundum artem*. The operation over, bandages adjusted and patient in bed (although necessarily suffering intense pain), the *fearless surgeon*, it being a Sunday and considering, I presume, "the better the day, the better the deed," remarked that he would re-visit his patient that day week. By the sixth day, however, the sufferings of the poor lad had become aggravated to such an extent that "the adventurer's" immediate attendance was requested by his father. The story now may be briefly told: Death put an end to the boy's earthly sufferings but five days after this second visit, the eleventh subsequent to the receipt of the injury. The simplest words which can record the sad end of that sacrificed youth stand as monumeuts of everlasting disgrace not only against the ignorance and hypocrisy of *the Bone-setter*, but against society at large which tolerates in its own credulity a state of affairs at once as lamentable as it is disgraceful.

Oh! ever loving, lovely and beloved!
How selfish sorrow ponders on the past,
And clings to thoughts now better far removed!
But Time shall tear thy shadow from me last.
All thou couldst have of mine, stern Death! thou hast.

On the fifth day after death and second after interment, the body was exhumed by order of the coroner, and an autopsy made at which, I being present, assisted. On superficial examination, a large external wound was to be seen in the anti-cubital fossa through which the lower end of the upper fragment could be felt projecting, but it did not protrude beyond the edges of the wound. From upwards of an inch above, the entire forearm and hand was extensively gangrenous, so much so, that it was impossible to make an accurate dissection of the soft parts or to determine the state of the vessels or nerves in the neighbour-

hood of the fracture. The body, had in addition, undergone great decomposition. When the wound was extended both above and below by incision the continuity of the entire shaft of the humerus was found to be complete, and contained the two condyles in an uninjured condition; it was devoid, however, of the two eminences which form respectively the trochlea and capitellum and articulate with the two bones of the forearm. The upper fragment then was the entire humerus merely denuded of its inferior epiphyses; the lower, those epiphyses themselves. The lower end of the upper fragment was nearly at the external orifice of the wound and directed forwards, and including, as it did, the two condyles, was broad with an extremely roughened, jagged, and uneven extremity. The epiphyses alone constituted the lower fragment, and still continued united together in one piece and attached by the ligaments of the joint to the bones of the forearm, so that the articulation proper remained normal; the upper extremity of this fragment was directed backwards and outwards. On measuring the arm before dissection, I found that there was slight shortening as compared with the other, but the normal relation of the olecranon process to the condyles was lost.

The case in a surgical point of view is one of much interest, the injury being on the whole rare, until within a few years past unrecognised, and dissections of it recorded by no means numerous. When a student I had the advantage of seeing a case of it treated in Sir Patrick Dun's Hospital, by Professor R. W. Smith, who still adorns the Chair of Surgery in the University of Dublin, and to whose class I feel a just pride in having belonged, and I have heard him with that eloquence, succinctness, and accuracy for which he is distinguished, enunciate in his admirable lectures on fractures and luxations, the signs both general and diagnostic of this remarkable lesion. It was he indeed, who first described it,* and quickly did I perceive the similarity even in its very aspect between the injured arm of that lifeless corpse lying in its coffin by the side of its "narrow bed," and the arm of the boy whom I had previously seen in Sir Patrick Dun's, in whose case, if my memory serves me, the accident originated from a fall off a donkey upon which he rode; and vividly did I remember the striking remarks of Professor Smith regarding the signs of the injury—the great transverse breadth of the anterior tumour caused by the retention of the two condyles in the lower extremity of the upper fragment and the two osseous tumours posteriorly, both of which signs serve to distinguish it from a supra-condyloid fracture of the humerus which it much resembles, not only from the facts of shortening and anterior osseous tumours being present in both lesions, but also because the antero-posterior diameter of the arm is increased likewise by each form of injury. It is also to be borne in mind that the normal relation of the three bony projections at the back of the elbow was disturbed, the olecranon being above the condyles, a fact which also serves to distinguish this epiphysary fracture from a supra-condyloid fracture, but which causes it to resemble much a luxation of both bones of the forearm backwards, a surgical lesion which Professor Smith likewise pointed out as liable to be confounded in diagnosis with this fracture of the humerus through the line of juncture with its lower epiphyses if the important differential signs of the signs of the latter be not accurately attended to. The two tumours posteriorly in an epiphysary fracture, being the head of the olecranon and the end of the epiphyses, are nearly on a level, but those caused by a dislocation are fully an inch one above the other, as they are formed by the olecranon and of the radius respectively. With regard to the former that learned gentleman, moreover, reminded us that the centre of ossification of the capitellum is developed much earlier than that of the trochlea. The direction which I found the lower fragment had assumed we may naturally infer was caused by the action of the triceps muscle.

In conclusion, I may add a few words regarding *the Bone-setter*. The imperfect state of legislation on the question and the sympathy of a local jury saved him from punishment which he so well deserved. He escaped without one single wound, save, that it might be he possessed even the minutest scintilla of the "*mens conscia recti*," and that a tortured conscience laden with remorse poured upon him in reality a retribution fiercer than any which a judicial tribunal could have enforced. It is perfectly possible that the man may have "put up" the fracture with as much care as he could bestow, but his ignorance of the nature of the accident and of the legitimate principles of surgery rendered it impossible for him to meet the exigencies of the case as skilfully as its complicated nature required; it is also very likely that he really did consider the case a trivial one when he decided on postponing his second visit for a whole week, and that he may have done so with perfect good faith is not at all improbable, but the old French proverb was only too sadly verified, *L'homme propose mais le bon Dieu dispose*, and the unfortunate victim fell a prey to his ignorance and self conceit. The lesion was not diagnosed; the bone protruding not thoroughly reduced; the fragments not placed in apposition; the external wound not attended to or its edges approximated; the bandages so tightly adjusted as to increase the suffering; and the injured limb left then for days and days (unexamined and unattended to) *literally to rot*—as, indeed, the *post-mortem* examination showed it did. Is it not time that this remnant of a barbarous age "*the Bone-setter*" should be finally extinguished? Now that hygienic and sanitary measures have so materially diminished and mitigated disease; now that the sewage and other grave questions are being discussed for the prevention of contagion; now that Irish physicians, stimulated by zeal and by the vigorous and hearty exhortations of the Poor-law Commissioners, have "stamped" variola from their land, and that as nearly a happy result in this direction has been obtained in the mother country, should we not repel *the Bone-setter* with the disastrous consequences of his ignorance once and for ever from our shores? May we soon see the last of him! May the efforts of the Medical Press and Circular, which ever holds up its head honourably amongst its contemporaries, prove successful towards his final extinction! And may my professional brethren at all times manfully assist!

* Malgaigne, Vidal, and other writers, appear to have previously mistaken its diagnosis by not drawing the distinction between fractures *below* and those *above* the condyles.

Transactions of Societies.

BRITISH MEDICAL ASSOCIATION.

I.—The Audacity of Modern Surgery.

You, gentlemen, among whom are some of the most intrepid operators of the day, will have no difficulty in recalling examples of the audacity of modern operative Surgery. You know that the boldest exploits recorded in Surgical annals have been repeated but recently; that, in obstruction of the gullet, the stomach has been opened and the patient fed through the opening; that the kidney has been cut down upon, and stones taken from it; that the aorta has been tied; that the removal of the whole upper extremity (the shoulder-blade and part of the collar-bone, together with the arm), either on account of accident or of disease, has become a not unfrequent proceeding. Upon the table before you there is perhaps as large a mass as has ever been taken away, along with the upper extremity—an immense enchondroid tumour. You know that operations which but a few years ago were counted unjustifiable, such as ovariotomy, are now established on the firm basis of success; that feats even more startling, which might even make the initiated tremble, have been undertaken in isolated or comparatively rare instances, and with a fortunate result; that the spleen has been taken away, the kidney extirpated, as a sequel to ovariotomy; and, not to multiply examples, that the uterus has been removed several times alone, and

also together with a large cyst and all its diseased appendages, constituting a large mass.

But it must not be supposed that, because these great operations are cited as illustrations of the audacity of modern operative Surgery, they have no other claim to our admiration. Many of them are successful endeavours to save life under the most unfavourable circumstances; and none were undertaken but after a patient investigation of facts, or without a careful and judicious consideration of all the aspects of the disease and of the condition of the patient. All were performed according to sound Surgical principles, and for the removal of disease in itself necessarily fatal.

Nor need our admiration of these or similar undertakings engender in our minds a recklessness of human life, any more than their execution indicates the existence of such a feeling. It is, indeed, sometimes said, and even by members of our Profession, that the performance of such operations does evince a certain want of respect for life, and that great operators are apt to look lightly upon the deaths of patients where a fatal result ensues. For my part, I entirely repudiate such thoughts, nor do I believe in their existence; and I would appeal to every operator in the room to echo my opinion, and to say if he would not deprecate such a feeling as the worst foe to a really sound operative Surgery.

But if in our own ranks there are those who believe in such recklessness, we cannot be astonished that we sometimes hear opinions in the same sense expressed by individuals of the non-professional public, and the very virtues of the Surgeon, his coolness and self-possession, brought forward to attest his callousness to the sufferings of others and his disregard for the sacredness of life. No accusation could be more unjust. Because, Sir, when the Surgeon puts his knife into the palpitating flesh his hand does not tremble, nor the sight of blood affect his nerves, should he be stigmatised as cruel, heartless, and unfeeling, or regardless of human life? Surely not. This presence of mind is the result of knowledge, not of callousness—of knowledge based on experience, and of forethought. It is the result of a well-devised plan of operation. It is indeed, the result of a true sense of the sacredness of human life, and of the deep responsibility that attaches to him who places his patient's life in possible immediate jeopardy, to rescue him from a certain but instant death. Without such a feeling, no man ever was or will be a truly good and successful Surgeon; for more than aught else—more than the love of fame or the desire of success—it impels us to those measures of precaution, of careful preparation, of minute detail, which enable us to bring to a fortunate termination the most hazardous proceedings, and thus to justify the audacity of modern operative Surgery.

II.—The Conservatism of Modern Surgery.

The term conservative as applied to Surgery is quite of modern origin, and dates from the year 1852, when it was first made use of by Sir William Fergusson. The conservative spirit, however, influenced the practice of Surgeons in much more ancient times, as we know from the works of Paulus Ægineta, who distinctly speaks of the excision of the joint-ends of bones, and of the removal of entire bones in lieu of the amputation of the limb.

The story told by Garengeot of the man whose nose, having been bitten off in a drunken quarrel in a wine shop, fell into the kennel, was picked up, washed, and re-applied to the face and grew there, can scarcely be quoted as exemplifying conservatism in the special sense which has been given to the term in recent years. A predecessor of mine in this town, some fifty years ago, acted quite within the strict meaning of the term when, in a case of compound dislocation of the ankle-joint, where certainly most Surgeons of that period would have amputated the foot, he merely removed the astragalus and saved the limb. The gentleman who had the good fortune to be the subject of this, at that time, somewhat unusual act of conservatism, was afterwards well known to me, and walked with only a very slight halt. Another Newcastle Surgeon, who, I am happy to say is yet hale and well, practised the excision of the os calcis sometime before the mention of the phrase by which we would now characterise the operation.

It is, however, since the publication of Sir W. Fergusson's paper that the attention of the Profession has been more thoroughly roused and directed to this principle in Surgery, which, during the last ten or fifteen years, has been more and more widely acted on, and is now so completely established as to be one of the most marked characteristics of modern operative Surgery.

The removal of diseased joint-ends of bones is at present one of our most common proceedings, and has gradually been applied to most of the articulations in the body. The excision of the separate bones of the tarsus and carpus, and of the whole shaft of long bones, is not less frequent; and even such bones as the shoulder-blade and collar-bone have been several times removed, the extremity which they support being preserved.

It is interesting to note the advance which has taken place, in a conservative direction, in the method of performing resection, itself the stronghold of conservatism. The external incision, at first more or less complex, has been reduced in most situations to a linear and less extensive one; the amount of bone thought necessary to be removed is less; and recently the practice of subperiosteal section has been adopted, by which an important structure is preserved and reparation favoured. After excision by this method we rarely meet with those cases of withering, the result of too extensive removal of parts.

Even in what we might call the hostile territory of amputations, the same principle is at work, leading us to remove limbs at points as far distant from the trunk as possible, as in the amputation through or immediately above the ankle-joint, instead of below the knee, and through the knee instead of at the middle or lower third of the thigh. Few amputations are followed by a more satisfactory result than that through the knee-joint, when done so as to leave an anterior flap to cover the end of the bone, from which the articulating surfaces need not be removed. The wound heals rapidly; no raw surface becomes exposed; and a shapely useful stump is the result. These conservative amputations possess several advantages, since they not only leave a more serviceable stump, and interfere less with the symmetry of the body, but they also increase immensely the patient's chances of life.

The cast upon the table was taken from the thigh of a young woman whose recovery would assuredly have been much more doubtful had amputation through the mid-thigh been resorted to. Her leg had been frightfully mangled in a steam threshing-machine, and the bones broken into small pieces up to the knee-joint; a quantity of blood had been lost; and, when seen, she was in such a condition of collapse that the propriety of an operation seemed doubtful. It was just possible to obtain an anterior flap to cover the end of the femur; and, death otherwise certain, amputation through the knee was done. The pulse afterwards was barely perceptible, and for thirty-six hours it seemed most unlikely that life should be preserved. Subsequently she rallied, and restoration to health was ultimately rapid. She was able to be out of bed in fourteen days, and the stump entirely closed in a very short time.

A peculiar signification is given to the term "conservative" by Sir W. Fergusson, who uses it to designate those operative measures by which limbs or other parts of the body are more or less completely preserved. Such proceedings as have been already mentioned come strictly within this meaning; so, too, would some of the modern operations for the removal of growths from the jaws and the neighbourhood of the orbit. Malignant growths occupying the ethmoid cells and displacing the eye outwards, as well as exostosis springing from the os frontis, may be extirpated by means of a proceeding which preserves the nasal bone, and, as a consequence, the contour of that important feature the nose. This bone is raised up along with the skin covering it, so that it may be laid down again in position after the operation and preserved; the only structure absolutely removed along with the diseased growth, in addition to portions of the ethmoid, being a part of the nasal process of the maxillary bone. The mark left after this measure is exceedingly trifling.

The treatment of an ordinary compound fracture could not be looked upon as fully within the meaning of conservatism in Surgery; but I know no other term which can adequately describe the carrying through to a successful termination a case of such aggravated injury as would raise the question of the propriety of amputation.

There are, perhaps, few questions in Surgery which afford a greater test of judgment, experience, and decision than that which we have to ask ourselves in certain cases of injury—Shall this limb be removed or not? When the question has been answered in the negative, there are also few cases which afford a greater test of our patience, perseverance, and readiness at expedients, watchfulness, minute attention to details, and capability of using mechanical forces.

(To be continued.)

SPECIAL CORRESPONDENCE.

[FROM OUR OWN CORRESPONDENT.]

PARIS, 24th August, 1870.

SOME persons recently have made many complaints concerning the organization of military ambulances, or international ambulances. After examining what they say, I am obliged to believe the assertions to be full of exaggeration. The lazy manner in which all the devotion placed at the command of the administration has been utilized is owing to a circumstance which is too generally ignored, —viz., that in the late affairs the majority of the ambulances, with their officers, have been taken prisoners by the Prussians. Thus, M. Legouest, the surgeon at the head of the first corps, had lately no news of his ambulance ; and we hear that a surgeon of another has been in the same plight. Several towns, where hospitals have just been set on foot by Professor Layeran, have fallen into the power of the Prussians, and from one of these that gentleman left as it were by one gate, whilst the Prussians entered by the other. We must reflect that affairs are not now as they were in the Italian War ; surgeons were then wanting, because the victorious army marching forward, picked up all its own wounded and a part of those of the enemy ; but it has happened very differently in the French retreat lately, and we don't believe that the number of wounded taken up by the French has exceeded 2,000. Now, there are in the army more than 600 military doctors, and, for this reason, persons in power have not been in a hurry to send to the Seat of War (as has been suggested) all doctors, without exception, belonging to military hospitals. At present, some of these remain in Paris, such as MM. Colin, Godellier, and Villemin, whose departure, it is true, will take place, probably very shortly.

For the same reason, the students inscribed at Val-de-Grâce have not been able to find employment in Paris. The number of those inscribed is about 1,700, but, in consequence of absence and different reasons, there are about 1,000 disposable. Now this is twice or thrice as many as there are wounded in our hospitals. There are only sixty wounded men in the Val-de-Gráce. There is, however, a supposable case in which we ought to reject the entire want of movement of this reserve of ambulances, and this would be if a certain number of the wounded tended in private houses, near the Theatre of the War, should be in need, as M. Nélaton is reported to have said, of sufficient care. In such a case, the zeal of the military doctors fails, because *they* are obliged to follow the motions of the corps ; but, on the contrary, it is here that the volunteering ambulances can render the most effectual service, if there are sufficient servants to attend to the sick.

The Minister of War has just decided that all the doctors and apothecaries inscribed on the lists of the Hospital Val-de-Gráce, after the examinations which have just taken place, are to be retained in Paris, or in the localities where they may chance to be actually residing ; and, consequently, whether they may be National Guards ("Mobiles"), or called out by the last Act, they are not to be sent to the places indicated in that Act. Two large rooms in the Auction Rooms in the Rue Druot are said to be full of old linen, to be used for making *charpie*. I hope it may not be frequently contaminated by small-pox patients. M. Hoüel, a Professor attached to the Faculty, conservator of the Dupuytren Museum, set off a few days ago with several pupils and young doctor volunteers to help in operating and dressing the wounded.

MM. Hardy and Guibout, two of the physicians at the Saint Louis Hospital, have been charged with the medical service of the military hospital, Saint Martin. M. Ricord subscribes 200 francs a month, so long as the war lasts, to the *Secours aux blessés ;* and Dr. Buisson, Dean of the Faculty, has abandoned to this society his honorarium as long as the war lasts, amounting to 1,500 francs a year— from all of which you see how good and generous our brethren are here as elsewhere to the poor and afflicted.

M. Bazin mentions a piece of diagnosis between disease of the nostrils arising from syphilis and scrofula, which will be, I am sure, felt to be very useful by practitioners. He says that syphilis destroys first of all the bones and cartilages of the nose and of the palate before touching the integuments, whilst scrofula does not reach the bones before it has first destroyed the superficial parts. This is very practical. The question has often been mooted whether consumptive persons ought to marry, or rather to procreate children. These two ideas are, of course, in Paris, easily separable ; although in other cities they would seem to be considered identical terms. Dr. Virchow, in some recent observations on the subject, translated into one of the French Medical journals, is reported to have said that in the first place, although it certainly frequently happens that the offspring of consumptive parents are consumptive, yet this is not *always* true. Next, consumptive persons, although they die young, are often as intelligent and often as great geniuses as any other class of men. We must all die of some disease or other, says Virchow, and why not of this as well as another ? I cannot say that these reasons convince me, and I must add that I hold that most consumptive parents ought either to have no children or the minimum number. And, I may say, too, that parents who have syphilitic poison in their frames, are often in very much the same position. It must be remembered that delicate children, such as those produced by consumptives and many syphilitic parents, are often no great pleasure to their unfortunate parents, but rather a burden and a drag on themselves and their relatives. This is opposed to the happiness of the greatest number.

I see that M. Alfred Fournier, who is now the successor of M. Ricord as a writer on syphilis, has brought out a work on the writings of Fracastor, with annotations of his own. I have not read the work, but hear it highly spoken of. The magnificent photographs of skin diseases brought out in a lithographed form by Dr. Hardy, of the Hospital Saint Louis, are now out of print. Their price was sixty francs, and there is, I hear, to be another edition. At this moment, scarcely any books are sold, as I was informed by M. G. Baillière the other day, Nothing is read but the "*Dernières nouvelles de la guerre.*" I hear that, among the comparatively few wounded soldiers at present in the Val-de-Grâce, the most of those wounds are struck in the lower extremities—very few in the chest. My informant, a young British subject, added that he supposed this was owing to the fact that the Prussian needle-gun does not carry so far as the French chassepot. I am so entirely ignorant of warfare, Mr. Editor, that I cannot judge whether this is a true account of the fact or no. Can you ?

M. Alfred Fournier gave, in one of the Medical Societies of Paris recently, an account of a case of syphilis, where the primary sore had been contracted fifty years before the occurrence of some tertiary lesion. This proves two things :—(1) That people once tainted with constitutional syphilis are never quite certain to be free from relapses however long they may live ; and (2) That syphilis may remain a very long time without much mischief being done to the ordinary health of the individual. This long period of freedom from attacks of tertiary syphilis is, I should think, one of the most remarkable on record. This is a very bad season for the watering places of France. Most of them are reported to be entirely abandoned by the Parisians, who naturally desire to be in the Capital, in order to receive the last notices of their poor male relatives, so many of whom are being slaughtered in this dreadful strife. Wherever you go—into whatever hospital you stray—a great proportion of the male patients are going off to the war. If this goes on much longer, there will be a serious loss of the adult male population in France. But this may, on the other hand, be advantageous to many poor women who have, as you know, so few lucrative employments even in this city. Waiters and drapers' assistants are going off in shoals to their doom. I presume their places will occupied by women, and that prostitution will

then become a little less common in this strange mixture of good and bad people—Paris. In the wars of the former Napoleon a great number of men perished ; and thus women got a little more share of the good things of this life, than they do in most countries, and notably Germany, where they are as yet mostly household drudges. But, even here, there is an immense deal to be done before the grand excuse for prostitution, destitution of the weaker sex, is taken away. To this effect, consult the work of Lecour published this year.

I trust in a future letter to give you some account of lectures "On Diseases of the Heart," recently delivered by Dr. Peter at the Hôpital de la Pitié. At this moment, of course, all is quiet in the lecture room. The Sorbonne, the College de France, and the Academies of Medicine and Law, are all deserted. May the students soon meet in better times, when sweet peace again settles on this distracted land ! I was never so convinced as I am now that war is the greatest of all human errors and crimes. It breaks the heart of mothers and fathers, and plunges us all here into the direst affliction.

The sixth ambulance of the *Société de Secours aux blessés* has been ordered to depart immediately, and is to be sent to Epernay in Champagne, the railway being only open as far as Chalons. No instructions have been given to it, and, of course, this ambulance must endeavour to find out the Army by itself, as no telegrams have arrived for some days from Marshal Bazaine. Doctor Pietrowsk is the chief surgeon, and there are four surgeons, eight assistant-surgeons, seven sub-assistant surgeons, one Catholic clergyman, and one Protestant pastor, one major-infirmier, and sixty-one under-servants. All these men are young, ardent, and the assistant surgeons are all doctors of medicine, many of them being old *internes* of the Parisian hospitals. There is talk of the speedy creation of a sedentary ambulance at Paris, formed by the funds subscribed by the Parisian Press. Dr. Ricord and Monseigneur Baüer are to be the chief directors. From three to seven o'clock yesterday fifty-three doctors wrote down their names as associates at Ricord's house. Seeing the great number of names which are sure to pour in daily, to judge of what took place yesterday, M. Ricord has said that, besides the sedentary ambulance composed of 200 beds, they ought to create in each quarter companies of doctors, whose duty it should be to visit the wounded in private houses, and who, in case Paris should be besieged, should organise, on all points attacked, flying ambulances, destined to receive the wounded, and to afford them the first cares before sending them to the sedentary ambulance.

The ambulance of the first division of the First Corps of the Army was established at Frischwiller, in the *mairie* near the Church. On the 6th August, the day of the bloody battle which was engaged against the corps of MacMahon, this building, which ought to have been respected, on account of its white flag, was fired at from eight in the morning until half-past four in the afternoon. M. Rodet, the military *sub-intendant*, together with the members of the staff and administration of the ambulance, neither wishing or being able to follow, under any pretext, the division which was in retreat, remained in the town. The ambulance gave asylum to 580 French and 40 Prussians. At half-past four o'clock they were all made prisoners by the Prussians. Two of the servants also were killed as they were taking a wounded Zouave into the ambulance ; and Dr. Milliot was killed as he was bandaging the wounds of one of his patients. The ambulance of the French Press also was made prisoner, and both of these ambulances met each other at Cologne. The members of the first division reached Paris on Saturday last. Evidently they ought not to have been taken to Cologne at all. You thus see that there are dangers to our devoted brethren in charge of the wounded soldiers.

Lord Derby made a capital speech on sanitary matters at the opening of the new hospital at Bootle last week.

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the Medical Press.)

No. II.

ALDERSHOT SEWAGE FARM.

The farm lies to the north-east of the two camps, and it consists of about 112 acres of land, of which 89 are under cultivation ; of these about 46 acres are laid out for Italian rye grass, and 2 or 3 acres for rhubarb, which, we are informed, nobody will eat a second time, on account of its rank sewage flavour.

The soil consists of very porous sand, with a ferruginous subsoil. The sewage amounts to about 200,000 gallons a day. It comes from the north and south camps, where there are about 10,000 soldiers, with a supply of about 20 gallons a head daily. It is a strong sewage representing the pure sewage of an adult population with no manufacturing operations. It flows from the camp for a distance of nearly two miles through eighteen-inch earthenware pipes, with an average incline of 25 feet in a mile, but the incline is not regular and the pipes are too large, and the scour is not good. When it arrives at the head of the farm it is discharged from the two pipes into a common open channel, which delivers it to the subsiding tank, with a coarse contrivance for straining the sewage by an upward flow through perforated planks, and then it runs over a weir into the channel which conveys it to the carriers from which it flows over the land. The solid matters which are strained off from the sewage are conveyed to a pit where they are mixed with gas lime and other refuse matters, and are then used for manure ; but the amount of solid matter thus kept back is not large, for in twelve months it only amounted to about 300 tons in its wet state.

At the time of our visit, the farm was in a very offensive condition, for although the great bulk of the sewage was not flowing upon the land at all, but running bodily into the Blackwater stream, yet the remains of previous irrigation were lying about in cakes of partially dried fœcal matter, which would be washed away into the nearest streams and ditches by the first heavy shower of rain. The ground was everywhere sodden, and stinking, and the rye grass was dying out, and the usual rank water grass taking its place.

At the lower part of the farm there is a military or occupation road which bounds the farm, and on the opposite side of the road are a few cottages and beer houses, the inmates of which complained bitterly of the frequent stenches from the farm, the sewage of which flowed into the neighbouring ditches and ponds, and thus rendered the place a stinking swamp. Most of the sewage at the time of our visit was running from the farm across the road, and either going at once into the Blackwater stream or running upon the meadows behind the houses. At the places where the sewage was running into the Blackwater stream the bed of the river was silted up with the solid matters of sewage and rendered most foul and offensive. Samples of the sewage (No. 1.) were taken from the head of the farm as it came from the camp, and (No. 2.) after it had been strained, and (Nos. 3, 4, 5, and 6) as it was flowing from the farm to the Blackwater stream from four of the outfalls.

A sample of the Blackwater stream (No. 7) was also taken immediately before the entrance of the foul sewage water from the farm into it; and the following are the results of the analysis of the several samples :—

Constituents per gall.	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.	No. 7.
	Grs.	Grs.	Grs.	Grs.	Grs.	Grs.	Grs.
Solid matter in solution	53·93	53·73	51·67	52·47	58·20	54·13	18·93
Chloride of Sodium	14·92	15·36	16·98	17·08	24·01	20·64	4·12
Organic matter	30·01	31·70	27·89	24·21	20·69	22·10	3·56
Ammonia	7·54	7·54	6·40	6·40	5·04	5·12	0·18
Ditto Organic	0·94	0·94	0·56	0·64	0·48	0·48	0·08
Nitrogen as Nitrates, &c.	0·00	0·00	0·00	0·00	0·00	0·00	0·26
Oxygen required to oxydise	4·38	4·40	4·20	3·81	3·30	3·61	0·35
Matters in suspension	43·77	35·01	3·84	25·91	6·14	4·80	2·68
Organic matter	29·75	26·24	2·18	12·28	1·98	3·22	0·69
Mineral ditto	14·02	8·77	1·66	13·63	4·16	1·58	1·99

These results show that the so-called purification of the sewage by irrigation was merely a pretence, for the soluble constituents of the sewage were but little improved by the process, the organic matter of the effluent water being still over twenty grains per gallon, and the amounts of suspended matters also considerable. In a sanitary point of view, therefore, the process was highly unsatisfactory, for not only was the sodden sewage ground evolving a most offensive odour, which the inhabitants said was sometimes most sickening, but the effluent water was still a strong sewage, polluting the ditches and watercourse to such a degree as to render them a most serious and dangerous nuisance.

Considering how highly the Royal Pollution Commissioners had spoken of this Aldershot Farm, and of the success of the process,* we were not prepared for the shocking condition of things which we witnessed.

We have no means of ascertaining the commercial facts of the case, but if any sewage farm can ever be made to pay it must be in such a case as this, where both the land and sewage are given to the tenant for a peppercorn rent.

Next week we shall report on the

WARWICK AND BANBURY SEWAGE FARMS.

Analytical Records.

NEW PREPARATIONS.

WE received a few months ago a few samples of Long's Solution of Pepsine in Glycerine and some bottles of Long's *Liquor Ergotæ*, manufactured by Hamilton, Long and Co., of Dublin. The former preparation we found exceedingly useful in cases of impaired digestion and mal-assimilation. We exhibited the drug in form of mixture in combination with dilute nitro-muriatic acid, and the effect obtained was most satisfactory.

It is directed that this solution of Pepsine be administered *after* meals; our experience is—and those who employ it, we think, will observe the same—that it is more efficacious if given *before* eating; that it will thus hasten in a marked degree the process of digestion. We have great pleasure in recommending it as a most valuable preparation. The reliable efficacy and power of Mr. Long's Liquor Ergotæ, we believe, is already established by physician-accoucheurs and others. We can only assert that we found it active and certain in producing the effects of ergot, whilst the nauseous objection to the drug is overcome by reason of the sweet and palatable form in which Mr. Long's preparation is made. We regret, however, to learn Hamilton, Long and Co., knowing, we presume, the value of their latter medicine, have thought fit to patent it. A two ounce bottle purchased from, and obtained through, the Messrs. Herrings, bore the Government stamp. This will increase the price of the preparation, and put it out of the power of the general practitioner to keep it. Allowing the therapeutic value of these two preparations, we hope the eminent Dublin firm of Hamilton, Long, and Co. may be induced to give these medicines at a fair remunerative price, and that they will not deprive the general practitioner engaged in extensive obstetric practice of possessing the latter drug, because, owing to its present price, those gentlemen who use much ergot would find it amount to a serious item at the end of the year. This is our only objection, otherwise we have great pleasure in introducing to the notice of the Profession, and strongly recommending to them, *Long's Solution of Pepsine* and *Long's Liquor Ergotæ*.

THE editor of the *Union Medicale*, in his last issue, makes his lament in doleful strain. He says :—"We would have desired to have placed our humble residence at Chantillon at the disposal of two wounded officers, who might thus have enjoyed the most healthful circumstances. We are prevented from making the offer by the fear of the investment by the enemy of that part of the suburbs of Paris. Chantillon is situated exactly between the fire from the forts of Vauves and Montrouge. If they were attacked by the enemy these forts would bombard my poor house, and the wounded therein, as well as those who were taking care of them, would be no longer safe.

* "In this case the extreme natural poverty of the soil does not seem to have been a hindrance to the efficiency of the process of cleansing by irrigation. The farm, *well managed*, is covered with a capital plant of vigorous growth, to be fed by the filthy water, which accordingly is greatly purified by the process. * * *

"The Aldershot Farm appears the more satisfactory as an example of *the sewage nuisance abated*, at the same time that its filthy contents are converted into valuable produce, from the circumstance that a previous attempt to deal with it by subsidence and filtration tacitly had been a complete failure."

First Report of the Commissioners appointed in 1868 *to inquire into the best means of preventing the pollution of rivers.*—p. 78.

Registered for Transmission Abroad.

THE
MEDICAL PRESS AND CIRCULAR
Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 0
,, If Paid in Advance 1 1 8

, Post-office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 31, 1870.

THE WAR AND ITS LESSONS.

"Medical men, like priests, have no right to be politicians." It has long been justly felt to be highly important that some persons in all countries should devote themselves to the welfare of the whole race, and not only of that portion of it which is for the moment under the same government. The Christian religion has ever taught that all men are brethren; and in no case is the teaching of this sublime fact felt to be more true than when it is applied to the case of the sick. Anatomy and physiology have revealed to all who are members of the noble art of healing, that the differences between Germans and French, or between English and Russians, are but skin deep. The rate of the pulse is a constant quantity in all European countries,—the length of life and many other facts of our natural history are equal in most States. Everywhere man has the same appetites of hunger, thirst, exercise, repose, or sleep. Hence, the medical observer is sometimes at a loss to conceive why European nations should object to leave each other in the tranquil enjoyment of the means of satisfying the imperious demands of these appetites as far as their conquests over external nature will admit.

In former days, it was the priesthood alone who were supposed to be sufficiently imbued with the spirit of Christian brotherhood to be allowed to accompany armies without taking an active part in the conflict. Modern civilisation has made a great step in advance in adding to the list of those who are to be allowed to be present as non-combatants at these sad scenes of butchery, our modern battles, the members of the medical profession. It is, indeed, a kind of *reductio ad absurdum* of the whole theory of modern warfare when we see that the sole object of hostile camps is to disable each other for the moment from fighting, not the further suffering of the combatants. In days gone by, all kinds of cruelties took place after the battle was over. Soldiers revelled in murder and rape for days after a victory. Who, then, shall say that human nature makes no progress, when we hear so much, at this terrible hour, of the benevolent and arduous attempts everywhere made by members of our Profession to mitigate the miseries of the soldier in the field and after the battle is over?

Although patriots, we are, indeed, no politicians in the narrow sense of the word, which makes men love their own country alone, and count the citizens of all other nations as aliens. Medical art is ever ready to succour all members of the race. Medical science finds too little difference in the construction of the human frame in various countries to require any peculiar set of precepts of art to be carried out in different countries. The great Virchow is a renowned physician in Paris or in London. Nélaton is as great a favourite with ourselves as he is in Paris. The illustrious Jenner has a statue in France, although, alas! he is neglected in aristocratic London. Laennec's memory is as much loved and revered in Dublin, as it is in St. Petersburg or in Berlin.

The truest of all democracies is the medical fraternity. It is a republic, like that of letters; and the chief men in our Profession are those who are the inventors of some agent, such as chloroform, which shall free the whole race from needless suffering; or the discoverer of some new remedy or application against mechanical or physiological injuries. Our Simpsons, our Velpeaus, and our Trousseaus have mostly worked their way to fame from the ranks; and, although practice and the emoluments of the Profession are doubtless often the lot of the least scientific of our brethren, still the man of real utility as a discoverer in medical science is sure to be recompensed by some modest professional reward. We hold, then, that it is one of the most encouraging signs for the future destinies of our somewhat unfortunate race that the same honour which, for so many centuries, has been granted to the clergy, is now to be shared with the doctor.

For, after all, depreciate as you will the human frame and its necessities and abilities, it is all that we have. Without the integrity of the brain, where would be our thinkers? Without a healthy heart or lungs, what is human life? Certes, it is not in these days of accurate anatomical and physiological research, that it will any longer be found possible to talk slightingly of the doctor's *mission*.

The aims of medicine are the sublimest of all human aims. The true physician, or, rather, generally, the medical student, belongs to all countries. Everywhere he sees, with interest, the wonderful construction of the human frame, endeavours to penetrate into the arcana of life, and to discover what militates against health. Medical men are, of all men, the most fit for fraternity and equality. They learn to judge their fellow-man, not by some superficial qualities he may chance to possess, but by the deepest of all criteria, those founded on constitution and temperament. Many persons say that this Franco-Prussian war is likely to be one of the last fought in Europe. Would that this were likely to prove true! We ourselves are too anxious that it may be a correct prophecy to be good judges of the truth of the saying. But of one thing we may be certain; and that is, that the tendency of the study of the science of medicine is towards those golden times when war shall cease among all civilized nations.

What! is it to be said that our Profession is inces

santly to be progressing in its inroads upon death, disease, and suffering, whilst, every now and then, nations are to go mad, and undo all our trouble by slaughtering each other wholesale? The thought is madness. Human nature, although, alas! full of contradictions, is always in search of happiness; and as philosophy is fast advancing (although both France and Germany are rather backward in philosophy as yet), we may still hope that our immediate descendants may live to see war looked upon as the greatest of all errors and crimes. Meanwhile, let us again congratulate ourselves on the place assigned to our heroic brethren on the modern field of battle. The cannons and the mitrailleuses directed against their fellow-citizens carefully avoid the camps of the red-cross. Thus, in the midst of war there is peace, and in the midst of enmity, fraternity. All honour to the ambulances of the International Society. Let us all send our mite freely to Paris or Berlin, being certain that in so doing we shall advance the cause of humanity and add to the renown of our sublime profession.

THE LICENSING CORPORATIONS.

A Parliamentary return has just been issued, on the motion of Sir John Gray, which puts us in possession of sundry facts and figures which, probably, we should have had some difficulty in arriving at if we were dependent on the voluntary acts of the Licensing Corporations. This return was moved for by Sir John Gray for the purpose of placing in the hands of members some information preparatory to the introduction of his Medical Bill. It furnishes us with—

"1. The number of each kind of licence, diploma, degree, or certificate granted from 1865 to 1869, inclusive.

"2. The amount of 'the fee' paid for each.

"3. The number of years during which the candidate for each is required to be engaged in studying the Profession, and how many months in attendance at hospital.

"4. The time during which the candidate is required to have been engaged as dresser, clinical clerk, or pupil, stating the dates at which such practical hospital work was declared to be a requisite qualification.

"5. Is the candidate to demonstrate at the bedside of a patient that he has acquired a practical acquaintance with disease, giving the date at which such rule was adopted, and the date since which it has been operative."

The relative proportionate part which each licensing body takes in the qualification of the Profession is the first point in this return which arrests our attention, and it affords us, at the same time, subject of speculation as to the means which some of the Corporations adopt to secure such extensive patronage, and as to why others, who may be said to have no useful *rôle* to fulfil, are allowed to exist at all.

In England, the "College and Hall" so immeasurably out-top the Universities, and even the College of Physicians, that they may almost be said to qualify every medical man.

The College of Surgeons, in the five years, made no less than 1,652 surgeons, and conferred besides nearly 200 fellowships, and 167 licences in midwifery. In other words, it gives 330 licences each year, and only one in ten of its licentiates takes a qualification in midwifery. Its numbers, however, seem to be steadily falling off since 1865, the number of memberships conferred last year being more than one-fourth less than in 1865.

Hand-in hand with the College of Surgeons goes the Apothecaries' Company, which granted last year 275 licences, and, on an average of the five years, 261—a number approaching within about one-third to the total of all the medical practitioners qualified in England.

The "Hall" appears, also, not only to maintain its long-enjoyed prestige, but to improve its position from year to year, for its figures show a steady, if not a very large, increase.

By virtue of the axiom which makes a man respectable because he "keeps a gig," the College of Physicians of London may be said to "keep a gig;" for it occupies, in relation to the College and Hall, what betting men would call a bad third; and it is perfectly evident that the rank and file of the Profession either do not take a medical degree, or they seek it elsewhere than in London.

The five years' average of the College of Physicians shows that it confers annually 70 licences and 18 memberships, and that the demand for its qualification is not improving.

As qualifying bodies the Universities of Oxford and Cambridge may be eliminated altogether from the calculation, for the number of persons who seek the honours of M.D. Oxon, or M.B. Cantab, are utterly insignificant. The largest number of Bachelors of Medicine capped in any one year in Oxford was three; while in Cambridge the total number of medical and surgical degrees conferred did not exceed on an average five.

The University of London has, however, put in a louder claim to being the Medical University, and, in view of the figures before us, its effrontery seems marvellous. If report speaks true, it was in favour of this establishment that the amendments—save the mark—of the Medical Bill were introduced, and it might have been supposed, by the tone of *hauteur* adopted by it, that it exercised some influence in medical education, or was likely to take a leading position amongst licensing bodies. The truth, however, as elicited by this return, places this institution in the same category as South Kensington, as an insatiably expensive job without it possessing the merit of making any return to the country for its cost. The degrees of Bachelor of Medicine and Master in Surgery are the two working qualifications conferred by the University, that of Bachelor of Surgery not being recognised by the Medical Council as a qualification to practise. The University granted last year seventeen Bacalaureates in Medicine, and made one Master in Surgery. In other words, it qualified about one-twenty-fifth part of the aggregate number of doctors qualified in England. Nor does the London University give promise of greater results, which might justify the Government, even in anticipation, in humbling the Profession at its feet. In 1866 it granted twenty-eight working degrees, and every year since the falling off has been steady and decisive.

So far, then, as English qualifying bodies are concerned, the return puts before the Profession a very plain conclusion as to whose hands it is in which Medical Education is placed.

Seven-and-a-half-tenths of all English Licentiates take the licences of the College and Hall; one-tenth are qualified by the College of Physicians; and one-twentieth by the Universities. We shall proceed with our analysis next week.

Notes on Current Topics.

About the War and Wounded.

Who thinks of anything now but this hideous slaughter? Scraps and notes in relation to it seem to absorb the attention of all newspaper readers; and, of course, doctors, on whom devolves the care of the worst sufferers, cannot but be doubly interested.

Disease is likely to be more fatal than the sword if the war be not speedily brought to a close. We believe the Prussians are already suffering severely. As we predicted, the advent of rain instantly had the effect of causing sickness. As the Prussians are unprovided with tents, or other mode of protecting themselves from the inclemency of the weather, unless they can obtain a speedy peace, they will find Providence fighting against big battalions.

It is said that the Germans are alive to the evils of overcrowding, and we can add that French medical authorities are equally well informed. But can overcrowding be helped? Must not every available hospital be overcrowded? When we reflect on the numbers to be attended to, and the small space available, we are as concerned as we are at the impossibility of the surgeons present sufficing for the thousands of our wounded fellow creatures.

Think for a moment of the numbers of the killed and wounded that have been reported already, and it is obvious that medical and surgical aid could not have been bestowed on a tithe of them. The reports, we know, at present are very incorrect; but the history of all recent wars has told the same tale of immense numbers perishing without help. The Crimean of 1854-5, the Italian of 1859, the Danish of 1864, the Bohemian and Italian of 1866, the American war of 1861-1864 all prove that the ordinary medical staff of all armies is utterly unable to cope with the mass of suffering which follows a great battle. At Solferino there were nearly 42,000 killed and wounded. Between May 4th and June 20th, 1864, there were 8,487 killed, and 44,261 wounded in the campaign in America. At Sadowa there were upwards of 20,000 wounded. Three days and three nights passed before the wounded could be collected from the field after this battle. After the battle of Gitschin in the same campaign, wounded men were forty-eight hours without nourishment of any kind. We need not quote the numbers that have figured in the newspapers in this last war. They are fresh in the memory of all—or, at any rate, all know that the mass of maimed men has been most horrible to contemplate.

Some English surgeons have been sent out by the Society for Aiding the Sick and Wounded in War. Their services have been readily accepted, and we need not say they are working hard at their posts. The same Society is sending out medical and surgical necessaries, and it may suit some of our readers to present to them articles of this kind. Surgical instruments and appliances of all kinds will be thankfully accepted for this purpose, and immediately forwarded, as will also chloroform, opium, and the hundreds of things that it is not necessary to specify for professional readers.

M. Michel Chevalier has been writing in the *Revue des Deux Mondes* respecting the sanitary condition of the French Armies. He speaks of the defects noticed in the Crimea, and considers that these defects originated in various ways, all of which have been many times exposed and condemned. The great evil of all is that the Medical Department in France is subject to the "Intendance" Department, and this gives rise to many inconveniences. M. Chevalier condemns this, as well as many other things. He points out, too, how inefficient is the number of surgeons, and tells us that no less than forty-five out of eighty died in the Crimea from the overwork imposed on them.

Have explosive bullets been used? We do not believe in the reports that have been started either as to this or any other infringement of the Geneva Convention. In war time such reports are sure to be spread. Some are pure inventions; others arise from accidental mistakes. We may here quote the result of some experiments that Mr. Adams lately made: 1. An explosive bullet discharged into the head of a horse caused instantaneous death. There was only one report; a little blue smoke curled out of the wound; the bones of the head were shattered; the brain utterly destroyed, presenting merely a disorganised pulp; where the bullet lodged at the back of the head there was a cavity seven inches long, by six inches broad. 2. Another horse was killed by a plain bullet in the head. The bones were not shattered, and the brain was completely uninjured; and, although the animal dropped immediately, the subsequent quivering of the limbs showed that death was not so instantaneous as it had been in the other instance. 3. An explosive bullet was discharged into the thorax of a dead horse. From the wound itself there was no smoke; but, on the chest being cut open, a considerable quantity issued forth. The bullet penetrated and shattered one of the ribs, and lodged in the opposite side, having produced immense laceration of lung tissue. 4. An explosive bullet, when fired against bone, produced widely-extending comminution.

The Volunteer International Ambulances are expensive, but of incalculable value. The complement of each is 27 surgeons and assistants, and 60 "*infirmiers.*" One ambulance can attend to nearly 2,000 wounded, but ought not to be so pressed. From 1,000 to 1,500 is a large number to attend to. The Paris newspapers have subscribed and furnished one.

At Metz we are told that M. Sonard, who organised the Brescia Hospital in the Italian war, has the sole charge of the hospital arrangements.

One of the most important things to help troops to fight well is to feed them well, and yet we hear of the supplies being endangered here, the rations being reduced there, and, in another place, regiments going into a fight with empty stomachs. Troops should never want in this way. In fact, they should be well fed and exercised, so as to keep them in good condition in time of peace, and it may be worth while to take this opportunity of directing attention to the diet of our own Army. We fear it is not to be denied that both the quantity and quality of the British soldiers' diet are defective. This subject should be considered by the authorities.

But, in regard to our own immediate help to the wounded, diet, too, is of great importance. If compelled to choose between unlimited surgical appliances and an unlimited supply of good food for the wounded, we should be inclined to trust to the latter. Here, then, is a hint for those helping: Concentrated foods of all kinds, con-

densed milk, Liebig's extract of meat, and such like articles may really be of greater use than instruments, which are only needed to supply the surgeons present. In the absence of professional men, such foods and medical comforts need not lie idle as bistouries, amputation knives and saws do.

These, too, may save from the diseases which may be expected to ravage the camps. Such close agglomeration of human beings always leads to sickness, for which, and as a preventative of which, abundant food and medical comforts are urgently needed. Abundant food, in a dietary of great variety, to guard against scurvy, fevers, and other outbreaks, and to succour the injured and those falling ill, ought to be provided for in every army; but, alas, how often do privations exist!

Dr. Thudichum strongly advises the sending out of condensed nitrous oxide. Is it certain that the military surgeons of the Continent are accustomed to use this agent or possess the apparatus?

There are nearly 2,000 Parisian medical men and students ready to serve, but who have not yet been employed. Red tape seems worse in France than England, and even in this crisis is not swept away.

The Germans have tried a condensed diet in the form of a kind of pease pudding, in which smoked meat, chopped up small, has been mixed. A lump of this forms a complete meal of animal and vegetable food. It is said to be good cold, but can be improved by boiling when the soldier has the opportunity of getting water and fire.

It is no easy thing to imagine what 20,000 wounded means. The words are easily pronounced, but the idea can scarcely be grasped. One thing it means is, that many of the sufferers are left untended on the field. A correspondent gives us a heart-rending description of a number of these unhappy sufferers, who had not been removed on the third day after the battle in which they fell before Metz. The number of surgeons is utterly inadequate for modern warfare.

Why will not our Government send out a number of military surgeons? By the Convention of Geneva they would be accepted. They would gain invaluable experience in case we should be involved in war. They would be of great benefit to the miserable sufferers. There are plenty who would rejoice to go instead of eating their hearts out at home. If there is something for them to do, throw that duty on the medical staff of the Militia or the Volunteers, and so give those surgeons some practical experience.

So beyond all calculation have been the numbers of the wounded, that many German towns have heartily responded to an appeal to the inhabitants to take them into their own homes. This is an excellent plan. Distribute as widely as possible all the wounded—and German towns can easily receive many. But unhappy France! How can such comforts be provided in an invaded country? In this respect our sympathy for the French wounded should be redoubled. With requisitions to feed the enemy, how can the poor people tend the sick and wounded?

As we go to press we hear that pyæmia and fever are raging in the citadel, where some 15,000 or 20,000 wounded lie. It may be that before this reaches our readers' eyes, it can be of little consequence as to the course of the war; but it is of great importance as a medical event, which we predicted would occur.

Showing Children London.

We had hoped the unpardonable and dangerous practice of lifting children by the chin and occiput in order to show them, as it is said, London, was a cruelty practised by the unthinking and ignorant-minded of a past generation. About a year ago there was recorded, as well as we can recollect, a fatal case, wherein a nursery maid lifted her charge off the ground in order to show it London. The child died immediately, and a *post-mortem* examination revealed a rupture of the transverse ligment and a falling forward of the odontoid process upon the spinal cord. We were horrified a few days ago, as we walked through a fashionable park, observing a man lift several children one after the other by the chin and occiput, and swinging them from side to side, whilst he repeated a portion of a rhyme which we think Dean Swift never meant for so dangerous a practice—

> Here we go up, up, up;
> And here we go down, down, downie;
> And here we go backwards and forwards,
> And up to London townie.

Upon repeating the third line the child got a lateral swing, and the last line had it suspended "high in air." This is just the most likely way to dislocate the *axis* from the *atlas*. We wonder when people ever will have common sense. It is too late, when death occurs, to remedy an existing evil practised through ignorance of the consequence. We think, then, wherever children congregate in numbers, the policeman should have his eyes open to head-swinging, and make a few examples in the police-court. Fine, or imprisonment, will most likely destroy, by the publicity given to the punishment in the daily papers, a dangerous and absurd practice.

A new Sanatorium for the Winter.

Our readers will remember that last spring we announced a project for establishing a Sanatorium at Cairo under the control of Mrs. James Appleton, of Portsdown House, Clifton Gardens, W. We have now the pleasure of stating that all arrangements have been completed, and that Mrs. Appleton intends to leave London the first week in October, and would be willing to take charge of invalids who may propose to spend some time in the beautiful climate of Egypt. In the midst of the uncertainty respecting Continental health resorts, and considering Mrs. Appleton's experience, we can freely add our opinion to that of some of the most eminent members of our Profession, that invalids can scarcely do better than avail themselves of such an opportunity.

The Coal-miner's Spine.

The condition of the spine of the collier who works in damp mines has not, we believe, been written upon. We had an opportunity lately of watching a number of coal-miners going to and returning from the "Pit." We remarked the peculiar gait of a number of these men, and directed the attention of a local practitioner to the circumstance, but this gentleman was so accustomed to their appearance that he overlooked what appeared a peculiarity and an

abnormal state of things to us. They walk with the head and shoulders bent forward, and the lumbar and sacral regions projecting greatly behind. The legs seem stiff as if there were little movement about the hip joints, with a superfluous amount of genuflexion.

We had a few of these colliers undressed and examined. We found that in all those who walked as we now describe, there was antero-posterior curvature of the dorsal spines; that the man was unable to stand erect, and that there was a very considerable amount of stiffness about the hip joints. We were unable to detect any tenderness or learn from the collier that he suffered from pain or actual inconvenience. They all invariably ascribed the distorted spine to being sent to work in a damp pit at too early an age; the deformity was slow and progressive, yet one youth of three-and-twenty years had the gait and appearance of a man of fifty. We gathered from not a few that lying on the back, for the purpose of striking the "Bind" with their pick, on a damp surface, produced rheumatism which terminated in the stiffness, and eventually in the deformity. The curvature is irremediable, for we saw a man of fifty who had not worked as a miner for many years, yet he retained the hollow back with a well-marked concavity directed forwards.

We recommended a few young colliers to wear washed leather bands around the back as a preventative, and we shall return to the subject when the result is recorded to us.

Hair Restorers.

From the analyses of Professor Chandler, it appears that lead is the universal ingredient of these quack preparations. In fifteen different kinds examined he found this metal in all, the lowest quantity being one-ninth of a grain, the highest sixteen grains in the ounce.

In one lotion for the skin he discovered corrosive sublimate!

The fashionable enamels he found to consist of carbonate of lime, oxide of zinc, or carbonate of lead.

Infant Mortality.

The Quarterly Returns of the Registrar-General show that taking an average of the Kingdom the deaths of infants and elderly persons may be regarded as the same; but that, in considering the mortality separately, there is great local variation, and that in some places the infantile death rate is excessive. In Staffordshire and Lancashire the proportion is great, whilst in Devonshire there are not one half the children die compared with those over sixty years of age. Infants appear to die quickly in Bradford, Liverpool, Manchester, Leeds and Bristol. The county of Nottingham has long had an evil reputation respecting its infantile mortality; this quarter we find the number of deaths compared between young children and elderly persons is about equal, but we have made inquiry into the cause of a previous increased infantile mortality, and we learn the cause is chiefly dependent on the nature of the employment of the people, and to the neglect of the children. In Sutton-in-Ashfield, for the quarter ending in June, there were 125 births and 112 deaths. Of the latter the greater number consisted of children under a year old. A correspondent living in the district tells us that nearly all the residents have large families; some women have borne twenty children, and every fresh addition, particularly at the present when work is scarce for the stocking knitter, is looked upon as an intrusion, and the parents are only too thankful if the child "goes back." We believe the children are generally born healthy, and free from disease—syphilis being rare, owing to the early marriages and the mutual arrangement married couples enter into if dissatisfied with each other as to separating and taking a fresh spouse—but after birth they receive little care or attention. If irritable, or suffering from colic, they are speedily dosed with Godfrey's cordial, or some other anodyne, as the mother generally is forced to wind the cotton on bobbins in order to keep the husband employed in the frame, so that there is little nursing, little maternal care, and no anxiety manifested whether the child lives or dies; accordingly, the infant mortality of Nottinghamshire is truly great. We understand in the coal mining districts the mortality is not near so excessive in proportion as in the frame-work knitters' towns and villages. If epidemic disease, as measles, scarlatina, or typhoid fever, affect them, what from want of proper nursing, and the great defect which exists in sanitary arrangements, the number of deaths are out of all proportion. It is difficult to recommend a remedy for this infant mortality; that it is due to carelessness on the part of the parents, and to the want of proper precautions being adopted by the authorities, there is no disputing. It is out of the question trying to teach the people the value they should set upon the lives of their offspring; but, we believe, the authorities should put their *veto* upon the reckless and indiscriminate sale of syrups containing opiates, that the pennyworths of Godfrey's cordial should be stopped, and that Local Boards of Health should be formed, under the Towns Improvement Act, to look after, and if need be improve, the sanitary condition of the locality; that in all cases of suspicious death the coroner should direct a *post-mortem* examination to be made, and should not be satisfied with the statements of interested relations who in many instances, our correspondent tells us, overdose their children. No medical evidence is sought by the coroner, and some absurd verdict returned by a jury at his dictation.

This is a miserable state of things, and readily enough teaches a surprised Registrar-General why infant mortality is so excessive in certain localities.

"The Love that Kills."

Scarcely a week passes that we do not observe in the police intelligence column of the daily newspapers, the report of some poor deluded woman brought before the presiding magistrate, who attempted self-destruction because of being *enceinte* to some wretch, who deserts as soon as he betrays; or who is driven to desperation in the agony of her grief, and in the deep force of her love, because of the duplicity and villainy of the tempter. Foiled in the extreme step of suicide, justice satisfies itself with a week's remand of the offender, with the advice of the prison chaplain during the interval of the weary week, and an acquittal with a caution as to the future. Should the self-destroyer succeed in the act, society is satisfied with a coroner's inquest, and a verdict of temporary insanity; but society never troubles itself further with the poor fallen sister, who, in the anguish and bitterness of a self-convicted mind, tried to rid herself of the world's callousness and hard-heartedness, because of her own weakness and another's guilt, and she just steps from the dock to face the

world anew with a fresh stain upon a character—the loss of which drove her to the act she stood charged with.

We don't refer to the depraved woman whose profession is prostitution, and who either from advancing years, increasing poverty, chronic alcoholism, or incipient *delirium tremens*, attempts suicide ; we confine our remarks to the first fallen, whose innocence in their confidence of some monster in human form, deprives them of the world's good name, and robs them for ever of that which is most dear to woman. No matter how often a man may stray from the bidden track, the world overlooks his folly, and he quickly recovers his position ; but, when the chaste spirit of a virtuous woman is once tarnished, and her fair fame is defiled, society, in their civilization, close their eyes upon the degraded one, and shudder at her presence. This it is to which we object, for we argue if a woman falls once, and, by conduct, demonstrates how keenly the blow is felt, and how acutely she suffers mentally, that a chance should be held out to her for reformation. What becomes, we ask, of all those young women driven mad in their despair, who weekly come before one of the divisional magistrates ? Do they return to their homes to become useful members of society ? Do their relations and friends receive them as before ? We fear not. We believe, and our hospital experience teaches us the fact, that they are driven to prostitution for the sake of an existence. They dread meeting their relatives, and they adopt the only course open to them, for, without reference as to character, they are deprived of obtaining honest employment.

It is truly deplorable in the syphilitic wards of our large hospitals, in being made confessors of woman's weakness, to be told tales even from sinning lips that would make even the hardest hearted shudder, or the greatest worldling weep over the wreck which disease and debauchery have worked, and from which some timely succour in some temporary haven might have rescued them for ever, had it been offered at the first downfall, when the modesty and inward horror depending on a ruined character developed itself. We think we are the first to herald the good tidings that an active and competent member of the House of Commons will, in the next Session of Parliament, direct the attention of the State to this grievance, and will in addition ask for a measure that will have for its object the punishment of the seducer in a summary manner. Our only wonder is, why England has remained in apathy and apparently cold indifference so long, over so serious a social grievance, but if the Government will support such Asylums, and give the erring woman in her first backsliding from strict propriety a chance of reforming and of regaining a position lost, and wiping off the tarnish upon her moral character, it will truly be a most praiseworthy action, and no body of men will know how to appreciate it, after the poor victims themselves, better than the members of the Medical Profession.

Private Lunatic Asylums.

In a recent tour along the borders of Wales, we visited the Asylum at Church Stretton, the proprietor of which, Mr. Hyslop, offered us every facility to acquaint ourselves with the medical and domestic arrangements. We wandered about the establishment and grounds without let or hindrance, entered into conversation indiscriminately with the patients, and were pleased to see such order and contentment reign. A greater testimony to the character and worth of the proprietor of this asylum could not be found, than that more than one patient, when discharged cured, had obtained permission to still reside in the house as private boarders. The following particulars gathered at the visit referred to will, perhaps, interest some of our readers : Patients are accommodated, and receive the comforts of a first-class home, at terms varying from a guinea a week upwards. The Home Park is over 100 acres in extent, and the walks and drives by which it is surrounded are amongst the most romantic and picturesque scenery in the kingdom. The out-door amusements, such as cricket and gardening, are much appreciated in fine weather, whilst equal regard is paid to indoor recreation in the shape of billiards, music, &c. ; and for the more wealthy, additional luxuries are provided in saddle-horse and carriage exercise. To the physiologist, an asylum of this class, which necessarily contains the better class patients, affords an illimitable scope for study. The farmer patient, ever ready with advice as to the management of the homestead, which, fortunately for the cattle, could not always be adopted ; the phrenetic barrister insisting upon —what those piping worthies never do—pleading your cause gratis. We were, ourselves, generously offered the next presentation to a Professorship at Oxford University, value half a million, by a *passed* Oxonian ; and a still more valuable document was placed in the hand of the proprietor, at the Asylum Board, which consisted of a strip—the margin of a newspaper—whereon was written, pay to the order of W. Hyslop, Esq., the sum of £800,000 ; whilst another peripatetic, formerly one of the most eloquent of town councilmen in a neighbouring city, displayed his bent in a phylactery upon which was written "mottled soap," and about which decidedly useful article he was wont to indulge in a peroration of no mean order. For the last twenty years, private asylums have been open to the inspection of the public, and every means adopted to remove those impressions which such novels as *Valentine Vox* had not unnaturally impressed them with ; and now that Psychology has become an advanced and defined science, it is really pitiable that such superlative twaddle should still be preached by one or two contemporaries, who speak of "rib-breaking" and "bone-crushing," as if asylums, public and private, were nothing better than improvised mills to reduce those osseous portions of the human economy to a state analogous to the brains of the writers. With reference to certain prolific causes of insanity, we will give Mr. Hyslop's words, feeling that the opinion of a gentleman of such extensive practical experience and acute perception should carry its own weight. He said "there is no doubt that among the chief causes, are, nervous diseases and quackery ;" and that in the pockets of many patients he finds on entering, one or more of the villanous pamphlets of the quack scoundrels who infest every large town, sowing destruction broadcast through every village and hamlet. Can nothing be done with these ? Mr. Hyslop further thinks that the indiscriminate mixing of the idiotic and insane with the general community is a fruitful source of chronic idiotcy, and the public should be taught that asylums are as essential for the treatment of *mental* diseases, as are hospitals for *bodily* ailments. Referring to public asylums he maintains with some show of reason that no building should contain more than 300 or 400, that an acre of land for tillage and other purposes should be secured for every four patients, and that the medical superintendent should be monarchical. Managers should

be appointed over the male departments, as matrons are over the female, being responsible for the conduct of the attendants, &c. At present, the medical superintendent is overloaded with the internal economy, and has not, therefore, the time to devote to his more important professional duties and requirements in an establishment containing five or six hundred patients. We were glad to find throughout such excellent management here ; and, in mentioning, as an illustration, the one we have just visited, we need only add that it is not an exception to the rule, and that plenty of others would be found had we more time and space to devote to the inquiry. The establishment we have spoken of is for gentlemen only, Dr. Clement, M.P. for Shrewsbury, being the consulting physician, and Dr. McClintock, the medical attendant ; but there is another similarly conducted for ladies about a mile distant, under the proprietary of Mrs. Bakewell, widow of the late Dr. Bakewell, so that the little town of Church Stretton can boast of two of the best private asylums in Great Britain.

Official Incompetency in Matters Pharmaceutical.

The evidence given before the Select Committee on the Abyssinian Expedition discloses the incredible fact that the loss on the sale of medicines ordered for that undertaking was £35,829.

In any other country where official incompetency is less glaring, and commercial corruption less flagrant, so scandalous a transaction would be marked by some decisive action on the part of the Government. Let our readers picture to themselves the rottenness of our administrative departments when an over-supply faintly represented by a per-centage loss of nearly £40,000 can pass the observation of responsible controllers.

Professor Huxley will give the Address at the British Association next month.

Scarlet Fever is increasing in London.

Mr. B. Carter has been appointed Ophthalmic Surgeon to St. George's Hospital.

Baron Diergandt has given £10,000 to the German Hospital, London.

The Mayor of Aberystwith, whilst preaching on Sunday last at a dissenting chapel of which he was deacon, was attacked severely with paralysis, and fell almost lifeless among his congregation.

By a new Act of Parliament, the Poor-law Board may define cases in which the guardians of a parish may pay the expense of a pauper's conveyance.

The Director-General of the Medical Department of the Navy, Dr. Armstrong, R.N., has concluded his official inspection of the naval medical establishments at Plymouth.

The new law of life assurance is now in force, and we trust will be found of some protection ; at any rate, it will enable proposing assurers to ascertain some of the facts of the company's finance.

M. Husson, the Director-General of Public Assistance for the Hospitals at Paris, has obtained from the War Minister an exemption of the Hospital Students from military duty.

M. Wurtz, Dean of the Faculty of Medicine, has put forth a statement that the students who are inscribed in the registry of the Val-de-Grâce, shall be retained in Paris, and in the localities where they may now be, and will not be required to report themselves at the military depots.

The Poor-law Board have not approved the proposal of the St. Pancras Guardians to require their Medical Officers to devote all their time to the poor. The only objection to such a move is the vested interest of men now in practice. Could not this plan be gradually brought into operation ?

We hear that the general health of Lady Mordaunt has lately improved, but that her mental state is such that it is necessary for her to remain under medical care. She is in a first-class and most comfortable private asylum near London.

The *Peuple Francais* makes the following statement, which may be worth much or nothing :—" We are informed from Soulz of a violation of the Convention of Geneva in the case of Army Surgeons acting under Marshal MacMahon. Several Medical Officers have been detained for the last eight days, and—what we should not have believed unless we had personal knowledge of its truth—their horses, baggage, money, and clothes have been taken from them ; and, not content with these indignities, the Prussian officers would not give them during their imprisonment either food or lodging. Many of them were obliged to lie on the ground, and had nothing to eat for several days but potatoes found in the fields."

M. Dorvault, Director of the Central Pharmaceutical Establishment of France, has presented to the Society for the Succour of the Wounded 100 kilogrammes of quinine, 500 litres of quinine wine, and material for 10,000 litres of hygiene drink. In addition, he has put at the disposal of the administration at St. Denis, five chambers with beds for wounded officers, buildings for the accommodation of ambulances for 200 wounded men, stables for horses, with every necessary medicine, and a fire brigade of ten men.

It has been stated, upon what we must reluctantly consider good authority, that a successor has actually been appointed to the late Military Commandant of the Royal Victoria Hospital at Netley. That such a functionary is as much out of place in an establishment, the sole purpose of which is the relief and cure of the sick, as a medical man would be at the head of a regiment, has so often been remarked, that we now almost hesitate in printing the

self-evident fact. We have observed, with considerable satisfaction, the resolution displayed by the Admiralty in abolishing the position of Captain Superintendent of Haslar Hospital, at the same time that we congratulate Inspector-General Salmon upon the success and efficiency with which, under his sole rule, the entire administration of the establishment is conducted, including matters of professional detail, of finance, and discipline; nor have we ever heard it asserted that the absence of the late Governor of Netley has been missed in an official sense, whatever it may be in a social. There is not a doubt that the Inspector-General there could conduct the whole duties of administration as easily and well as Dr. Salmon does at Haslar, at the same time that a considerable money-saving would be effected to the public, and a good deal of irritation saved to officers more immediately concerned.

The time has more than arrived when each department of the public service ought to be held responsible for what directly concerns it, and for no more; military officers should be so for those of a military nature; medical officers for all that bears upon the treatment, accommodation, and general management of the sick; but of all places, hospitals are surely the very last in which military pomp and circumstance are in any way appropriate. We are aware that it is in contemplation to abolish double government in military hospitals, and to throw the entire management upon the medical department. This is as it should be; and it is to be devoutly wished, considering the present aspect of public affairs, that such a change may not be long delayed, at a time when all preparations for probable emergencies ought to be completed. Perhaps, therefore, the military authorities may yet be induced to leave well alone as regards Netley—taking in this an example of what has been done, with such excellent results, at Haslar. May we point to some of the results of military administration in the French Army as quite recently described, and ask if such a system should be any longer copied in ours? It is thus summed up in the *Pall Mall Gazette* of 23rd August:—"But the beaurocratic obstacles have been too great, and the sufferings of the wounded on the French side have been frightfully aggravated by official incompetence." So much for their system of military *intendance*.

SCOTLAND.

GLASGOW.

The trustees of Anderson's University have elected Dr. J. E. Thorpe, Owen's College, Manchester, to the Chair of Chemistry, vacant by the death of Dr. Penny. The other candidates were Dr. J. Campbell Brown, Liverpool; Mr. Tatlock, Glasgow; and Dr. John Clark, Glasgow.

EDINBURGH.

It is stated that the University authorities contemplate purchasing the buildings and grounds of the present Royal Infirmary. The price mentioned is about £20,000. The foundation stone of the new Infirmary is expected to be laid in October next, when it is hoped the Prince of Wales will preside.

A general Poor-law order has been issued to the effect that appointments of Medical Officers after Sept. 29 next will be permanent.

Hospital Reports.

Remarkable Case of Alopecia, the Result of Cerebral Injury.

By R. Cooper Todd, A.B., Staff-Surgeon.

Alopecia, partial and complete, is often the result of special dyscrasiæ, or zymotic diseases. It has followed parturition, and in fact any influence producing cachexia. It is, however, generally regarded as a manifestation of syphilitic infection, and some have blamed the exhibition of mercury for the baldness.

In such cases, however the loss of hair is mostly partial, and it is confined to the scalp. It is also generally slowly progressive, extending over a few weeks, or even months; and the patients are apt to recover as the cachectic state passes away.

In the case about to be recorded, however, the loss of hair was general, and took place, when it began, at once. The patient was a strong, healthy, hirsute man in the prime of life, and free from any scrofulous or syphilitic taint. The alopecia came on, it is true, some time after the cerebral injury, and after the exhibition of both mercury and the bromide of potassium, yet it can scarcely be doubted that the history of the case, particularly when compared with that of another similar one, points to some nervous influence as the cause of baldness.

It may be well to mention that the original cerebral injury was treated on the expectant principle, nourishment and even stimulants being cautiously administered. The exhibition of mercury was proposed by that distinguished practitioner, the late Dr. Hutton, whose valuable aid I had solicited, but the medicine was not administered, in deference to my opposition; and it is curious to relate that the very first serious symptoms in the case followed the action of two mercurial purgative pills, taken without advice by the patient himself.

It is thought that the unique character of the case justifies the hope that it is worthy of a place among the recorded cases in the Army Medical Report, although the case *per se* has already appeared in the pages of the "Lancet."

In the summer of 1863 I was called to see a gentleman, aged about forty-five, at an hotel in Bray, Ireland, who had been thrown from the side of an Irish car upon his head, and received a partial concussion of the brain. Immediately after the accident he was quite master of himself, and able to continue his journey until he reached the hotel, which was about four miles from the site of the accident. When I saw him he was slightly confused in mind, but perfectly able to answer questions, and conscious of the passing events. By my advice he remained that night in the hotel; but the next morning, before I had time to visit him, he had left the hotel and returned to his home in Dublin, a distance of quite twelve miles, which he accomplished by rail and by cabs. In the course of the following day, and for a few days after, some alarming symptoms supervened. Hemiplegic convulsions of an epileptiform character came on, accompanied by total unconsciousness; but the fits were of short duration, and in the interim the patient was collected. There was, however, present at times a peculiar kind of delirium, like that common in some low fevers. The patient rose from bed, seemed anxious to hide away and lock up in his chest of drawers trifling articles, such as a grape or two, and on one occasion he tried hard to throw himself out of his window; but at the same time, when addressed, he was quite amenable to government, and recognized those about him. In a short time he quite recovered, and in less than six weeks, I think, after the accident, managed successfully some very important private business.

However, in the course of time, he suffered, as he stated himself to me afterwards, from occasional headaches, and he sought medical advice, I think, in Scotland. He then

underwent a course of mercury, and subsequently took daily, for about twelve months as I understood him to say, thirty grains of the bromide of potassium, when he found that one morning, on proceeding to shave, he had no beard to cut; and subsequently and rapidly all his hair fell out, not only from his head and face, but from his chest and body, and up to this time he had been, as I have said, a very hirsute man.

This peculiar result of the accident was brought to my notice only the other day (1869) by the gentleman himself. He was then in excellent health, but perfectly free from any trace of hair. He stated that his taste and smell were not quite so good as they used to be, but that in every other respect he was quite well and hearty, and that he had never had any approach to any epileptiform seizure since the first attack.

At first I was very much disposed to regard the alopecia as the result of the action of the bromide of potassium. This idea was strengthened by considering the effect which the continued use of the iodide has been known to have upon the testes in males and upon the breasts in females. I gave up this idea, however, on reading the report of a case, similar at least as far as the loss of hair goes, alluded to in Holmes's "System of Surgery," article "Accidents from Lightning," which was pointed out to me by my friend, Dr. H. Massey. In both cases the baldness followed nervous shock. In the one mentioned by Mr. Holmes, the depilation began the day after the accident, which was a lightning stroke. The patient was a naval captain, and during a thunderstorm he was knocked down by lightning, and the very next day the hair fell off from all his body. In the following year the finger-nails (wrongly printed in the "Lancet" "toe-nails") "scaled away," those of the toes experiencing no visible change.

As it is quite clear that the alopecia was not the effect of treatment in the case recorded in Mr. Holmes's "Surgery," so I think it may be fairly inferred that the baldness in the case of my friend resulted from cerebral injury, and not from the subsequent treatment.

Correspondence.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

[LETTER FROM DR. C. R. DRYSDALE.]

Sir,—As this is the usual time for taking an annual holiday, I have thought it might be interesting and instructive to visit the country of our neighbours and allies, not only in the day of their pride, but also whilst they are suffering so terribly from that curse of the race, war. We heard, indeed, rumours that, because Paris was *en état de siège*, we should not be allowed to enter the city without passports, and as I had not provided myself with one of these somewhat antiquated papers, I began to think I should be condemned to hear about the war doings in some *bain de Mêr*, such as Etretat or Trouville, both of which I visited *en route* for Paris. However, on arriving at the fortifications of the town by the gate which leads to Versailles, no objection was made to the entrance of any of the passengers in the carriage which I occupied, and we passed through, having, however, to make a détour, because the road was being obliterated in order to construct a drawbridge, instead of the ordinary route. But when we passed through the Place de la Concorde, it was still more evident that we were in a city suffering under the suspense and agony of war times. There had been a disturbance the day before, and the troops had charged the crowds in the Place; while even on this, the day after, groups were scattered over its vast extent, conversing in an animated manner about the advisability of getting rid of the Emperor and family, and proclaiming a Republic, to avenge the defeats of the previous days.

Were I member of a profession accustomed only to cheerful sights, I should, indeed, have remained out of this city just now. Paris is plunged in the deepest sorrow. No music, no amusements are cared for. Everyone reads the journals from morning till night; men and women, too, rich and poor. Everywhere you hear that such an one has lost his son, or her husband, or brother, or dear friend in those accursed combats of Wissembourg, &c. The hearts of our medical brethren, too, are sad. They seem, in the exercise of their profession as hospital physicians and surgeons, to ask themselves, "What use are our feeble efforts, towards saving a few damaged lives, in comparison with the atrocious losses inflicted in an hour or two by the deadly engines of modern warfare on so many thousands?" The only redeeming feature of the moment in my eyes is the *Society of Succour to the Wounded Soldiers*, which holds its committee meetings in one of the wings of the Palais de l'Industrie. The morning after my arrival I hastened to visit this admirable bud of modern philanthropy, and had the good fortune to be shown over the whole of the departments by a kind Frenchman, a professional brother who had served in America during the war and on the same service. In one of the rooms sat the amiable and eminent senator, Nélaton, who is the director of this, as well, I believe, as of the ambulances of the army.

The ambulances of the International Society are destined to assist those of the army, not to do away with the necessity for the latter. When I visited the Palace of Industry, there was a notice posted up to the effect that the medical staff being complete, no further medical volunteers could be accepted. This speaks volumes, does it not? for the generous intrepidity of our brethren in the profession in France. Everyone knows that the medical service of the ambulances is fraught with danger to the lives of those following it. Besides the danger of being shot by the enemy's bullets, which is by no means small, there are to be taken into account the dangers of pyæmia and of the diseases of armies, which so constantly carry off large numbers of the medical men and attendants on these ambulances in times of battle. Two die from disease to one from war. I had hoped to see M. Lefort, in order to converse with him on the Contagious Diseases Acts and other matters I had considerable interest in, and on which he is a great authority; but he, too, was no longer at the Hôpital Cochin, having set off a week before my arrival in charge of one of the ambulances. And on visiting the Hôpital du Midi, I found that the surgeon, M. Liégois, had just departed on the honourable errand of solacing the miseries of this most terrific of all wars.

From different causes, I find that there are very few of the sick and wounded in any of the Parisian hospitals as yet. There was said yesterday to be only some twenty or thirty wounded men in the Val-de-Grâce Hospital, and a few more in the hospital for old age in the Rue des Recollets. But if the 15th of August or thereabouts is to be the day of a great battle, as all seem to say it is likely to be, then there will be beds in all the hospitals for wounded and sick both here and I have no doubt in most of the provincial hospitals. Consequently, in one or two of the hospitals I have visited, the beds were being cleared out, and the patients receiving their exeats in order to prepare for such a dreadful event.

For instance, at the Hôpital du Midi yesterday, M. Mauriac, one of the physicians, was told that 80 of the 300 beds were vacant, and that probably these will be filled in a few days by wounded soldiers. And the same is taking place in most of the other hospitals. There are no students at the Midi at present, and no one to write out these interminable hospital papers but the doctors and patients themselves. I shrewdly suspect that several of the patients in hospitals are glad enough to shelter themselves there, in place of running off to what seems almost certain death in the course of one or two days, and could not help the melancholy reflection crossing my mind when M. Mauriac signed a certificate of ill-health and incapacity for a poor fellow suffering from the anæmia caused by an attack of universal and obstinate syphilitic eruption, that he was lucky to have even this sad disease at such a fearful moment as this, instead of "mourant pour la patrie."

To persons possessed of greater love for the ridiculous than myself, it might have been laughable to see how the Parisians have passed from the state of absolute certainty of succeeding in this war into a condition verging on despair. At first, the journals spoke very contemptuously of the Prussians, and confidently of the superiority of the French in every respect to their neighbours. All kinds of jokes were heard about the love of that nation for beer, tobacco, and ham; and their coarseness and vulgarity were commented upon with considerable freedom. Among the attacks made upon the nation of

Prussia was one contained in a paper called the *Paris-Journal*, which, I must confess, I think nearly hits the mark; at least, I ask any of our German friends whether it is not partly true:—"Like all that is born of damp, the German race spawns rapidly (pullule). A woman who has only four children is accused of sterility. Germany infests the whole world. At London the Prussians have invaded the city. We find them everywhere: merchants at Bordeaux, carpenters or sweepers at Paris, &c. In the United States they will form the majority of the future; and the son of Bismarck will probably desire to annex North America to the German Vaterland." These rapidly-breeding and grasping tendencies of the Germans are certainly the weak point of that clever nation; and I must say, in passing, that able men, as most of the Prussians are, with whom I have lately conversed—there is a deplorable ignorance among even the best men of the German nation—of the most important of all the sciences, *i.e.*, political economy and social science.

As a contrast to the spawning habits of the Germans, I may mention that a Parisian lady told me yesterday that, among her acquaintances in Paris, very few families had more than *one* or *two* children. No wonder that such prudent persons look with disgust on the emigrating and grasping tastes of the Prussians. In the words of Talleyrand they exclaim "Ces pères de famille sont capable de tout!" French people, you know, do not emigrate, but can live at home, and are not forced to overcrowd the already over-stocked labour markets of England and elsewhere like the *pullulating* Prussian. In future, there will doubtless be a strong sentiment against all nations which, like the Germans, tend by their rapid breeding to lower our wages. While I have the pen in my hand I should like to avail myself of the well-known impartiality of your editorship to reply to a few of the observations contained in a letter from Dr. Waring-Curran, a gentleman from whom I have learnt a good deal and hope to learn more. Dr. W. Curran is opposed to one of my remedies for prostitution,—viz., greater facility of divorce. My argument for this greater facility is that my experience among prostitutes as patients—pretty extensive—has shown me that their trade is very largely patronised by married men who have married from mercenary motives, or whose partners are not *par amour*. And I hear from Mr. Conway, a distinguished American literary man in London, that since the establishment of facility of divorce in Indiana, U. S., there has been hardly any prostitution in that State, and that comparatively few persons avail themselves of the six months' notice for incompatibility granted by the laws. Dr. W. Curran chivalrously defends the Catholic clergy of his native country and their dogmas. For my part, I have a sincere respect for all churches, and only question those parts of their moral codes which oppose my experience as a medical man. There are two points in which I quite disagree with our Catholic brethren of the church, and I have often argued with clergymen of that church in France that they ought to change them. The first point is that the Catholic clergy make it a mortal sin, "un peché mortel" to restrain the numbers of a family by any means save that of abstinence. I think that this is quite a silly doctrine, and liable to alienate most men and women from the confessional. The second dogma I combat in the Catholic church is that of irrevocable marriage, as I see constantly that this leads to crime of all kinds, to prostitution, and venereal disease. Lastly, I am just as much opposed to the celibacy of priests as to that of soldiers. Both soldiers and celibate priests are liable to fall into habits of masturbation, or, as my lady friends in Paris assert, the latter class of men constantly use the confessional to gain the persons of married women. I trust Dr. Curran will find that some of my arguments have some weight.

I see a letter in the MEDICAL PRESS AND CIRCULAR from Mr. Haughton on the question of the habitual use of alcoholic fluids. When I mention that I had the fortune to write a few lines on this subject in your columns under the heading, "By a Physician," on the 6th July, which that gentleman refers to with praise, he will see that I am on the side of the anti-alcoholists, and in favour of the habitual abstention from all but simple drinks. I believe that the best chance for longevity resides in simple tastes, and, in short, that the hydropathic theory is not a bad one; only, I protest with my whole soul against Maine Liquor Laws of any description. We have, I am sure, quite too many interferences with our individual liberty in English-speaking countries without adding to them, as Professor Newman and others seem to desire so ardently, the suppression of all trade in wine and spirits. Persuade and convince the world that an innocent and simple existence, free from the false pleasures given by alcohol and tobacco, is the happiest in the long run, and I, for my part, will do my best to help you, and to advance that cause which I believe to be the true and the scientific one. But the moment that anti-alcoholists begin to wish to have recourse to the magistrate, to coerce their fellow-men, or prevent them from doing what they please with their own health, I range myself on the other side, and am their determined foe.

I think it an immense pity that able and energetic men like Dr. Anstie and others should be on the side of the alcoholists, because the giving up of smoking and drinking, a difficult matter at any time to uncultivated persons, is rendered almost impossible so long as we have such clever journals as the *Practitioner* recommending a person in health to take a bottle of Bordeaux wine daily. For my part, I see too many diseases caused by alcohol annually not to be persuaded that it is one of the most dangerous articles of diet; and I also may remark that I have seen too many instances of longevity and perfect health in persons who abstain from it not to feel sure that a bottle of Bordeaux wine daily is anything but a necessary of existence.

I hope, before leaving this, at present, sad but ever charming and beautiful city, to send you a few more notes on hospitals; but this letter is already absurdly long.

Yours faithfully,

CHARLES R. DRYSDALE, M.D.,
M.R.C.P.L., F.R.C.S.E.

Paris, August 14, 1870.

An Incredible Case.

A VERY remarkable case is recorded by Dr. Edward Cass, of Dresden, Ohio, in the *Medical and Surgical Reporter*—remarkable in its phenomena, still more remarkable in its treatment, and most remarkable in its sequel. The patient first discovered at about the age of sixteen "a whitish, watery discharge" escaping from his urethra one day while at work at his trade (shoe making). This discharge occurring periodically every day, he applied for medical aid and took to reading medical books himself. All treatment proved futile until, at the age of thirty-two, he came under the care of Dr. Cass, "much emaciated, an indescribable restlessness haunted him, fluid semen discharging once, twice, or three times during sleep," He denied having ever practised masturbation, "never had erections in his life, nor did the ejaculation of semen produce the least sensation approaching organism."

The treatment proposed, and agreed to by the patient, was castration, which operation was performed by Dr. Cass on the following day. The day after the operation we are told that "about four o'clock, while in a dreamy state, the 'muscles went through the motion'—as by habit, a small discharge following;" the same thing recurring twenty-four hours afterwards. But the most extraordinary part of the story still remains to be told. A year after his emasculation, the patient announced to his physician that he was "troubled" with vigorous erections and sexual desire (things which he had never experienced before), and that he contemplated matrimony. This intention he actually carried out, and we are informed that he has for now eight years been happily married, though childless.

Assuming that the microscope gave positive assurance that this was a case of real spermatorrhœa, and not of prostatic origin, the question is to be asked whether castration was a justifiable operation; and this question we think will be unhesitatingly answered in the negative by ninety-nine in every hundred, irrespective of such a process being forbidden by law even with the patient's consent. But laying this aside, the subsequent access of venereal appetite with apparent virile power remains to be explained. It is known that eunuchs, made so in manhood, may retain the former desires which they can no longer gratify; but that one who never before felt the sexual instinct should have it roused by the ablation of its proper organs is something passing comprehension. In the absence of a minute examination of the parts removed, we are almost enough like Didymus (whose name, by the way, signifies a testicle) to believe in an undescended testis and a scrotal tumour—in any other imaginable complication—rather than in the paradox thus seemingly recorded.—*New York Med. Gaz.*

Defect of Epiglottis.

In place of the epiglottis as normally fashioned, there was found by Dr. Eberth, in a female fifty-six years old, merely a fold of the mucous membrane, 5 mms. high and 1 mm. thick, with a crescentiform body of a fibro-cartilaginous consistence 3·5 mms. high. From the point of insertion of this fold of the mucous membrane of the pharynx spread two other wider folds, which turning backwards, under the pointed angle, united, and with the epiglottidean fold closed the three cornered glottidean cleft. There was no reason to infer that in this case the defect of epiglottis was a secondary abnormity, it was evidently congenital. There were only slight functional disturbances. The case is one seldom met with. Dr. E. cites as the only recorded case besides his own, that of Targiom Tozetti; even in this case, however, J. F. Meckel believes the defective epiglottis to have been the result of disease occurring after birth.—*Virchow's Arch.* xliii.

Yankee "Coroners" Law.

In addition to the Franco-Prussian difficulty, last week was rendered historically notable by a declaration of war between two New York coroners over the body of one Florence Scannel, who is supposed to have come to his death from the effects of a pistol shot wound received on the 3rd of December last. It appears that at the time of the occurrence, Coroner Rollins went to Bellevue Hospital with the view of taking the wounded man's ante-mortem deposition; but as Scannel refused to make any deposition, the visit can scarcely be said to have had any official bearing. A fortnight ago, however, Scannel changed his mind, and Coroner Flynn being sent for, received his deposition. The patient dying, Coroner Rollins proceeds to his residence, and meeting with objections from the friends of the deceased, has a police force placed in possession of the house, while he goes after Coroner Flynn. The latter individual meanwhile arrives at the house, has the police guard removed, and takes possession himself. Coroner Rollins returns, and being admitted after some difficulty, claims jurisdiction on the ground that he would, if he could, have made an investigation seven months ago, and further that he has retained Scannel's pistol (by what right does not appear). On the other hand, Coroner Flynn claims that he actually took the ante-mortem deposition, and as he has the friends of the defunct on his side, refuses to yield, and Coroner Rollins, fearing personal violence, is forced to retire from the field. Then comes the alleged murderer to protest that Coroner Flynn is "personally and politically opposed to him, and that he fears his safety will be jeopardized by a packed jury of Scannel's partisans."

Squabbles of this sort are of little general interest further than as they excite a wish among medical jurisprudents that coroners were of the nature of Kilkenny cats; but they serve to illustrate the absurdity of our present system of electing men to an important office on purely political grounds. One coroner with proper assistants would amply suffice for the city of New York; but even if there be more than one they should all be medical men with more regard for pathology than for politics, more solicitude for forensic medicine than for inquest fees.—*New York Med. Gaz.*

Medical News.

Refusing to Vaccinate.—At Leeds, on Tuesday, four persons, summoned for refusing to have their children vaccinated, were ordered to comply with the Act, and pay costs. One of them, a chemist, named Toulson, was summoned for the thirteenth time, and declined to comply, on the ground that he would not be the murderer of his child.

Post-Mortems at Guy's Hospital.—Another case was brought before the sitting magistrate last week, when, in answer to Mr. Benson, the applicant said he had not read the report of a similar case from the same hospital, which was dismissed some short time back. Mr. Benson said the complainant in the previous case had withdrawn it because he could not take the case to a superior court. He had spent £8 or £9, and if the applicant were to take the case through it would cost him between £50 and £60. Mr. Benson said he would commit Dr. Morrison, or the whole of the medical profession, if the applicant would bring proof that he would prosecute at the trial. The applicant, who said he was only a working man, and had no money, left the court evidently much disappointed.

Naval Medical Volunteers for the Continent.—The *Pall Mall Gazette* states that Deputy Inspector-General of Hospitals and Fleets, H. J. Domville, C.B., immediately after the first serious engagement between the French and Prussians, volunteered to proceed to the Continent, with a view of placing his services at the disposal of those who have charge of the wounded of the two armies, but the Lords of the Admiralty declined to give him leave. Several other eminent naval surgeons have followed the example set by Dr. Domville, with the same result.

Ecce Signum!—Some time ago we directed the attention of the proper authorities to the vilely fraudulent system adopted by many metropolitan traders in the matter of weights and measures. That our remarks were pertinent and judicious is now beyond question, as the following paragraph which we clip from the *South London Press* will show: Another batch of 64 South London tradesmen were fined on Wednesday for being possessed of short weights and measures. They consisted of 13 chandlers, 11 oilmen, 10 butchers, 5 each of publicans and bakers, 4 each of fruiterers and cheesemongers, 3 coal-dealers, 2 each of marine store dealers and grocers, and 1 each of gum merchants, iron-founders, costermongers, and leather-dealers. The total amount of the fines was £77 15s.

Vaccination Gratuities.—Mr. James Flexman, Surgeon to the South Molton Union Workhouse, has been awarded by the Medical Department of the Privy Council, on the recommendation of the Inspector of Vaccination, £3 12s., as an extra gratuity for the manner in which vaccination has been performed in that institution.

Health of Paris.—Small-pox still prevails in Paris. One hundred and eighty-seven deaths have taken place from that disease last week. Diarrhœa has also set in, and caused 71 deaths in the week.

Lunacy in Ireland.—The new Report of the Irish Lunacy Inspectors gives the total number of insane persons in Ireland in 1869 as 16,661. This is a decrease of 174 as compared with the number in 1860. In this period the number of lunatics at large has decreased from 8,991 to 6,579.

Health of Liverpool.—Relapsing fever is spreading at Liverpool, an increase of 116 cases having been reported last week over the previous one.

NOTICES TO CORRESPONDENTS.

*** Correspondents not answered in the current number should look at the notices in the following week.

NOTICE TO SUBSCRIBERS.—*The Publishers beg respectfully to remind those Gentlemen who have not paid their Annual Subscription, now overdue, that the most convenient mode of remittance is by Post-office Order, or cheque, which should be made payable, in England, to Albert Alfred Tindall; Ireland, Moffatt and Co.; Scotland, Maclachlan and Stewart.*

ACCEPTED papers received from Drs. Gordon, Thorowgood, Watson, Waring-Curran, H. M. Jones, Moore, Archibald Bleloch, Drysdale, &c.

DR. SUTTON, F.R.C.P., will deliver the Introductory Lecture at the London Hospital.

WAR MAPS.—We have been using this week Stannard's Bird's-Eye View of the Seat of War, being No. 7 of a series. It is a very finely coloured map, showing the points very clearly, and we have found it the most useful of all the maps we have come across in these times.

SUICIDE THROUGH PERSISTENT ABDOMINAL PAIN.

We observe in *The Midland Gazette* particulars of an inquest held at Sutton, upon the remains of a man named Huskinson, who committed suicide by hanging owing to a persistent abdominal pain from which he suffered for some months. A verdict of "temporary insanity" was returned. His medical attendant was baffled by his case as no actual disease of any organ could be detected during life. As the case was interesting, Dr. Waring-Curran obtained permission to make a *post-mortem* examination. He found all the thoracic and abdominal viscera healthy, but he noticed, we believe, the intestines tied down in places by firm bands of lymph; no doubt, from the history of the case, the sequence of localised peritonitis, which accounted for the dragging character of the pain, which was so severe and obstinate in yielding to treatment, as to drive the unfortunate patient to the extremity of self-destruction.

FORTUNE'S REVERSES.

We admire the terms in which our respected and much admired contemporary *The Graphic* narrates the trial of a man named Barrett, who alleged he was a surgeon, for receiving stolen goods, for which he was sentenced to twelve months' imprisonment. It appears Barrett had formerly been in prosperous circumstances, but was ruined by the failure of a "*Wheel-bang* Company (?) to whom he sold £13,000 worth of property in Holborn, for which he never got paid. *The Graphic* recommends that the directors of the said company should be invited to stand forward and agree to divide poor Barrett's penalty among them, as they did his property. In this we concur; but as it is not likely, we can only express our regret at the weakness of the law respecting the punishment of those scoundrels who keep deluding and ensnaring the public, and drive to desperation their unfortunate victims, such as Barrett.

DR. BELL TAYLOR ON THE CONTAGIOUS DISEASES ACTS.

We observe Dr. C. Bell Taylor, a Nottingham surgeon of repute and eminence in that part of the country, has just published in a pamphlet, Part II. of his Essay on *The Contagious Diseases Act*. The publication contains the substance of a paper read by Dr. Taylor before the Medical Society of London, and which originally appeared in these columns in January last, which shows how despotic measures not only fail to repress venereal diseases, but tend in a serious manner to increase them. Our author refers to one of Mr. Acton's letters published in THE MEDICAL PRESS AND CIRCULAR, wherein Mr. Acton stated "that unless the soldiers are carefully inspected and secluded, we cannot expect any benefit from the Contagious Diseases Acts. Dr. Taylor's pamphlet is a clever compilation of the opinions entertained by those who oppose the Act from a sanitary point of view, and as such will no doubt, be read with great interest, and we may safely add, instruction too.

APPOINTMENTS.

CORFIELD, W. H., M.B , Physician to the St. Pancras Dispensary.
DIXON, J., L.R.C.P.Ed., Assistant to the Extra Physicians of the Royal Hospital for Sick Children, Edinburgh.
HULKE, J. W., F.R.S., Assistant Surgeon, to be Surgeon at the Middlesex Hospital.
NICHOLLS, W. H., M.R.C.S., House-Surgeon at the Brighton Lying-in-Institution.
ORCHARD, T. N., M.B., Junior House-Surgeon at the Ardwick Dispensary.
THORPE, Dr. T. E., has been elected Professor of Scientific Chemistry at Anderson's University, Glasgow.
VINCENT, O., M.R.C.S., Surgeon to the Great Northern Hospital.
WALLIS, A. J., M.R.C.S., Medical Officer for the Dartington District of the Totnes Union.
WOOD, Mr. R. A. H., Resident Accoucheur at the Liverpool Lying-in Hospital.
WAR OFFICE—MEDICAL DEPARTMENT.—Staff Surgeon Major J. Crerar, from half-pay, to be Staff Surgeon Major, vice F. H. Baxter, M.D., who retires upon half-pay; Surgeon W. T. Harding, from the 56th Foot, to be Staff Surgeon, vice F. Oakes, appointed to the 56th Foot; Staff Assistant Surgeon T. B. P. O'Brien to be Staff Surgeon, vice E. H. Roberts, placed on half-pay; Staff Assistant Surgeon H. Sherlock to be Staff Surgeon, vice Staff Surgeon Major J. Gorringe, deceased.

VACANCIES.

District Lunatic Asylum, Clonmel.—Resident Medical Officer. Appointment in the hands of the Lord-Lieutenant of Ireland (See Advertisement.)
Newport Union, Mons.—Resident Medical Officer. Salary £40, with extras.
Salford Hospital.—District Surgeon. Salary £80, with board and residence.
Chester County Asylum.—Assistant Medical Officer. Salary £100, with board.
Whitechapel Union, London.—Public Vaccinator for the entire Union.

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

Snuff-Taking, its Utility in preventing Consumption, &c. By Dr. J. C. Murray.
Two Cases of Rheumatic Insanity. By T. S. Clouston, M.D., &c.
Report of the Committee of the Medico-Psychological Association.
A Catechism of Health. By Dr. J. H. Bridges.
The Glasgow Medical Journal; Le Mouvement Médicale; Journal de Médecine Mentale; New York Gazette; The Chemist; New York Medical Journal; Nature, &c.

Marriage.

DRURY—FERRY.—On the 24th inst., at Bishopwearmouth Parish Church, Charles D. Hill Drury, M.D., of Pulham St. Mary, Norfolk, to Fanny, second daughter of Robert Ferry, Esq., of Sunderland.

Deaths.

BANKS.—On the 19th inst., W. Roger Banks, M.D., aged 38.
BENNETT.—On the 12th inst., Samuel Bennett, L.R.C.S.I., of Bruff, Co. Limerick, aged 63.
HUTCHINSON.—On the 9th ult., at Wynberg, Cape of Good Hope, James Hutchinson, F.R.C.S., late Secretary to the Medical Board, Calcutta.
MACLAREN.—On board the homeward-bound West India Steamer "Seine," Peter Maclaren, Surgeon, of Williamfield, Maudeville, Jamaica.
WELBANK.—On the 20th inst., Richard Welbank, F.R.C.S.E., of Clarence-place, Kilburn, formerly of Chancery lane, aged 73.

MR. RICHARD C. HOYLE was on Friday elected Medical Officer to the Barnstaple Union, at a salary of £13 per annum. There was only one candidate. After our remarks on this subject, we think one candidate was enough. We congratulate Mr. Hoyle on his victory, and the guardians in obtaining the services of a medical man at such a salary.

FEVER IN LIVERPOOL.

AT a recent weekly meeting of the Workhouse Committee, the medical officers reported that on Saturday last there were 328 cases of fever in the hospital, being an increase of 16 on the week. Thirty-four deaths had occurred during the week, being an increase of eight on the week. Three of the deaths had been caused by fever, being three less than the preceding week. The governor, in his journal, in an entry, said :—"I beg to draw the special attention of the Committee to the number of fever cases, namely, 370, under treatment this morning, which is equal to the accommodation both here and at Ashfield street. During three days 96 cases have been admitted, showing an increase much greater than we have hitherto experienced, and calling for immediate steps being taken to make provision to meet the requirements." With reference to the increase of fever in the town, Mr. Cropper said he had written to Mr. Wm. Rathbone, M.P., asking him whether it would be possible to obtain from the War Office the loan of field hospital tents, which might be erected on some vacant piece of land in a centre portion of the town, and to which fever cases could be removed. In the course of some further conversation several suggestions were made, some of the members advocating the temporary use of St. Anne's Church, which is about to be razed to the ground, as a temporary hospital, others holding that it would be far better to erect tents in Parliament fields, and on some suitable pieces of ground at the north and south ends of the town.

The Irish Medical Journal

BEING THE JOURNAL OF THE

Irish Medical Association

No. 131. PUBLISHED EVERY WEDNESDAY New Series

ARMAGH BOARD OF GUARDIANS.

KEADY DISPENSARY.

The following letter was read by the clerk :—

Keady Dispensary,
15th Aug., 1870.

To the Board of Guardians,

ARMAGH UNION.

GENTLEMEN,—I enclose Dr. Rae's bill for acting as medical attendant to the Keady Dispensary for the past six weeks.

Dr. Rae has filled up all the books, and fully discharged the various duties of the situation during the above period.

I am, Gentlemen, your obedient servant,

LEEPER.

The clerk said that at the time Dr. Leeper obtained leave of absence for six weeks, the appointment of Dr. Rae as his substitute at a salary of £2 a week was noted in the minutes ; but up to the present the Commissioners have not given their sanction to the payment of the money. He wished to be instructed as to what he should do. He could not draw the cheque without the sanction of the Commissioners.

Mr. Best said that when the application was made for leave of absence there was a very small Board. The payment of Dr. Leeper's substitute was opposed by him and a few other guardians ; but they were out voted ; and since then no notice of this claim has been given to the guardians. He thought it should first be sanctioned by a special meeting of the Board.

Mr. Small.—This is a most unprecedented claim. Dr. Leeper very lately, by means of establishing a precedent, put this Union to an expense of about £200 a year. He now brings forward another precedent, by which every medical man in the Union may put us to an expense of twelve guineas a year more. We have always acted well to our medical officers—if they were ill we paid them, and paid a substitute. I am willing we should do so still, provided a proper ground exists for it—as, for an example, an accident, or illness caught in the discharge of public duty. But in this instance Dr. Leeper complained of rheumatism—a complaint to which many men of his age—myself for example—are subject. Mr. Kirk, M.P. for Newry, employs Dr. Leeper to accompany him to Germany to take care of his precious person, and Dr. Leeper accepts the employment, and takes advantage of the occasion to drink from the spas of Germany. He applies to us for liberty to go ; we give him the liberty, and we pay him his salary ; Dr. Leeper is well again, and I congratulate him on it ; but now here we have a claim for twelve guineas to pay Dr. Rae, which I oppose and will oppose as far as I can.

Mr. W. M. Kirk said that observations had been made in connexion with this subject which were quite uncalled for. Dr. Leeper had been twenty-seven years in connexion with the dispensary. During the whole of that time he never had sought for or obtained leave of absence for a single week. He was attacked with rheumatism of a most virulent type, and would have been obliged to give up. He took advantage of Mr. Kirk's going to Germany to try the German spas, and his illness had been removed. I thought the union had been a gainer by this because the service of an able and popular practitioner have been retained to the Keady dispensary, and the payment of the claim establishes no precedent.

Mr. Winder.—This was all discussed before.

Chairmun.—The commissioners have not yet sanctioned the payment of it. The question is, are we in the habit of paying a substitute for a medical officer who goes away in ill health.

Mr. Small.—Yes : if he be in ill health. I had rheumatism the other day ; but I don't call that ill health.

Mr. Best.—In Richhill we paid our doctor——

Mr. Small.—But that was a righteous case ; that man got his thigh broken, and he got it broken again, in the discharge of his duty to this Board. But I consider this the most ridiculous claim I ever heard of.

After some further conversation, the Board directed the clerk to refer the matter to the Poor-law Commissioners, and to request an answer, and then to refer the question to a special meeting of Guardians on the 6th proximo.

LIMERICK UNION

THE MEDICAL OFFICER OF CASTLECONNELL DISPENSARY DISTRICT.

The Clerk read a letter from the Poor-law Commissioners, stating that they had dismissed Dr. Porter, medical officer of the Castleconnell dispensary district, by sealed order, as they believed the charges made against him by the committee of management to be correct.

Dr. O'Sullivan enquired whether Dr. Porter had asked for a sworn enquiry into the matter, and if so, whether it had been refused by the Commissioners.

Mr. Gabbett, Secretary of the Committee of Management, said he would inform the Board of the facts.

Dr. O'Sullivan said he merely wanted to know whether an enquiry had been refused.

Mr. Cronin enquired whether it was customary for the Board to be informed of the business of the committee.

The Chairman replied in the negative.

Mr. Gabbett said a meeting of the Committee of Management had been held by direction of the Poor-law Commissioners for the purpose of giving their observations on a report furnished by Dr. Porter to the Commissioners. The Committee framed a report on the subject, and directed it to be forwarded to the same body. At that meeting a member stood up and produced an anonymous letter which it was not necessary for him to speak about. They sent it to the Commissioners for their opinion, accompanied by a resolution, to which they had agreed. He (Mr. Gabbett) as secretary, sent a copy of that resolu-

tion to Dr. Porter on that day, and on the succeeding day he received a letter from Dr. Porter, declining to accede to the request of the Committee by sending in his resignation. He further stated that he would have a sworn inquiry, and as far as he (Mr. Gabbett) recollected, added that he hoped his accusers would not be his judges. In the course of that week I got a letter from the commissioners containing their reply to our report, and to our resolution forwarded to them with the anonymous letter. I did not think it necessary to bring that letter here. They (the commissioners) wrote to Dr. Porter requiring his explanation, and I believe Dr. Porter wrote a reply, which was not satisfactory to the commissioners.

Mr. Tinsley said there was one thing that had escaped Mr. Gabbett's notice in reference to Dr. Porter's letter, but which he (Mr. Tinsley) recollected. Dr. Porter, as a person charged with a criminal offence, asked the commissioners to send him a copy of the letter which he was charged with writing, and as soon as he should have received it he would then give them a reply. The commissioners' reply was the sealed order dismissing him from office. He would ask Mr. Gabbett whether this was correct.

Mr. Gabbett repeated that so far as his recollection of the letter was concerned he believed the statement of Mr. Tinsley was partly right and partly wrong, and he (Mr. Tinsley) could give no more than his opinion respecting the letter, and neither could he (Mr. Gabbett). It is true that with the letter they furnished me they also furnished me with a copy of a letter they wrote to Dr. Porter. In the first place they say they asked a statement from Dr. Porter with reference to the anonymous letter. They stated in their letter that he required from them a copy of the letter, with the date of its receipt and the name of its recipient. They, the Commissioners, in their letter to Dr. Porter, declined to do this, and gave it as their opinion that this, far from being an explanation, was an aggravation of the offence; and they wound up by saying that in their opinion the anonymous letter was written by himself (sensation). In that particular your statement was incorrect, and I now state it because you brought it out of me (hear, hear).

Mr. Tinsley said when the letter was received, the meeting dissented, and stated their opinions on the acts of the Commissioners, which they considered most arbitrary. When any man was charged—no matter how humble his rank might be he should first be tried. He cared nothing about Dr. Porter, and knew nothing about him. If he was guilty he ought to be tried, but what he (Mr. Tinsley) complained of was that he was condemned behind his back, found guilty—the strongest censure was put upon him—he was deprived of the means of earning his bread—he was dismissed by sealed order without the option of an investigation, at which he might have had an opportunity of defending himself. If an enquiry had been instituted, and the Commissioners had come to that resolution, he would say they would have been perfectly right; but Dr. Porter had no trial at all. The first day there were certain charges made against him and he apologised—he (Mr. Tinsley) used the word advisedly—and a large number of the committee accepted the apology. This was in reference to the principal charge brought against him that day. A gentleman produced this anonymous letter, and another gentleman stated that he believed it had been written by Dr. Porter. The latter then stood up greatly excited, and in the strongest possible manner repudiated the charge, and denied that he knew anything about it. He beame so excited that he was requested to leave the room, which he did. He was subsequently called in and informed that the majority of the Board had resolved that he should be called upon for his resignation. He (Mr. T.)would state that several of the members were under the impression that he would be called on for his resignation by the Commissioners, but it was afterwards decided by the Secretary that it was the Committee who had called upon him for his resignation. The doctor would not get an hour to make his defence, which he (Mr. T.) thought extremely harsh. Even though he were guilty of the crime laid to his charge, he should not have been convicted and judged in the course of a few minutes, without an opportunity of making his defence. He did not wish to stand up as an advocate of his innocence, but he should be held to be innocent until found guilty. At the last meeting it was perfectly obvious that he could not hold his position at Castleconnel. If he were even innocent he could not hold his office in the union.

Mr. Tinsley.—It would be better to ask the Commissioners to withdraw the sealed order, and to permit the doctor to ask for an enquiry. We think it better that a termination should be put to this unseemly and unpleasant piece of business that has been going on at Castleconnell such a length of time. I may say that I made it my business to enquire how he discharged his duty, and I have been told that he discharged it with ability and attention. He may have had private faults, but I must say that the large majority of the people of the district I was in had no fault to find with him; and it is not for any dereliction of duty that he is discharged.

Dr. O'Sullivan again put his previous question as to whether an enquiry had been refused.

Mr. Browne.—There were assertions made here against myself as a member of the committee; for from the manner in which Mr. Tinsley has put the case before the members of the Press here, it appears to be a most outrageous thing.

Mr. Cronin.—No mistake about it.

Mr. Myles.—Order.

Mr. Brown.—Why it was not Dr. Porter who was on his trial, but the committee. The members of the committee were on their defence, for they were accused of dereliction of duty. It was I who moved the resolution that he be called upon to resign; and I did it entirely irrespective of those letters; and the very words I used were that—Irrespective of those letters there was quite sufficient in what occurred—coupled with what took place before—to show that Dr. Porter was unfit to fill the position he held in Castleconnell. It was on the grounds of his bringing a charge against the committee, and which he was obliged to withdraw—that our charge against him was based. If these letters had never been brought, the majority of the committee would have voted that a resolution calling on him to resign be forwarded to the commisioners.

Mr. Tinsley.—It is right for me to say that Mr. Bourke, P. L. I. stated that his qualifications as a medical man were unexceptional, and I would take his opinion respecting his skill before Mr. Gabbett's. He (the doctor) complained of want of accommodation at both stations. In one of them he had no place to privately examine patients, owing to females occupying both apartments of the house. And in reference to this he complained that his report had been "cushioned." All this shows the downright necessity of having the Press present to report such proceedings; for had they been present we would have had an accurate report of the entire matter, and gentlemen would not now be contradicting each other in this unseemly manner. An investigation should take place, and this unfortunate man should not be prevented from getting a situation in any part of this country.

After some further discussion, on the motion of Mr. Brown, seconded by Mr. W. Laffan, the following resolution was passed unanimously:—"That the request of the Castleconnell Dispensary Committee to the Poor Law Commissioners, dated August 22nd, to withdraw their sealed order dismissing Dr. Porter, and allow him to resign, be complied with; or if they find they must adhere to their sealed order, that they will grant him an inquiry if he demands it."

BELFAST BOARD OF GUARDIANS.

VACCINATION OF CHILDREN.

Dr. Martin returned a list to the Board of 538 persons in his district who had not complied with the Act, in having their children vaccinated.

Mr. Humphrey, relieving officer, stated that in Dr. Rea's and Dr. Newett's districts there were 700 cases. They were proceeding with the inquiry, and action had been taken to enforce compliance with the Act in several of the cases.

Mr. T. Wilson, relieving officer, said he had completed Dr. Browne's list of 151 cases. On inquiry, it was ascertained that in 98 of the cases the children had been vaccinated, and with regard to 24 of the cases legal proceedings had been taken before the magistrate.

Some conversation took place as to who should take charge of this matter, as the relieving officers complained that it interfered too much with their other duties.

Some members thought that the medical officers were the proper parties to take charge of this matter, but the majority of the members considered that the relieving officers were the most suitable persons to be entrusted with it.

Mr. Gaffikin asked was there not some expense incurred in getting the law enforced in this matter.

Mr. Humphrey said there was expense and very considerable trouble.

Mr. Teirney—It would be a good way if the magistrates gave the relieving officers the fines in each. I'll warrant you they would soon hunt them all up then. (Laughter.)

Mr. Gaffikin—Oh, I think if they got a shilling in every case in which there was a conviction, it would do very well.

Mr. Humphrey—The magistrates can give that if they choose, as well as full expenses.

Mr. Gaffikin—It is the least the relieving-officer should get for his trouble. (To the relieving-officers)—We'll give you a shilling in each case.

Mr. Teirney—Ah, give them all the fines. That will never make them catch them. (Laughter)

Mr. Gaffikin said he understood a great many parents got their children vaccinated by private medical gentlemen, and it would save a great deal of trouble to the relieving-officers, as well as inconvenience and expense to themselves in being summoned, if they sent in the certificates of vaccination to the proper parties to receive them. Ont of 600 returned as not complying with the Act, there might not be 200 who would be required to be summoned.

The relieving-officers were then directed to proceed at once and summon all the defaulters in each of the districts.

The remaining business was routine.

CORK UNION.

A COMMUNICATION from the Commissioners was also read, asking whether the resolution of the Board proposing to increase the salaries of the several medical officers of the rural dispensary districts of the union by £20 per annum, was intended to extend to the medical officer and apothecary in the Queenstown district, whose salaries had been lately increased.

It was decided to inform the Commissioners that Dr. Lawler was included in the resolution, but the others were not.

DR. A. WILTSHIRE has treated successfully five cases of delirium tremens with the large doses of digitalis that have been previously recommended. We still should hesitate at these half-ounce doses of tincture of so uncertain a drug.

ADDRESS AND PRESENTATION TO WM. SCOTT, ESQ., M.D., J.P.

A MEETING was held in the Aughnacloy Court House on Saturday, the 20th instant, which was largely attended by the gentry of the town and neighbourhood, the object being to present an address and testimonial to their eminent and respectable fellow-townsman, Dr. Scott, J.P., on the occasion of his resignation of the charge of the Aughnacloy Dispensary District, with which he has been for many years connected, and where, by the kind and zealous manner in which he discharged his duties, endeared himself to all. The poor ever found him ready to minister to their ailments or console and advise them in their distress, and to all he was the able physician and genial friend. It is hoped that his retirement from the onerous public duties he has hitherto so efficiently discharged will enable him to pursue with his wonted vigour his arduous professional duties, of which the constant attention he has always bestowed on the hospital, irrespective of other calls on his valuable time, form no inconsiderate part.

HEALTH OF DUBLIN.

IN the Dublin Registration District the births registered during the week ending August 20th, amounted to 180—90 boys and 90 girls. The average number in the corresponding week of the years 1864 to 1869 inclusive was 152.

The deaths registered during the week were 128. The average number in the corresponding week of the previous six years was 133.

Seven deaths resulted from fever, viz. :—2 from typhus, 3 from typhoid or enteric, and 2 from simple continued fever.

Scarlet fever proved fatal in 5 instances, and measles in 2.

Eighteen deaths were ascribed to diarrhœa, and 1 to simple cholera.

The deaths of 11 children were referred to convulsions.

Bronchitis caused 5 deaths, and pneumonia or inflammation of the lungs 1.

Four deaths were attributed to heart disease.

Paralysis was the cause of 3 deaths, and apoplexy of 1.

Two deaths from kidney disease, and 1 from nephria, or Bright's disease, were registered.

Diseases of the liver caused 3 deaths.

Five deaths from violence were registered, 4 of which were from accidental causes, and the fifth, which occurred in the Richmond Hospital, was returned as "fracture of skull," but how caused is not stated.

Of the deaths registered 53 were of persons under 5 years of age, and 25 were persons 60 years old and upwards.

DEATH OF MR. CLEMENT, M.P. FOR SHREWSBURY.

WE regret to announce the death of Mr. W. J. Clement, M.P. for Shrewsbury, in the sixty-sixth year of his age. He was born in the town, which he has represented in Parliament since 1865. He was partially educated there, but afterwards went to Edinburgh. In 1844 the Royal College of Surgeons of England elected him an Honorary Fellow. He obtained the Fothergillian Gold Medal for his essay on "The Urinary Organs," and has contributed some practical papers to the medical journals.

DEATH OF DR. ALEX. H. COOKE.—We regret to annouuce the demise of Alexander H. Cooke, Esq., M.R C.S.E., son of the late Rev. Dr. Cooke, which took place on Friday, at the residence of Mr. R. W. Skelly, Greenwood, Saintfield, where he had been on a visit sinced Wednesday last. The deceased was Assistant-Surgeon in the Antrim Artillery, and was much esteemed by all who knew him. He had been in delicate health for some time, and was in a weak state when he arrived at Mr. Skelly's, from Carrickfergus. Dr. Smyth, of Saintfield, was most attentive to him, but medical skill was unavailing.

DEFECTIVE ARRANGEMENTS OF DISPENSARIES.

TO THE EDITOR OF THE IRISH MEDICAL ASSOCIATION JOURNAL.

SIR—In this period of progress, I cannot suppose that the obvious defects of our medical institutions will be allowed to remain unremedied. When the attempt is being made those who are interested may deem the following circumstances, in reference to our Dispensaries deserving of their consideration. There are seven hundred and eighteen Dispensary Districts in Ireland, which are attended by seven-hundred and ninety-six medical officers. The Poor Law Valuation is £13,117,769, which gives an average valuation of £18,369, for each district, and of £16, 480 for each of the seven hundred and ninety-six medical officers. If each medical officer could be located in a district of £16,480 a year, which is about a rental of £20,000, the proprietary and occupiers of the the district would afford means of enabling him to support the position in which he ought to be placed; but an examination of Poor Law Commissioners reports shows that there are one-hundred and twenty-nine dispensary districts, whose valuation is under £10,000, and of these that forty-one are under valuations of three, four, five, and £6,000. Several of these small dispensary districts are, it is true, joined to others to form one, for a medical officer, but the property of many districts is manifestly insufficient to afford him practice, which, of course is his chief object. Again, the average population of seven-hundred and eighteen districts is eight thousand, and seventy-six, and is only seven thousand two hundred and ninety-seven for each of the seven hundred and ninety-six medical officers. This population with a valuation property of £16,480 if available, would answer pretty well. But there are one hundred and fifty dispensary districts whose populations are very limited, five are under two thousand; twenty-two under three thousand; forty-seven under four thousand; and seventy-six under five thousand. Though some of these districts have considerable property, most have not, and when both elements for medical practice—property and population—are limited, the local authorities have less inducement to give the medical officer a fair salary, or when he is in the fit condition to retire, to superannuate him fairly. On the other hand, where there is population to be attended, and property to be rated, salary and superannuation will be much more freely given. Again, I find that each of forty-four dispensary districts to each of which only one medical officer is attached, has an average population of fourteen thousand one hundred and fifty-two, some sixteen thousand, twenty thousand, and twenty-three thousand, that the property valuation of each averages £26,658, and that the districts average thirty-two thousand and seventy-two acres, or fifty square miles. It appears to be impossible for one person to attend the sick of so large a population scattered over so great an area, even some having an area of forty thousand, forty-eight thousand, seventy-two thousand, and ninety-three thousand acres, and as the property in each is large, there is evidently room for change and improvement. These facts show that a re-arrangement of the dispensaries of many districts is desirable, for which there is provision in the Medical Charities Act. The public at large, but particularly the medical officers, and indeed, the whole medical profession, owe a great debt of gratitude to Lord Athlumney, for the pains which he bestowed in preparing and passing that Act, the sixth clause of which Act empowers the Boards of Guardians to divide the Unions into so many dispensary districts, "having regard to the extent and population, as may appear to them to be necessary," subject of course, to the approval of the Commissioners. With such a power, it was natural that guardians of influence should wish to establish dispensary districts, for their own more special convenience, and hence we find that many were established with too limited population and property, and some with too great a population and area. Several of the former dispensaries were located in this manner, and the same influence caused the continuance of the institution. If two such limited dispensary districts were immediately contiguous, to be placed under one medical officer, it would be all right, but when this is not the case, as often happens, the establishment of small dispensary districts has many disadvantages. It apparently offers a situation and a field of practice for medical men, and thus induces too many to enter on that profession, and to locate themselves where, though they may have a tolerable salary, they have not the elements for a fair practice—that is, property and population. Political economists tell us that where those offering for employment are even only very few more than there is a demand for, these few will cause the wages of all to be much lower than if there was employment for all; and on the same principle an excess of unemployed medical men, or of medical men located in districts which cannot afford them fair practice, is sure to lower the professional earning that would be had under a dispensary system where each of those institutions had sufficient population and property. At present the retiring allowance of the dispensary medical officer is charged on the property of the electoral divisions of the dispensary district, unless when the whole union forms that district, which is only the case in a few instances. In England the superannuation is charged to the property of the union at large, and until similar legislation takes place here, the guardians and members of small dispensary districts will be slow to give fair superannuations to their medical officers, or to superannuate them at all. If, for instance, either of the five medical officers of the Donegal Union were in a condition to be superannuated, how much more likely would the dispensary committees be to give fair superannuations when they know that the retiring allowance would be charged on the union property, £34,621 yearly, rather than as now on the district valuations, ranging from £9,665 to £4,258, and there are many unions and districts similarly circumstanced. Union rating in place of electoral division rating would remove this objection, and would also induce the guardians of these small dispensary districts to give higher salaries, and yet I have not seen that the Medical Association, or any medical party* has taken any step in favour of union rating, a measure so immediately tending to benefit the Poor-law officers of all classes. Had the dispensary districts been satisfactorily arranged at first, of course, it would have been far better, but though it may appear difficult to do so now, that difficulty would give way on the work being undertaken in a determined spirit. The above returns show that there is a necessity for much improvement, and if the Poor-law medical officers apply to Parliament early in the next session, there is a likelihood that they will get rid of the thousands of wealthy pauper patients, and that their condition will be much improved.

DENIS PHELAN.

HYDRATED chloride of aluminium is said to be a capital antiseptic. Mr. John Gamgee having introduced it, we may expect soon to find it freely in the market.

MR. MASON is trying to remove the deformity caused by a contracted cicatrix after a burn, by utilizing M. Revendin's method of skin grafting.

---

* I find that I have overlooked a petition to Parliament from the medical practitioners of the town of Enniscorthy, which petition contains a series of excellent resolutions on union rating, and on other important matters respecting dispensary and workhouse medical officers, and was presented by Mr. M'Mahon in 1864.

Printed and Published for the Proprietor, at the Office of the "Medical Press and Circular," 6 D'Olier street, Dublin.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, SEPTEMBER 7, 1870.

CONTENTS.

Original Communications.

A NEW CAUSE OF VENEREAL CONTAMINATION — TESTED BY PRACTICAL OBSERVATIONS AND INOCULATIONS FROM A HITHERTO UNRECOGNISED SOURCE — INOCULATION AS A MODE OF TREATMENT.

By Mr. Morgan, F.R.C.S.I.,

Professor of Surgical and Descriptive Anatomy, R.C.S.I.
Surgeon to Mercer's and the Westmoreland Lock Hospitals.

(*Continued.*)

These cases I have selected from many others under treatment, and where the inoculations have been made so as to test the question of the source of the soft-chancroid, or usual sore.

It seems to be essential that the system shall be under the influence of the constitutional poison in order that the vaginal discharge may be capable of producing the characteristic pustule and sore. My inoculations, I think, tend to this conclusion ; but I hesitate as yet to pronounce it as an invariable rule.

In the series of cases tested and treated by the inoculation method, the result has been most favourable in many instances, especially in those who were most prostrated by the disease, and thoroughly cachectic. No matter what our prejudices may be, or the difficulty that we may meet in explaining satisfactorily the mode of cure, we should not, I think, neglect any proposition based on practical results, which may enable us to combat the varying phases, and subtleties of the disease with greater prospect of success. The progress made towards recovery in cases of great intensity as in those forming Series 3, 9, was most striking, and was even more remarkable in a case of acute rupia, lately under my care (occurring as the first eruption after a primary sore) in a girl of twenty, who showed the most striking improvement when inoculation had been performed; two inoculations failed, the third succeeded; the rupious crusts fell off and healed most satisfactorily within a fortnight. Every one conversant with the subject of constitutional syphilis has seen the inexplicable freaks and spontaneous cures which occur; but where after inoculation we see almost every case undergo a marked improvement, it is impossible to attribute this to some accident or cause unknown.

I do not repeat the inoculation till the previous one has healed, and sometimes this lasts three weeks or one month, and it is a remarkable physiological fact, that the more infected and debilitated the patient, as in Series 3 and 9, the greater is the resistance to the inoculation, and, when produced, the greater is the tendency to heal ; while in the more vigorous and less depressed cases, as in Series 2, the contrary holds good.

The natural shrinking from the responsibility of inoculating a new virus on a patient probably already much reduced in strength, and suffering from the full influence of the venereal poison, has been one of the chief difficulties in the consideration and application of this mode of treatment, which, at first sight, may be distasteful to the ideas either of the surgeon or the patient. However, if it has been questioned that good results have not invariably followed its practice, certainly no injurious ones have been recorded of such a nature as to forbid the method or form the basis of any objection to its use.

Since the initiation of the idea, by M. Auzias Turenne, that there was such an attainable condition as syphilization, or a stage of non-receptivity, of the venereal poison, much attention has been directed to the subject. Sperino, of Turin, and Boeck, of Christiania, have followed up the idea, and the latter has particularly applied it on a large scale for the cure of the worst forms of syphilis. While the idea entertained by Auzias Turenne in 1844 was that such a saturation of the system was arrived at, that immunity from the effect of any further syphilitic influence was gained, Professor Boeck candidly admits his inability to explain the process, but that he has found by practice that the method of repeated inoculations has been satisfactory. Others believe that the beneficial effects of inoculations merely consist in the depurative action on the

system by means of counter-irritation, such as would be obtained by blistering or the use of a seton, and have imitated the process by the use of tartar emetic ointment, or the application of blisters. Others, as Professor Faye, are inclined to think that a temporary immunity is gained by the over-stimulated skin, when the method used by Professor Boeck is put in practice, of keeping up a perpetual series of re-inoculations on the patient's body. The practice has been so often referred to that it is hardly necessary to describe it here, more than to state that Boeck uses the matter of what is described as being the hard or infecting sore, having previously irritated the surface by the use of a stimulating application, and that he renews the inoculations from each succeeding sore until immunity or non-receptivity is reached, and the symptoms yield.

The source from which I have derived the inoculation agent has hitherto, I believe, never been tested. I do not assume that it is the secretion of a "hard" or "soft" type of sore; but a muco-purulent discharge; the result has always been the characteristic pustule and inoculable sores of the so-called non-infecting or soft ulcer, and the patient from whom the inoculative agent is derived never was known to have had a true infecting type of sore, or enlarged inguinal gland, and yet is thoroughly infected; as the statistics of the Lock Hospital here infallibly prove that quite irrespective of the form of the primary sores constitutional signs are almost invariable sequences; indeed, some of the most intensely syphilitic patients have been those who suffered from the phenomena usual to the soft or non-infecting type of sore.

It appears with regard to the inoculative power or receptivity of some patients, that the differences are very remarkable, and bear a ratio to the apparent saturation of the patient with the syphilitic poison. This is very remarkably shown and illustrated by the results of some of the inoculations of Series 12; the contrast of the effects of inoculation with the same drop of matter on different subjects is highly interesting, and goes far to prove that a progressive state of non-receptivity whether depending on constitution, state of health, or syphilization, is capable of being obtained.

From a drop of matter, or vaginal secretion, of Series 12, I inoculated No. 1,193 on the side of the abdomen on July 7th. This patient was at the time rather florid, and in tolerably good condition, and was but a little over a year living irregularly; she was aged about eighteen, and was suffering from patches around the vulva, alopecia, and nocturnal pains; in fact, in the early stage of syphilitic evolution, but in rather good health. The inoculation was performed with a new pin (so there could be no error on the score of cleanliness); a characteristic pustule was produced, becoming a sore within a week, and a most perfect chancroid with characteristic edges surface and discharge, formed. The sore became fully formed, and now has the appearance and size of the illustration (Series 13), August 18th, being more than five weeks after its first inoculation. The general condition is immensely improved, the pains and patches having disappeared completely. It is evident in this case, that the inoculated matter was most effective as to its result, and that the soil in which it was sown was eminently suited to its fructification.

In contrast to this, the next case is very remarkable. I inoculated from the very same drop of pus, within the same five minutes, on the same part of the body, and with a new pin, No. 1,075, a strong, healthy patient of twenty-one, who had not been more than a few months living irregularly, and was suffering from early constitutional signs. She had been inoculated on June 13, and at this time (July 7th) presented absolutely a nearly healed sore, the result of inoculation with No. 1,093. The effect in this case was by no means so persistent as in the former; the pustule produced was characteristic, and resulted in a perfectly-shaped chancroid by the 14th. This sore became about the size of sixpence, and then commenced to heal. The patient left Hospital, July 4th, free from all constitutional signs, having been sixty eight days under treatment.

At the same time, and from the same sore, and on the same part of the body, I inoculated No. 921, a patient suffering from intense chronic syphilitic intoxication, having had iritis, nodes, rash, and gummata, and who had been inoculated on four occasions previously; in three days a pustule was fully formed, which became a feebly marked ulcer, and healed within fourteen days from its first appearance.

In like manner, I inoculated at the same date No. 988, who had been intensely syphilitic, and had been ten times inoculated as referred to at Series 3. The pustule formed was imperfect and feeble, and the ulceration healed within one week. This patient was discharged August 1st, having been 133 days under treatment, perfectly free from all signs.

In like manner, and at the same date, I inoculated No. 1,000 (forming Series 9), who had been eight times inoculated, producing but an ill-formed, though characteristic, pustule and small chancroid, which healed within fourteen days.

In like manner, and at the same time, I inoculated No. 1,083, a patient not before inoculated, but who had suffered from the most intense syphilis for over eight months, having had double iritis, papular rash, patchy ulceration of the mouth and throat, extreme alopecia, pains and cachexia. A characteristic pustule formed, succeeded by a sore equalling a shilling in size, which lasted for sixteen days, when it presented the appearance given in the illustration (Series 14); now healing rapidly (July 29th). This patient left the hospital August 11th, thirty-five days after the production of the inoculation, and three days after its being healed, free from all constitutional signs, though thin and still delicate looking.

On an analysis of these cases, it is evident that inoculation from the same particle of pus produced different effects and sores of a persistence and character proportioned to the condition of the patient.

The illustrations show this: In the first (Series 13) the sore is of characteristic shape and considerable size, having existed for more than five weeks, but the patient was in comparatively good health, and had not suffered from any severe constitutional manifestation; while in the second illustration (Series 14), the reverse exactly was the case, the patient having suffered severely, and never having been before inoculated; here the sore was well marked and of tolerable size and persistence, but soon healed.

A consideration of the other cases given, will show the gradations of non-receptivity.

Thus, No, 1,075 who was at the time under the influence of an inoculation—a stout and rather florid patient—not having suffered very severely from constitutional signs, developed a sore less intense, and sooner disposed to heal, than the preceding.

No. 921, who had been intensely syphilitic, and who had been inoculated four times, a feebly marked ulcer only was produced, which healed within a fortnight.

No. 998 (forming Series 3), a patient who had been greatly prostrated by syphilitic constitutional intoxication, and who had been ten times inoculated, produced a sore which healed within a-week.

As these cases were all inoculated from absolutely the same drop of pus, at the same time, and with a different instrument, there could be no possibility of the inoculations taking place from mingled or diverse pus; and the conclusion is pressed upon us that there existed some condition in the patient which resisted the formation of these pustules and sores, and was antagonistic, or non-receptive of the poison so freely inoculable on others, and derived from a patient at the time, showing evidences of infection. Difficult as the question is, these instances go far to bear out the theory of syphilization; the activity of the resulting inoculations having borne an exact proportion to the intensity of the syphilitic manifestations, and becoming

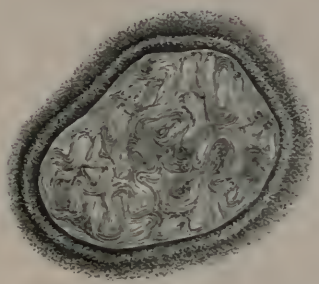
ARTIFICIAL CONTAGIOUS SORES

PRODUCED BY INOCULATION.

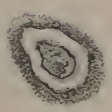
By Mr. MORGAN, F.R.C.S.I., &c.,

SURGEON TO MERCER'S AND THE WESTMORELAND LOCK HOSPITAL, DUBLIN.

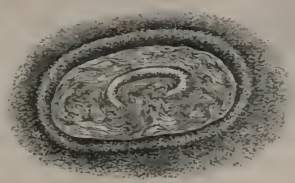
PLATE III.



SERIES 13.
Result of inoculation from a vaginal discharge on a patient not highly syphilized forty-two days after inoculation.



SERIES 14.
Result of inoculation from the same drop of pus as that causing Series 13, twenty-two days after inoculation, the recipient being highly syphilized at the time.



SERIES 15.
Result of inoculations from a vaginal discharge on a patient not highly syphilized forty-six days after inoculation.

gradually non-effective where the patient had been frequently inoculated, as in the last example quoted.

Again, with regard to the duality of the venereal poison, these instances are instructive: if the virus was the virus of a simple soft or chancroid sore, it should have been regularly inoculable, or productive, in all these cases; and if the virus of the true chancre, or infecting sore it should, according to theory, have been inoculable in none, at least with great difficulty. Yet, though all the patients were suffering from constitutional manifestations, the immediate results in each were widely diverse, and, as I have detailed, proportioned to their syphilized condition.

I have selected another case to illustrate this remarkable property of the virus, as it might be supposed that the particle of pus in this case just alluded to, had some special quality. The illustration (Series 15) represents the result of an inoculation performed on June 30th, mentioned when detailing Series 11. I inoculated several persons with the vaginal discharge of No. 1,185, who had been in hospital twenty-nine days when this was performed; the patient operated upon was free from any rash or severe signs, but had rather extensive patches and superficial ulceration about the vulva, and remarkable syphilitic ulcerations between the toes, with some large papulo-pustular rash on the feet; she had some nocturnal pains, and was a married woman; infected by her husband, to whom she was only a short time married, and was now about six months pregnant; otherwise free from any syphilitic signs. The pustule was most marked, and the resulting sore remarkably developed, having attained the size and appearance shewn in the illustration, Series 15.

August 15th, now forty-six days from the date of inoculation, all the other inoculations derived from this source (Series 11) and practised on eight other patients, have healed, thus:—

No. 1,093.—Inoculated June 7th; formed a perfect sore, equalling a fourpenny piece in size, by July 12th, and healed by the 20th July, the patient having been before inoculated, and being intensely syphilitic, pregnant, and suffering from patches, pains, and rash.

No. 1,098.—Inoculated June 27; formed a perfect sore, equalling a fourpenny piece in size; fully formed by the 10th July, from which date it commenced to heal; the patient had been before inoculated, and was suffering from patches, pains, alopecia, hoarseness, and copious papular and roseolar rash. She was a married woman infected by her husband, and was discharged July 20th perfectly free from all symptoms; fat, and in good condition, having been treated only with inoculation and hot air baths.

No. 1,112.—Inoculated June 27th; suffering from papules, alopecia, and pains; had been before inoculated; sore formed by 10th July, equalling a sixpence in size, and healed by the 30th.

The patient's condition greatly improved at that date; she is now a ward-maid in the hospital.

It is here remarkable that the only patient who did not present evidences of a severe nature, and who had not been long under the influence of the constitutional infection, afforded the best nidus for the implantation and growth of the inoculated virus. The cases tested on the 27th were inoculated from the same drop of pus, and that from which the illustration, Series 15, is taken was inoculated, though not from the same particle, yet from the same source, viz., the vaginal discharge of the same patient, No. 1,185, whose history has been before reviewed at Series 11; the theory of non-receptivity or syphilization, attainable by the process of the late Aurias Turenne, doubtless receives some support from these results, and goes against that of "elimination" or "derivation," by which some have thought the inoculation treatment acts. In *Hay's American Journal* of last month, the results of some cases, lately treated by the inoculation method, have been reported by Professor Bumstead, and instances are given in illustration. The question is thus put by Professor Bumstead—"Is syphilization to be recommended for general adoption?" He answers—"In the preceding pages I have said much in favour of this method of treatment, and I have endeavoured to give to its full credit, from what I have personally witnessed, and from the accounts of others, I believe that it is a very effective method for the treatment of syphilis."

But, on the opposite side is put the discomfort caused by submission to the treatment, and the markings caused by the cicatrizations of so many pustules.

This, no doubt, is to be considered, and it is a serious matter when applied to the treatment of a disease which is not necessarily fatal, as it brands indelibly the body, with evidences of having suffered from an affection so repugnant. I believe it would be most important to avoid this branding, not only for the sake of the moral, but the physical discomfort attending it—so great, indeed, that it is now urged as the chief obstacle to the practice of this method, which, though not more inexplicable, and by no means so astonishing, as that vaccination should be a guarantee against small-pox—seems, in many extreme cases, to be attendant with such good results that, as above quoted from an unbiassed and independent observer, it is found to be "a very effective method for the treatment of syphilis."

From my experience with the inoculation derived from the vaginal discharge of patients under the syphilitic influence, I believe that the chief objection, arising from the discomfort and markings caused by the continuous inoculation, may be obviated to a great degree. Thus, in the cases to which the inoculation method is specially applicable, where the syphilitic cachexia is intense, as in Series 3, 6, 7, 8, 9, already related, the inoculations were more persistent, and did not require that repetition of the pustulating and scarring process which is essential to the syphilization method of Professor Boeck. It is also remarkable that the receptivity of the patient seemed to bear a ratio to the condition and the manifestations of syphilitic intoxication, as fully illustrated by the Series 13, 14, and 15.

As to any inconvenience caused to the patient I have seen very little. The largest resulting sore I have witnessed is that of Series 13. The pustule produced by the inoculations is hardly painful, and the resulting ulcer is not very sensitive, or likely to prevent the patient pursuing any ordinary avocations. It is to be borne in mind that the higher on the side of the abdomen the inoculations are made the less inconvenience do they give.

The question of the character of the sore, from whence the inoculative virus is derived, is a matter of interest. Boeck and others profess to practise the method from the hard, or infecting sore, when previously irritated; though, in the earlier experiments, the pus of chancroids was used. However, the result in either case is a characteristic pustule peculiar to chancroidal inoculation. In the late cases related by Bumstead the matter used for inoculation was, on several occasions, confessedly that of the soft, or chancroidal sore, yet the resulting pustules were similar. The appearances of outline, and surface in the inoculation sores I have represented are very characteristic of the chancroidal sore; yet they were produced neither from a sore or pustule, but from a vaginal discharge, as I believe, necessarily occurring in a patient under the constitutional syphilitic influence.

The same characteristic pustules have been produced by Dr, Gjör, from the secretion of mucous patches. I have myself produced successful inoculations from the mucous patches of a child hardly two years old suffering from constitutional syphilis.

Dr. Richardson (*Dublin Quarterly Journal*, August, 1870, p. 86) relates a similar case of auto-inoculation produced from a mucous tubercle in an adult. It is evident from my inoculations that vaginal discharge furnishes a more vigorous pustule, and a resulting sore which, by its less evanescent property, obviates one of the chief objections at present brought against the process of syphilization, or the treatment by inoculation.

Transactions of Societies.

BRITISH MEDICAL ASSOCIATION.

II.—The Conservatism of Modern Surgery.

(*Continued from page* 159.)

One at least of the most important elements in the successful treatment of such cases is to be found in the great principle of rest, as carried out by means of apparatus which shall at the same time perfectly support the limb and retain it in position, and allow dressings to be applied without disturbing it. . . . . .

It happens now and then that our attempts to save limbs, though successful, end in disappointment; the limb preserved being from some cause less useful than an artificial limb, and a source of discomfort to the owner. Such a misfortune may occur in consequence of an extensive destruction of integument so that a raw surface which nature has not sufficient resources to cover in is left, to the continued annoyance of the patient, who will sometimes ask to be relieved of the extremity which it has taken so much trouble to preserve. We might fairly consider the new proceeding of grafting a portion of epidermis upon the gap to be filled up as, in such cases, partaking of the nature of conservatism. Or this inutility may arise from malunion, the causes of which I need not here enter upon.

There is here a cast of a badly-united leg, which was almost useless, and the seat of constant pain. The patient would gladly have exchanged his burdensome limb for a wooden pin, but acting in the spirit of conservatism, although the word was not then used, I cut out a wedge from the projecting tibia, divided the fibula with cutting pliers, and set the bones straight. The result is seen in the fellow cast. This operation was performed more than twenty years ago; but I had an opportunity of seeing the patient a few days since, and he informed me that, although the leg operated upon is somewhat shorter than the other, he has never experienced the slightest inconvenience, and for these twenty years it has been a good serviceable limb to him.

The term conservative as employed and understood by its distinguished originator does not, as already indicated, entirely cover the tendency of modern operative Surgery to abstain from the use of the knife, and substitute other milder and safer proceedings. I shall venture, nevertheless, to include among these illustrations of the conservatism of modern operative Surgery some such examples of abstention from the knife, since the spirit which pervades them is absolutely identical with that of conservative Surgery.

There are few structures of the body which have been the field of more brilliant and daring operations than the arterial, whether these have been executed to stanch the flow of blood from a wounded vessel or for the cure of aneurismal disease. Such operations have been oftentimes as successful as they have been daring, but too often, also, they have been brilliant failures, followed by a fatal result; sometimes life has only been preserved at the expense of a limb. Much has already been done in modern times to diminish the number of such failures and to further the conservation of limbs by the employment of mechanical measures in the place of cutting operations. In carefully adjusted position, for instance, we have a ready means of modifying the force of the arterial stream. The mere elevation of a limb exercises considerable influence over its circulation; but other positions, such as extreme extension and flexion, either with or without elevation, may be so employed as to keep the blood stream under almost perfect control.

A young woman was admitted into University College Hospital, a good many years ago now, whilst I held the office of House-Surgeon under Liston in that institution, with a wound of the superficialis volæ artery, inflicted by the point of an oyster-knife. The injury had been done some days before her admission, repeated attacks of bleeding had occurred, and vain attempts had been made to secure the ends of the vessel in the wound; the hand was swollen and inflamed, and the wound in a sloughy condition. I had her arm raised very high upon pillows, and stretched out in the extended position by bandages to the hand, whilst irrigation with cold water was employed to the wound, which was uncovered. No bleeding recurred. At that time I believed that the elevation of the limb was the sole cause of the arrest of bleeding, but I am now inclined to think that the extended position of the arm was also not without some effect. . . . . .

My attention was first drawn to the effect of this position two years ago by one of the Surgeons of the Lariboisière, who informed me that he had ascertained by experiment that by extreme extension the force of the arterial circulation might be materially modified. I have myself experimented upon this position, and find that, in thin persons particularly, extreme extension, or, as it may be shortly called, "over-extension," of the elbow-joint enfeebles the pulse at the wrist, and where the elbow-joint admits of being so extended that the end of the humerus presses forward against the artery the pulse is entirely extinguished. Abduction of the shoulder-joint and over extension of the wrist aid this effect. In the lower extremity, if a hard cushion be placed under the buttock, and the hip and the knee-joints over-extended, the pulse at the ankle is also very greatly enfeebled. I have not employed this method in cases of actual bleeding; but although the position might be difficult to enforce, believe that it would be useful, at least as an auxiliary measure.

A French Surgeon has recently impugned the efficacy of flexion as a blood-stopping means. I have therefore had some experiments done at the Infirmary here, with a view to test the effect of this position upon the pulse at the wrist, and at the ankle.

These experiments were done at different times, and on several different individuals, by Dr. Page, our excellent House-Surgeon; and by myself separately, with the assistance of Mr. Kaye, my dresser, with the following results:—

A. *Upper Extremity.*—1. Forearm bent on arm by muscular action of the individual experimented on. In persons with considerable muscular development, pulse at the wrist entirely stopped.

2. Forearm bent on arm simply, with the hand flat on the shoulder. Pulse weak and indistinct, sometimes quite stopped; this rarely.

3. Forearm bent on arm, with hand pronated. Pulse more weakened, sometimes entirely stopped.

4. Forearm bent on arm, hand pronated and extended. Pulse usually quite stopped.

5. Forearm bent on arm, hand pronated, and bent at wrist. Pulse either almost imperceptible or quite stopped.

6. Forearm bent on arm, with a roll of lint or cambric pocket-handkerchief, rolled up and laid in bend of elbow. Pulse always stopped.

B. *Lower Extremity.*—1. Leg fixed on thigh. Pulse in posterior tibial artery much weakened.

2. Leg flexed on thigh, and high on abdomen. Pulse in posterior tibial stopped altogether almost invariably.

3. Leg flexed on thigh, with a roll of lint or cambric pocket-handkerchief laid in the bend of the knee. Pulse stopped in some cases, not always; but with flexion of thigh on abdomen also, pulse invariably stopped.

4. Thigh flexed on abdomen, the trunk bent forward. Pulse materially weakened.

From these experiments, as well as from those cases of actual bleeding, in which this method has been used, it may be fairly inferred that we possess, in over-flexion, a blood-controlling agent of considerable power, which can be applied on the shortest notice; which requires neither instruments nor apparatus other than can be obtained in the poorest cottage; which can be put in force by any one possessing neither special knowledge nor operative skill; which is not dangerous in itself; and which may be relied upon with certainty to restrain bleeding, at least temporarily, even when it may fail permanently to arrest it. The bleeding from a wounded artery is so striking a thing—so many circumstances concur to attract the eye and arrest the attention—the crimson blood flying in jets across the room, or welling from the wound; the death-like aspect of the bleeding man—his livid pallor and convulsive agitation, these are so appalling, the absolute danger is so great and imminent, that we do not wonder if the ordinary bystander is palsied by affright, and the Surgeon himself deeply impressed by the gravity of the situation. It is to such a scene that suddenly, and without preparation, he may be summoned, perhaps to some remote place, perhaps in the middle of the night. Without assistants, except the terror-stricken spectators who encumber the room; by a flickering light of the candle, a practised operator might hesitate to undertake the search after the wounded vessel.

If, then, at such a time the mere flexion of a joint will remove the danger, allay the tumultuous excitement, dissipate the apprehension and anxiety, and relieve the Surgeon from an embarrassing and perhaps doubtful operation, were it only temporarily, it is surely a valuable addition to our resources.

But when I find that in the upper extremity over-flexion may be relied upon as a permanently efficacious measure, enabling us, in wounds of the palmar arch for instance, to avoid a tedious and perhaps mischievous dissection in the palm, or the ligature of all the arteries of the forearm or of the brachial; when I recall to mind the controversies which have prevailed as to the best treatment of repeated and secondary hæmorrhages; the choice offered to us between a tedious, difficult, and uncertain dissection in the midst of an ill-conditioned wound, or among a huge collection of clots, in search of the bleeding orifices, and a serious operation to ligature the trunk, in the lower extremity at least—an uncertain, not always effectual, and sometimes dangerous, proceeding; when I read in the most recent systematic works on Surgery, that secondary hæmorrhage from the deep arteries of the leg is a sufficient reason for amputation, and remember that I have myself seen a person narrowly escape amputation of the hand in consequence of wound of the palmar arch, I cannot but think I am justified in offering to your consideration this method as an illustration of conservatism in Surgery. If you consider this account tedious and unnecessarily long, I must express my regret; but as this mode of staying the flow of blood from bleeding arteries is only just mentioned in the last edition of Mr. Erichsen's "Science and Art of Surgery," and not even alluded to in Mr. Holmes's—the most complete and popular systematic works on Surgery of the day—it seems that some account of my own experience of the effect of position might not be altogether uninteresting.

A more remarkable example of abstention from the knife is to be found in the pressure treatment of aneurism. Sir Wm. Fergusson remarks that when Hunter tied the superficial femoral for the cure of popliteal aneurism, he performed a great act of conservatism; but modern Surgery has acquired in the same direction results still more important and more beneficial to humanity; aneurism of nearly every artery in the body, including the carotid, the subclavian, the iliacs, and the aorta, having now been cured by pressure. The old or slow pressure method was an advance upon the ligature; but what I believe was first named by myself—the "rapid pressure treatment"—must be considered to be in some respects even a greater improvement upon the older plan. Having arranged to read a paper on this subject, it is not my intention now to enter into it; but here in Newcastle, where the method originated, it could not be passed over without mention.

The rapid pressure treatment may be considered but the natural development of the older method, and, like so many other triumphs of modern Surgery, owes its practicability to chloroform. Having been myself somewhat concerned in its introduction, it would not become me to speak too strongly in laudation of it.

I should rather leave to those who best know what dangers encompass him who is submitted to the knife and the ligature—the shock, the suppuration, the erysipelas, the pyæmia, the gangrene, and the secondary hæmorrhage—the appraisement of a measure which, after a few hours' sleep, leaves the awakened patient free from his disease, with no wound to heal, no further risk to run, and to say whether any Surgical proceeding ever more truly deserved the application of the old maxim—*Cito, tuto, et jucunde.*

III.—The Success of Modern Operative Surgery.

It is in one sense a matter of indifference to what part of operative Surgery I turn for illustrations of its success; they abound everywhere. They might be found in the subjects we have already treated; or I might take to choosing at random some special department, say the orthopædic, and adduce the wondrous metamorphoses produced by its agency in proof of my position—the variously twisted and useless feet opened out, straightened, and made serviceable; the withered bent limbs made strong and shapely; the hideously distorted trunks conjured into symmetry; transformations worked with a perfection, a facility, and an absence of pain to the patient which seem little short of miraculous when we look at the condition of this branch of our art some forty or fifty years ago. Transformations, too, not now confined to some special metropolitan Hospital, but which may be undertaken by any provincial Surgeon to overcome difficulties and enable him to complete the transformations, towards which the division of tendons is only the first step. Here, too, I might refer to an aspect of our art most interesting to study—the moral effect produced by raising a misshapen, halting creature to the condition of a straight and well-proportioned man—an aspect which brings mechanical art into a close and remarkable relation with the subtle and mysterious problems of psychology. I prefer, however, as more in consonance with my design, to take examples from fields which have been more generally cultivated, and for a longer period, by the great body of the Profession, and from operations which contain in themselves all the essentials of treatment independent of the assistance of the mechanist. The operation of cutting for the stone, for instance, furnishes an example of this description. There have always been individual operators who have have been remarkable for their success in cutting for the stone; thus twenty, twenty-five, thirty, as many as forty persons have been cut in succession by different Surgeons without a death; but such examples would not serve the purpose I have in view, which is to show the success of modern operative Surgery in this operation, not the skill of any individual. Let us take, then, the lithotomy operations performed at any provincial Hospital throughout a series of years and distributed among several different Surgeons—say, for instance, the Newcastle Infirmary. In this institution, between the years 1859 and 1869, both being included, lithotomy has been performed sixty-four times, and of this number two operations only have been followed by fatal results. These sixty-four operations occurred in different proportions in the practice of six different Surgeons, who, during the time stated, have held office at the Infirmary for longer or shorter periods. The ages of the patients varied from two and a half years up to seventy, both of these extremes being among the successful cases; twenty-nine were ten years of age or under ten; sixteen were upwards of forty years old. Of the two fatal cases one was thirty-eight years of age, the other fifty-two. The average time between the operation and the date of dismissal from the Infirmary was twenty-eight days. The operation performed was the ordinary lateral one, which, introduced by Cheselden and modified by Liston, is that, I believe, most usually practised by British Surgeons.

These cases, then, were not of an exceptional character; but in every way examples of the ordinary kind of cases which may be expected to occur in Hospital practice; they were not in an unusual proportion of the most favourable age; they were not all in the hand of one operator, who might be supposed possessed of unusual skill; nor did they come under treatment during one particular short period, when for some special reason it might be thought that a run of favourable cases might have occurred; and they were operated upon in a provincial Hospital, where we do not arrogate the possession of unusual skill or success. We may therefore fairly assume that the results give us at least an approximation to the average success which the operation of lithotomy had attained at the period of their occurrence.

The ordinary rate of mortality after this operation, as calculated from a large number of cases, not confined to recent years, is stated by Coulson and others to be about one in seven. Sir William Fergusson states that out of fifty patients under fifty years of age cut by him in the whole course of his experience, two died: this is above the average of success as given by Coulson for the same age, but it must be considered below the rate of success of the Newcastle Infirmary for the time stated, the operations at this Institution being on persons of all ages.

If, then, I am correct in putting forward these cases as representing an approximation to the average results of modern lithotomy, it must be conceded that they constitute good illustrations of modern operative Surgery.

It has already been stated that the operation performed was the ordinary lateral one, and I am not aware that there was any peculiarity in the way in which it was carried out by any of the operators; with the exception that in some of the operations on children, performed by myself, the stone was removed by the finger alone introduced into the bladder, and without the employment of forceps; nor in the after-treatment employed. The instruments used were of the simplest description—the usual laterally grooved staff, sharp-pointed lithotomy scalpel, and forceps.

The success of the modern operation of lithotomy may be attributed in part to this simplicity of the instrument used; in part to the greater gentleness with which in modern times we employ our tools, particularly the forceps, so that we avoid the pulling and hauling with both hands, the violent movements of instruments from side to side, which in former days were not unfrequently witnessed, and the consequent bruising of the neck of the bladder and other structures, proceedings fraught with dangers which I need not enumerate; and greatly also to the use of chloroform, by which the operation is robbed of

more than half its terrors; and thus patients are encouraged to seek relief from their pain at an earlier period than formerly, and whilst the urinary organs are still not seriously affected by disease.

The modern procedures for the relief of strangulated rupture, for the extraction of cataract, and of ovariotomy, will afford us equally notable examples for the success of the operative Surgery of the day.

By the modern operation for hernia, I mean especially the operation without opening the sac, perhaps the most satisfactory and successful proceeding in the whole range of Surgery, aiming at so splendid a result as the rescue of a life from imminent danger. The operation, when the sac is opened, is itself, much more successful in the present day than it was some thirty years ago, being usually put in practice after a much shorter period of strangulation, and followed by a more sensible and rational after-treatment; but the operation without opening the sac is, I believe, as absolutely certain of success as any proceeding can be. I can remember when the result of herniotomy was considered so doubtful that every device was had recourse to avoid it, from the injection of tobacco to placing the patient on his head, or trundling him down the street on a barrel; and I have heard a Physician of great repute condemn the proceeding altogether as dangerous and unnecessary, asserting that the strangulation might always be relieved by repeated doses of calomel.

It is not astonishing that the result was uncertain when we consider the mode of operation not unfrequently adopted in those days. After a long and dangerous period of strangulation, we had an external incision running the whole length of the hernial tumour, followed by a painfully tedious dissection, occupying sometimes the better part of an hour, layer by layer down to the sac; this reached, it was opened to an extent commensurate with the external incision, and its contents assiduously manipulated, probably by more than one pair of hands, to ascertain the condition of the bowel; the stricture was then divided, the knife being passed in dangerous proximity to the bowel, which occasionally has been wounded even by the best operators; and when the operation was over, the Surgeon was not satisfied until the maimed and bruised bowel had been further tortured by purgatives and coerced into unnatural action.

How different is the modern proceeding! A small cut less than two inches in length is made over the neck of the sac; a little dissection with the handle of the knife or the finger-nail reveals the edge of the ligamentous structure; a few fibres are divided; gentle pressure is made upon the sac, which may not even have been seen; the bowel slips up, and all is over. The whole business not occupying ten minutes, an opiate is given, and the Surgeon has no further anxiety about his patient.

I know it may be said that this method cannot always be adopted; and indeed, in looking over some recently published cases of herniotomy, I must acknowledge to have felt some surprise at the frequency with which the sac has been opened.

It has fallen to my lot, as indeed to that of most operators, to operate in such cases pretty frequently; and for the last fifteen years I have rarely found it necessary to open the sac. Unless, indeed, there is some special reason for doing this, such as the great length of time during which the rupture has been down, the manifest pressure of a large mass of omentum, or indubitable signs of change in the bowel, emphysema, putrid smell, or the like, I invariably attempt the reduction without opening the sac; and, according to my own experience, the test of the propriety of the proceeding is in its practicability, for I have never in my own practice known a fatal result where the sac was not opened.

By the modern operation for the extraction of cataract, I mean the method—by whatever special name we call it, whether scoop-extraction, or Schift's operation, or modified flap extraction; whether the iris is touched before or after the extraction of the lens, immediately before or some time before, which consists essentially in a comparatively small incision through the cornea, the removal of a portion of the iris and extraction of the cataractous lens by gentle manipulation, aided by spoon, curette, vectis, or other similar instrument, diversely employed; for I take it the same principle pervades all these methods, however they may differ in minute details.

I claim for these modern operations, although each may be more particularly applicable in special cases, a greater and more uniform success than belonged to the old flap-operation.

I acknowledge that nothing can be more brilliant and striking in its performance, nor more excellent in its result, than a perfectly successful flap-operation after the old mode. After such a proceeding, when entirely successful, there is a scarcely perceptible cicatrix, a transparent cornea, an unmutilated iris, an undisplaced, round, central, clear, black pupil, and consequently sight as perfect as is possible after the removal of the lens. But then, how frequently does this perfect and complete result ensue? We must confess but rarely. How often, on the contrary, are the hopes of the operator disappointed even when all goes well at the operation? How often do we find that the edges of the wound become separated, that part of the iris protrudes, that the healing is delayed, and that ultimately there is a partially closed or distorted pupil, with broad cicatrix and more or less imperfect sight?

In the modern operation, although the pupil is necessarily somewhat misshapen, we can yet reckon with considerable if not absolute certainty upon a result so far successful as to give good useful sight. Although, then, the old operation in exceptional cases gave a result which left nothing to be desired, the new operation gives a more universal and assured success.

I need not detain you by any lengthy reasoning to show the success of "ovariotomy" in recent times. You know that from being looked upon as one of the most fatal performances a Surgeon could undertake; from being stigmatised by some of the greatest men as a frightful butchery, it has risen to take its place as a well-recognised proceeding—more successful than some older and long established operations. It is, indeed, emphatically one of the most brilliant examples of the success of modern operative Surgery.

These three operations do not, at first, appear to bear any close resemblance to each other, being undertaken for very different purposes, and one taking place in a little world as it were apart from the rest of the body; yet a brief examination will show that they possess some features in common; and although each may depend for its success upon some particular proceeding more or less special to itself, will enable us to discern certain principles common to all three greatly influencing their favourable termination. Thus in all three operations, a serous cavity containing important structures is more or less involved, and each may fail by reason of inflammatory action destroying or impairing the functions of these structures; or as in ovariotomy and hernia, by reason of other more serious consequences, to which procedures affecting such regions are more particularly liable.

The operation, without opening the sac, manifestly owes its success mainly to the fact that the peritoneum is not opened, and to the consequent exclusion of air, blood, or other contaminating fluids from the abdominal cavity; but the small size of the external incision as compared with the importance of the structures actually divided, and the still greater importance of those indirectly affected, is also not without an important influence, as well as the trifling amount of bleeding and consequent absence of blood within the external wound.

The modern modes of extracting cataract are less frequently followed by unfavourable results, mainly because the removal of the iris prevents prolapse of that structure between the lips of the wound and consequent delay in healing, morbid changes in the cornea, and contraction of the pupil; but the limited size of the corneal wound prevents loss of vitreous humour, excludes air from the anterior chamber, assists generally in preserving the integrity of the eye, and admits of more rapid healing; whilst the entrance of blood into the chamber is always an accident to be deplored, and sometimes injuriously affects the result of the operation. And in ovariotomy, although special circumstances affecting either the tumour or the patient exercise undoubtedly great influence over the result, nevertheless I conceive that this remarkable operation, which does not really require great operative skill or extraordinary manual dexterity, and which not unfrequently succeeds under apparently unfavourable conditions, as when adhesions exist, or when the patient is reduced to a condition of extreme weakness, is most likely to have a favourable termination where the wound in the abdominal parietes is small, four inches or under in length; when the time occupied is comparatively short; where the abdominal cavity and its contents have been little exposed to the air; and where, in particular, neither blood nor other fluids have entered in any quantity, or remain in the abdominal cavity. Ligatures, whose material seems almost a matter of indifference—wire, catgut, or hemp—may remain with impunity, but not blood, at least in any quantity.

Here, then, are certain common principles greatly affecting the success of each of these different proceedings. 1. The limitation of the external wound, as compared either with the

magnitude of the part to be removed, or the importance of the deeper structures involved, or the greatness of the result to be obtained, or, in other words, the approximation of the operation to a subcutaneous wound. Herniotomy without opening the sac, and the new operation for cataract, may be really regarded as equivalent to subcutaneous operations; whilst the small opening in the abdominal wall, through which the enormous mass of disease is drawn, really gives to ovariotomy a certain approximation to that form of proceeding. 2. The exclusion of air from the wound itself, or from the serous cavities involved. 3. And last, but not least important, the exclusion of blood from the wound itself, or from the cavities involved. Although these principles may be considered specially important in such cases as these, where a serous cavity is implicated, we have constant opportunities of observing their importance in operations generally. Indeed, it is but natural to infer that the principles which, carefully carried out, lead to the success of such an operation as ovariotomy, should also powerfully affect the success of proceedings upon less important structures.

In the excision of joints as now performed, as well as in the extirpation of growths from the bones of the face, we have examples of the limitation of external incisions. This principle, quite distinct from conservatism, not only favours rapid healing and diminishes deformity, but, also, by covering in raw surfaces more effectually and permanently, diminishes the risk of entrance of air into wounds.

Amputation by anterior flap, though not an example of the limitation of incision, shows the good effect of the complete covering in of raw surfaces. There is a cast here of another stump left after amputation of the knee-joint, where a posterior flap was formed. The flap was amply sufficient to cover the bone at the time; but, primary union not taking place, the flap gradually slid down, leaving a raw surface uncovered. Healing was long delayed, and the patient necessarily exposed to many risks which I need not enumerate.

The importance of the exclusion of blood from wounds left by operation can hardly be overrated. Every amputation of a limb, or removal of a tumour or diseased breast, affords an example of the impossibility of effecting rapid union where blood or bloody serum is allowed to collect between flaps or in the cavity of a wound; and the danger of septicæmia from such a cause in the early days of an operation will be recognised by every one. The application of torsion to bleeding arteries will greatly assist us in carrying out this principle; and the exclusion of air has been considered a matter of such importance, that a variety of means have been employed to effect it, which I can only allude to here, such as the water-bath used in Berlin and the *appareil pneumatique* at the Hôtel-Dieu. But, without employing any such special apparatus, by the management of our preliminary incisions, and by methods of dressing, with or without antiseptics, much may be done to effect this important end.—*From the Address in Surgery, delivered before the Annual Meeting at Newcastle-upon-Tyne, by George Y. Heath, M.B., Surgeon to the Infirmary, Newcastle-upon-Tyne.*

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the MEDICAL PRESS.)

No. III.

BANBURY SEWAGE FARM.

THE sewage farm is about one mile east of the town of Banbury. It consists of about 136 acres of a sandy clay soil, not very porous; and about forty-eight acres are under Italian rye grass, and the rest is pasture.

The population of Banbury is between 11,000 and 12,000, and the sewage amounts to about 300,000 gallons a day. It flows by gravitation from the town to the tanks of the old sewage works, where it settles for a time, the mud and scum being removed from it and mixed with street sweepings and other refuse, and sold in a solid state for manure. The liquid portion is lifted by steam power and conveyed to the head of the sewage farm, which is rather more than a mile off, and about twenty-one feet above the level of the tanks. It then runs by carriers over the ground, and finally into the river Cherwell, which is close to the lower part of the farm.

At the time of our visit, in the month of April last, the ground was sodden with sewage, and the side ditches were full of decomposing sewage, the smell from which was very offensive. There is only one house near the farm, and that is a little beerhouse called the Bowling Green, the landlady of which said that the smell from the farm was sometimes most sickening. We took a sample of the sewage at the head of the farm, and another from the effluent channel as it ran from the subsoil drain into the culvert which passes under the railway to the river Cherwell, and the following are the results of the analyses:—

Constituents per gallon.	Raw sewage.	Effluent water.
	Grains.	Grains.
Solid matter in solution . .	48·87	39·73
Chloride of sodium . .	8·94	8·46
Organic matter . . .	16·49	12·21
Ammonia	3·81	0·48
Do. organic . .	0·28	0·05
Nitrogen as nitrates, &c. .	0·00	0·63
Oxygen required to oxydise	1·42	0·83
Matters in suspension . .	3·27	0·38
Organic matter . . .	1·86	0·13
Mineral ditto . . .	1·41	0·25

A large portion of sewage was passing from the side ditches of the irrigated ground into the water course which flowed towards the river, and this was much worse than the above, which was from the subsoil drain.

Five thousand pounds have been borrowed to make the ground fit for irrigation, and a rental of £4 10s. an acre is paid for the land. Last year the returns from sale of crops, &c., was £160 less than expenses and interest of money.

WARWICK SEWAGE FARM.

THIS farm was visited in the month of April last. It is situated about one mile from the town, and consists of about 102 acres of stiff clay land under cultivation with Italian rye grass. The population of Warwick is about 11,000, and the sewage amounts to about 600,000 gallons a day. It runs by gravitation from the town to the subsiding tanks, where the suspended matters are in great part removed from it, and it is then pumped to the head of the farm, which is about fifty feet above the tanks.

The farm was in a sad plight at the time of our visit, for the winter frost had killed the grass over large portions of the farm, and the sewage was running over the ground in a very offensive state.

Samples of the sewage were taken at the entrance to the farm and at its exit from it; and the following are the results of the analysis of each sample:—

Constituents per gallon.	Raw sewage.	Effluent water.
	Grains.	Grains.
Solid matter in solution . .	47·21	52·63
Chloride of sodium . .	11·04	9·12
Organic matter . . .	12·95	7·42
Ammonia	2·20	0·52
Ditto organic . . .	0·14	0·03
Nitrogen as nitrates, &c. .	—	0·10
Oxygen required to oxydise	0·86	0·48
Matters in suspension . .	24·67	0·26
Organic matter . . .	11·87	0·13
Mineral ditto . . .	12·80	0·13

The farm has been in hand about two years, and it cost about £12,000 for plant and for laying it out, and a rent is paid of £3 an acre, and £1 for taxes, making a total of £4 per annum per acre; and last year the produce just paid the working expenses of the farm, without interest of money or cost of superintendance.

Registered for Transmission Abroad.

THE
MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
„ If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, SEPTEMBER 7, 1870.

LORD DERBY ON PREVENTIBLE DISEASE.

Those who have the cause of medical science at heart must always rejoice when any extra-professional person of eminence can be found to interest himself intensely in aught that pertains to the physical welfare of the people at large. Not that we have not plenty of examples of noblemen and gentlemen of high rank taking up with some new-fangled medical doctrine, such as homœopathy, or mesmerism, or spiritualism. Enough and to spare of these we have. It is, indeed, scarcely to be expected that persons who, like hereditary monarchs, never have the slightest inducement to study any subject seriously, should be always more or less amateurs in their pursuits in life. In Lord Derby we have a man of a very different calibre. His grasp of scientific questions is always profound, and his deductions logical and instructive. Though not a member of the medical profession, we are convinced that a profound mathematician and man of science as he is, has found it necessary, in these days of positive science, to make the study of biology and pathology part of his occupation in life. And, as he is in that sublime position that no one can believe or assert that any of his medical opinions are delivered for the sake of gaining public applause and emoluments thereby, all that falls from his lips on the subject of hygiene must prove fraught with interest to the earnest physician or medical enquirer.

In an eastern suburb of one of our most unhealthy commercial cities, Liverpool, among fetid brick-fields and other unlovely accompaniments of modern money-getting, a new hospital has been inaugurated by Lord Derby, on which occasion words to the following effect fell from him. At the very outset of his speech he mentions the conflicting opinions now held as to the question whether hospitals should be erected by voluntary subscriptions, or by each city or authorities of each parish. It is fairly maintainable as a proposition that the relief of sickness stands on precisely the same footing as the relief from destitution, and that an hospital rate would not be less justifiable than a poor-rate or an education rate, and probably this may ere long be thought generally. In the meantime there is much, says the speaker, to be said in favour of leaving hospitals to the care of private charity. But, even at the present time, says Lord Derby, with great truth, many of us are far too apt, even in these days of supposed sanitary knowledge, to talk and think of disease as if it were a calamity inflicted on us by the direct act of a higher power; and, as if all we could do in regard to it, were to observe some well-known public precautions, and then to wait, and only hope to mitigate its violence in individual cases. There is an amount of truth contained in this expression of the speaker which is quite incalculable. He adds that he thinks that he will not be accused of exaggeration when he states that if we could deduct from the actual amount of disease at any one time existing in the country, all that can be clearly and unmistakeably traced to human and preventible causes, we would have a comparatively small amount to deal with. This is, of course, a necessary deduction from the well-known fact that in many large towns, such as Glasgow, and several others, the death-rate is higher than thirty per thousand, whilst in healthy rural districts it is not much more than half that rate. Consumption, rickets, and scrofula haunt our large cities, and cut off children and young adults in a dreadful manner. No figures of statistics can give us the immensely large number of damaged existences which are the consequences of our present system of living in large cities. What statistics can tell of the ruined health of the poor work-people confined from morning to night in some sedentary occupation in dirty towns, or of the numbers of persons who fall victims to great fatigue conjoined with scanty nourishment in all our hives of industry?

Look at questions such as this! Contemplate the vast mass of indigence, for instance, congregated even in wealthy London: 123,000 paupers in the month of August, 1870. The more you reflect over such gigantic poverty and such detestable circumstances, says Lord Derby, the more easily will any man of reason accept the consoling conclusion that in sanitary matters at least the world's future need not be like the past; that for the worst of the material evils which beset us, the cause is not in the arrangements of nature, but in ourselves. This is the age of great cities. It seems impossible to carry on the complicated business of modern society without such gigantic cities. This being the case, we must accept the fact, and endeavour to do our best to make town life as healthy, both physically and morally, as country life. Broad streets, good drainage, plenty of open spaces, plenty of light and air, are, of course, if possible, to be secured. Good and cleanly houses for the poorest classes; baths and wash-houses; fields for open-air exercise, and places of artistic amusement for the leisure hours of the citizen, are all required. Unless we try to accomplish such aims, much of our boasted civilisation is but an empty sounding lie. For, after all, is it not evidently the bounden duty of truly civilised states to see that the happiness of every person in the community is up to a certain standard. Who with any knowledge of matters as they exist

at present can feel content with human science? As Lord Derby says with his usual profundity, "All the true wealth of a state is not shown in the lists of its exports and imports, nor in a vast revenue easily raised, nor in its enormous yearly savings, of which our statistical writers boast." (Porter's *Progress of the Nation* is a good example of the empty glorification referred to by the speaker.) "All these things are excellent in their way; but excellent though they may be, they are means, not ends, and the end of them all is that we should have living on this English soil a population not squalid with dirt, nor decimated by disease, but healthy in body and mind, trained for all needful purposes, whether of peace or war, living in houses which make self-respect possible, and attached to a country which has done its duty towards them."

We are much mistaken if the concluding sentences of this speech will not be remembered as among the very best utterances ever made by that accomplished scholar and gentleman. We have often heard it said that it requires the highest of all intellects to sympathise in the sufferings of others, and this truth is well shown forth in this touching appeal to the British nation to be mindful of the amount of poverty and preventible disease weighing us down in the midst of all our progress in other directions. It is easy to see traces of the philosophy which guides the illustrious speaker in his utterances. No transcendentalist he. No half and half believer in experience as the only road to knowledge. No Kantist, nor Hegelian, nor disciple of Cousin, could speak as Lord Derby does. Positive science is evidently his guiding star. He reverences all that is attainable, and hence knows how to sympathise with the aspirations of the great physicians and medical men of all countries. A thorough political economist and enlightened follower in the footsteps of Ricardo, James, and J. S. Mill, we are proud to know that this country possesses such statesmen as he. Earnest, thoughtful, and without a shade of frivolity, he sets a bright example of steadfast faith in better times to those unscientific drivellers who deny the power of science to effect any amelioration in the condition of our race. It is no time for such idle talk when France is being overwhelmed in consequence of its scepticism in the wisdom of any of its former able statesmen. With a Gladstone and a Derby, we may be proud of possessing the ablest and most earnest politicians in Europe at the present moment. Nor do we fear for the future of public health questions when we have such eloquent advocates to plead our cause as the Earl of Derby.

THE IRISH LICENSING CORPORATIONS.

The fact which our analysis of Sir John Gray's return elicited last week—that the "College and Hall" exercise all but a monopoly of the qualifying powers in England, and that the University contingent is little more than one twentieth of the whole—applies in no respect to Ireland, where medical licensing is exercised by five licensing bodies under the influence of a very active and, we presume, useful competition. Here the whole condition is changed, and the Universities claim a much larger share in the duties and emoluments of licensing than in England. The reason of this fact seems to us to be obvious. In England the purpose of the two senior Universities is not in the education of professional men at all; it is devoted to the conferring on the sons of the gentry that patent of education which is felt to be a necessity of social position. Therefore, their teaching is almost altogether applied to arts and literature, and not to the making of doctors, engineers, or even to any great number of clergymen.

In Ireland, on the other hand, University education is usually taken as a means to the higher walks of professional life, and, therefore, education in special sciences goes hand in hand with Arts instruction, and are as much, or more, a means of livelihood of the Universities than literary education.

Thus it is that we find a much more equal level occupied by the medical licensing bodies. The Royal College of Surgeons has conferred, in the five years ending 1869, an average of ninety-five surgical diplomas each year, and admitted eight fellows to its Corporation. It seems to maintain, and even improve, its position in spite of the competition to which it has been subjected, for the licenses granted for the last two years are in excess of those of any of the previous three.

Of its annual influx of licentiates, only a very small proportion (eight) seek its midwifery diploma, while a still smaller number have for the last three years gone forward to its fellowship. The causes of these two regrettable facts may not be comprehended by our readers, but they are none the less obvious.

The medical qualification of the licentiates of the College of Surgeons is usually taken, not from the Universities, but from the Colleges of Physicians of Dublin or Edinburgh; and, as midwifery is likely to be regarded rather as a phase of medicine than of surgery, and the College of Physicians in Ireland gives the qualification to its own licentiates for an extra fee of five shillings, while the College of Surgeons charges a guinea, it is not wonderful that students prefer to combine that branch of their education (if they take it at all) with medicine rather than with surgery.

The College of Physicians of Ireland is so close to the College of Surgeons in its annual grant of licences that the dependence of the Colleges on each other may fairly be, to a certain extent, assumed. It admitted in the five years an average of eighty-one licentiates in medicine in each year, and on sixty-four of them conferred its midwifery diploma, and it may thus be roughly calculated that of the ninety-five men qualified by the College of Surgeons, eighty take their second degree in the College of Physicians, and fifteen go to Edinburgh or Glasgow.

These figures ought to serve a good purpose by showing the Colleges how close their connexion naturally is, and how wise a step it would be that that connexion should be drawn closer together. It is greatly to be regretted, now that it is shown, that the diplomas of each College are almost always sought for by the same candidate that monetary difficulties should oblige that candidate to undergo two examinations instead of one, and should imperil the prosperity of each Corporation by enforcing an artificial separation.

This argument would seem to apply most forcibly to the College of Physicians, because that body is not in as good a position to maintain its position without the patronage of the College of Surgeons as is the College of Surgeons to sustain its supremacy without aid from the College of Physicians.

In the present state of medico-educational feeling, surgery, undoubtedly, takes rank with the general practitioner as the more important branch, and candidates will always look first for their surgical degree, and afterwards for the most convenient medical qualification. Moreover, the College of Surgeons has a choice of Corporations, from which its *alumni* may take their medical degree, while the College of Physicians, having no reasonable expectation of Scotch or English patronage, have, in Ireland, no other source of supply than the College of Surgeons.

The College of Physicians has, however, no occasion for despair in the contemplation of the figures before us; for, it has established a substantial increase in the demand for

its licenses within the last five years. In 1865 it gave only sixty-six licenses in medicine, and forty-seven in midwifery, while in 1868 it conferred respectively a hundred, and seventy-six.

The University of Dublin labours, of course, under the competitive disadvantage of seeing the demand for its medical and surgical degrees clogged by the necessity for a full curriculum in Arts. Nevertheless, under the energetic administration of its Medical Registrar, the Reverend Dr. Haughton, it has been placed, as regards medical qualifications, in the foremost rank amongst Universities which insist on a complete Arts curriculum.

The supremacy of Trinity College, in this respect, may probably owe something to the recent disestablishment of the Irish Church, for the activity which has, hitherto, reigned in its Divinity School has been diverted, probably in anticipation of reduced revenues from clerical sources, to the Medical Faculty. To whatever cause the amelioration may be attributed, it appears that the University has made consecutive and rapid advances in the numbers of medical graduates within the last five years. It commenced in 1865 with nineteen Baccalaurreates in medicine and eleven Masterships in surgery; and in 1869 these numbers had increased, *equo passu*, to forty-one and nineteen respectively, an advance of exactly 100 per cent.

The University of Dublin also evinces a very laudable desire to maintain the educational rank of its graduates, for it has almost altogether laid aside the licences in medicine and surgery, which were set up some years ago for the purpose of competing with the Royal College of Surgeons, and for which only a nominal qualification in Arts was demanded. On the whole, the University of Dublin occupies, in matters medical, a very creditable position, and seems quite able by its own exertions, and its well-earned prestige, to retain the confidence of the Profession, in spite of the blandishments which the Queen's University exerts to attract students.

The Queen's University in Ireland, although it has not thriven at the expense of Trinity College, occupies a very respectable rank amongst Irish Licensing Bodies, and has effected a very unequivocal progress within the last five years, albeit it, as yet, does not at all realise the grandeur of its conception as the National University. Its *piece de resistance* is the M.D., of which it granted thirty-one in 1865, and fifty-one in 1869. Granting in these years respectively twenty-four and thirty-three Masterships in surgery, an increase of nearly 30 per cent. in its total of medical graduation. When it is remembered that the University M.B. costs £99 4s., the success of a £5 licence will be easily understood; yet it is but just to say that the Queen's University has not climbed into the degree of success which it has attained by depreciation of their curriculum, or a make-believe examination.

The last of the Irish Licensing Bodies is the Apothecaries' Company; and the melancholy condition of starvation in which that Corporation exists, *quoad* its licensing powers, ought to be taken to heart by all qualifying bodies. It will be recollected that we pointed last week to the London Apothecaries' Company as enjoying the confidence, and receiving the adhesion of, nearly seven-tenths of the entire number of English licentiates.

The Dublin Apothecaries' Company forgot its duties and privileges as *the* Pharmaceutical Corporation of Ireland, and took to the manufacture of doctors. With what result? It put its seal last year on twenty licentiates in medicine, which, at 10s. each, produced it a gross income from this source of £10.

And this while the state of Pharmacy in Ireland was a bye-word, and even sleepy governments were moved by shame to seek a remedy. Already has the Dublin Apothecaries' Company ceased, as an examining or qualifying body, to exist, and if our anticipations are verified, soon will it cease to exercise any power even in the regulation of Pharmacy in Ireland.

Notes on Current Topics.

About the War and Wounded.

The startling intelligence of the last few days may seem to throw some of the expressions in the following paragraphs behind date, but as made from time during the week, we have not thought it advisable to revise the phraseology.

The readers of newspapers who seem to labour under a morbid excitement, that some proprietors were stimulating by most reprehensible practices, have surely this week had enough of carnage. The appetite for the horrible too has been further pandered to by estimates of the slain. Thus, by one journal we are told that the German losses reach 200,000, and though this is the highest number we have seen quoted, we know they must have been enormous, and it is significant that no official publications of the numbers are made. But, whatever the totals, we know that the sufferings of the wounded are beyond ordinary comprehension, and our predictions that pestilence would follow in the wake of the armies seem already to be realised. Fever, pyæmia, dysentery are known to be now prevalent, and there are whispers of cholera—a disease which will terrify troops who have no fear of the mitrailleuse, and will demoralize armies more than defeat. The time, then, draws nigh when disease will asert its influence as greater than that of the sword, and when the sick may be more numerous than the wounded.

We have already pleaded for contributions in kind rather than in money. Of course, those who cannot give time and trouble, may assist by giving money; but what will be most needed we have already specified, and thousands of ladies can find material and time to make bandages, charpie, and so on. Our Profession can vastly help by teaching kind-hearted patients how to make them. Plenty only need to be told how to roll up a bandage, and the lengths and widths most useful to set them to work with a will. Last week we informed a lady that calico, flannel, &c., torn in strips of 1½ inches to 3 inches, and any proportionate, intermediate widths, and of three, four, six, or more yards length, would be particularly useful, when the material was at once procured, and at our second visit, we were required to show how to roll up one bandage. The result of this was, that a most useful packet has already reached the Seat of War.

Again, we were asked about charpie, and explained that very old soft, but scrupulously clean *linen*, cut into squares of two inches or a little more, could easily be picked to pieces with the fingers—every thread being separated—and that the resulting mass was highly prized as an application to wounds by French surgeons. Thereupon, a whole family set to work, the children kept at the task for days, and we have had the pleasure of sending a large package to the Palais de l'Industrie, where Count Flavigny's committee sits *en permanence*.

The ladies who so earnestly made bandages, charpie, &c., having disposed of all the material in their houses, requested the gentlemen of their households to hand to them instead of a society, the pecuniary contributions they intended for the wounded, that its value might be enhanced by their labour. Armed with this money and the thrift and the foresight of their sex, they requested their

drapers to sell the calico, flannel, linen, &c., required, at a reduced price for this purpose. The drapers at once agreed to let them have what they required at cost price, and so they had so much the more material on which to bestow their work for the wounded. By the time our patients had finished the work they had become so interested in it, that they next proceeded to enlist their friends, giving each a lesson; so that others are now busy in the same way, and who knows how far the good work may spread?

Every medical man has it in his power to instruct some patient, and by so doing, may do more than by soliciting contributions of money. This is the way in which our Profession may best help the wounded.

We may now give an example of how the leaves of human kindness will spread. On the invitation of one of those we had instructed in rolling bandages, we went for a visit with a family from Saturday to Monday. The Saturday afternoon was passed in the enjoyment of the fresh country air and lovely scenery. On Sunday morning, however, the weather being less propitious, an immense roll of calico was produced with the remark "better day," "better deed," it was proposed that the invalids who could not go to church should spend their time in making bandages. The result was, that all preferred the latter employment, and we had the option of walking to church alone, or joining in the work. We chose to work for the wounded, and, in a few minutes, every one of us were hard at it. We worked with a will, so that on Monday morning a large package of well made bandages was despatched to Paris.

Dr. Russell bears testimony to the admirable manner in which the German *krankenträger* (bearers of the sick) carry on their arduous duties. The moment the fire slackens in any part of the field, they proceed on their errand of mercy and carry the wounded to the waggon. He incidentally alludes, too, to one of the most terrible tortures of war—thirst. "Water—water—for pity's sake, give me some water," was a cry that reached him wherever he went on one hot day; and an officer accepted from him, as better than champagne, some of the dirtiest water he ever saw.

The tortures that must be endured from thirst by these poor fellows, left, as so many have been, for whole days without help, is fearful to contemplate, and may induce a reverse of the sentence passed by some writers, that only skilled attendants are of any use.

Besides those left on the field, many are speedily conveyed to the nearest villages. After a battle, it is necessary to improvise hospitals in the speediest manner. For transport, every hay cart or farm waggon is pressed into the service of mercy; doctors are overburdened with work both on the field, on the route, and in the village hospitals. Priests and sisters of mercy of all orders lend willing service, the former often walking beside the waggon or cart in the capacity of driver, the latter discharging all the duties of nurses and domestic servants combined. The picture of all these mangled human forms coming in every kind of rough, jolting conveyance is too painful to dwell upon. It is only alleviated by the devotion of the men and women who strive to assuage the sorrows of war—the medical profession and its best assistants, volunteer nurses.

A correspondent wishes each soldier to be provided with a piece of lead foil, an india-rubber ball, and a ring of the same material, which, he thinks, with a couple of pieces of wood to be frequently found on the field, would enable him to staunch a wound.

A German correspondent, who speaks of all the towns and villages near him as crowded with wounded, estimates the losses of Prussia at 40,000 killed, another 40,000 wounded, in addition to very many thousands of men prostrate with disease, such as dysentery and fever. Well may it be asked, "Who can rejoice over such victories?"

Who can help regretting the allegations that have been made about firing on the ambulances? We do not place much reliance on the statements made in German despatches. We do not believe the French are so uncivilized. Mistakes may have occurred, and the question of a more distinctive badge is very properly revived. The idea of the bright yellow uniform—one not used by any European army, having long been relinquished by Spain—has, at least, the merit of rendering mistakes less likely to occur. It would, perhaps, be well for something of the kind to be done; but, meantime, every ambulance ought to carry *large* white flags with the red cross. The French assert that the Germans hoisted the neutral flag to protect their ammunition waggons. If this be true, the act deserves the execration of all Europe as likely to destroy the most successful effort yet made to alleviate the horrors of war. A nation guilty of such a trick should find itself under the ban of all others.

The question of allowing the wounded to pass through neutral territory has been spoken of by some of our contemporaries in a very flippant way. No doubt for the wounded, in some cases, this would be a great boon; but the Geneva Convention was not designed to be turned into a weapon, and no General in front of an equal foe would suffer such transit, for the simple reason that by so doing he would set free other lines of railway by which his enemy's army might be fed or re-inforced.

We are very glad to announce that our advice has been taken, and that Dr. Gordon, C.B., Deputy Inspector-General, than whom no one is more capable, has been accredited to the French army to report on the field hospitals and other matters. He is to be assisted by Surgeon-Major Wyatt, of the Guards. Professor Parkes, of Netley, will, we understand, proceed to the German army. We should be glad to see a much more liberal adoption of our suggestions. Drs. Gordon and Parkes will do all that can be accomplished by two men; but there is an inexhaustible field for acquiring military surgical expeperience, and we have hundreds of army surgeons who sadly need, and would rejoice to acquire, such practice. It is losing a grand occasion, one we may hope will not return, for our army surgeons to be at home learning nothing. If ourselves involved in war in this generation, who can calculate the gain to our wounded of such experience as that now being lost!

Our Paris correspondent has more than once alluded to the defective organisation in France, and the subjection of the medical to the *Intendance* department. This seems to be the reason why hundreds of men are now waiting in idleness instead of being at the front. Is it not grie-

vous, when thousands of wounded are dying for want of professional aid, that as cursed a system of Red Tape as England's own is keeping the surgeons from the patients they long to relieve ?

We hope our recommendation to send out foods in concentrated forms will be adopted extensively. The sick as well as the wounded need these, and they can be given where the doctors are not present. Liebig's extract of meat is one of the most useful articles. Another is Newnham's condensed milk. We have been trying this last article lately, and find it fully equal to the promises held out. We have no doubt Messrs. Crosse and Blackwell, the London agents, would supply it to the committees at a very reasonable price, and no medical man need be told the value of milk. A full supply of it would save many lives. We are informed that, on the recommendation of a friend of ours, the French Government has ordered a supply. Paris would do well to lay in a large store instead of the milch cows, which will require feeding. Again, we should think that our great manufacturers of preserved soups and meat essences of all kinds would supply the committees, who will send out goods instead of money at very low rates. Another invaluable thing—so much more highly appreciated abroad than among ourselves—is chocolate. The nutrient power of chocolate is very useful, and do not foreigners—above all, Frenchmen—often make a meal of a stick of it ? Such provisions as these will be of greater use than surgical appliances, which may remain useless when needed from the absence of surgeons.

The newspapers have published many extracts from letters sent to the committees, and also many letters from their own correspondents, containing important medical facts. One letter indignantly denies the assertion that personal help is not needed, and describes heart-rending scenes. He also declares that the French wounded are not so well attended as the Prussians. At St. Privat he did not see a wounded Prussian without a mattrass and a blanket ; but on going into the French hospital, he found everyone with nothing to cover him but his own great coat, and nothing to lie on but straw. Another letter tells us that at Pont-à-Mousson, the lady nurses had to sleep on straw in the open air. From many sources, too, we learn of fearful distress among the inhabitants of the war-stricken districts. Famine and pestilence usually follow war, and we may expect that Europe will suffer from all three scourges.

We have spoken of the Committees. The work of all deserves our sympathies. The National Society is the largest one, and has done, of course, more than the others. Col. Lindsay is chairman. It has sent out some forty surgeons, and much material. It is in relation with the National Societies of the Continent, and its help is afforded to both sides alike. The German Aid Society in this country seems to have flourished abundantly and requires no good word from us, The French do not seem to do so well. We observe they have two or three independent Committees. Could they not effect a union ? *L'Union fait la force.* The French have much to learn in the way of organising as the English understand it, and when they have learned it they will find more abundant help from English warm hearts. *Verbum sapientibus satis est.*

One of the very best things yet accomplished by the Committees is, the establishment of an International Field Hospital at Bingen. Dr. Thudichum is to have the charge of it, and Mr. Simon will give him his personal assistance. The Medical Officer of the Privy Council may here reap real laurels, and forget his blunders about Medical Reform, The hospital is to have 200 beds. The German Aid Society supplied the tents and bedding, the German Government gives the rations, and the English National Society provides the other requisites. We hope great things from the hospital which is on the neutral territory of Luxembourg.

Another happy instance of union is seen in the co-operation of the French and American Societies in Paris with the English. This co-operation is adding greatly to the influence and usefulness of all.

The wounded fill many towns in Germany where they have been removed as stated in our last issue. Some were obliged to be left in the streets, so fast did they come in, and this too without shelter. In one case 400 peasant waggons arriving together, the wounded in them who had been travelling two days had to be left all night in the vehicles. Still, great efforts are being made at Hanover, Cologne, Bonn, Dusseldorf, Mainz, Munich, Berlin, and, in fact, throughout Germany. The palaces of royal and noble families, and the houses of others are being rapidly transformed into hospitals, and the proprietors are, many of them, busy with sewing-machines, and, in other ways, providing what is needful.

Medicine and the War.

The *Birmingham Post* says that, in consequence of the war, there has been a great rise in the price of surgical instruments and of certain medicines. Quinine and chloroform are fast going up in value. A new sedative remedy—chloral—of which there are only moderate quantities available, is becoming scarce ; one of the largest wholesale houses in England considered itself quite fortunate the other day in being able to get about £30 worth of it. The same difficulty occurs with regard to surgical instruments. The trade is a small one, with no power of quick expansion, and the stocks being exhausted, instruments cannot be got. Of artery forceps, for example, we are told, there is not a pair to be had in Sheffield, and the same remark applies to other implements necessary to army surgeons. Indeed, we hear that in order to make up supplies required for use in France and Germany, even the pawnbrokers' shops have had to be visited.

Training for Slaughter.

The great object of both French and Prussians at the present time is to obtain recruits. We are informed a fifth of the men being quickly trained for slaughter, are unfit either by constitution or in physical strength to stand against long and fatiguing marches, or hold out against the vicissitudes of the battle-field. Some of the best soldiers being, "where the wicked cease from troubling and the weary are at rest," those who take their place are poor substitutes, so that we must not expect them to compete with professional soldiers in the hour of strife, or be surpised if disease infect them. They are food for musketry, and possess the courage to fight, if they only knew how, or were blessed with the physical

powers to endure privation. Some of these raw young countrymen present a truly pitiable appearance when first forced to confront danger. Training for slaughter they possess our sympathies, for the fate which awaits them is deplorable in its awful certainty.

Cooling Drinks for the Wounded.

We understand there is a great lack in the French and Prussian hospitals of refreshing and nutritious beverages for the parched soldier, thirsty with the heat of fever from his wounds. We suggest to those ladies and philanthropic gentleman at home interested in sending out lint and chloroform, to forward a supply of barley and concentrated solution of milk; for we learn great numbers of the wounded soldiers have succumbed to diarrhœa, no doubt induced by the acid drinks which they consume, that may for a time appease their thirst, but never nourishes them, and terminates in a relaxation of the bowels, which is invariably fatal. We recommend this important subject to the consideration of those interested and acting at home through pure humanity. Barley for making drinks is much needed, and we know no better article than it, as the barley-water can be prepared according to taste with a little lemon-juice.

Nuisance Prevention in Ireland.

Bumbledom is as efficient in its guardianship of the public in Ireland as in England, and we are occasionally reminded rather more forcibly than agreeably of the executive qualities of Boards of Guardians and Town Councils in the removal of dangerous nuisances. A bad form of English cholera, with a widespread epidemic of diarrhœa, has broken out in Clonmel, and its spread is reported by Dr. Fitzgibbon to his Board of Guardians. The Mayor, as Chairman, thinks the occasion one for glorifying the Town Council as to its activity in carrying out disinfecting works, but the effect of his laudation is somewhat marred by the following statement from another guardian:

He was very sorry to be obliged to bring before the Board, *for the third time*, a terrible nuisance which existed on the Cahir road, and if some steps were not taken he would communicate with the Commissioners direct. There had been a habit of throwing dead horses into the quarry at Tubberaheena, but latterly they had left the carcases at the quarry at the top of the hill. *This morning two were there exposed, and the stench from them was fearful.* Characteristically, the Mayor and Chairman of the Guardians made answer to this statement. That "three or four magistrates passed that place every day. It was not his duty to look after the matter, and he would not do so. He considered the constabulary had power to prevent this nuisance." A guardian said he had brought the matter under the notice of the police, who certainly did what they could. The Mayor objected to the posting of warning notices or the appointment of a nuisance inspector. "If there was likely to be a continuance of the disease they might get assistance for Dr. Fitzgibbon, *but there was nothing to prevent them waiting for a week.*"

From proceedings like these, and from a long and dearly-bought experience of the maladministration and culpable laziness of Boards of Guardians, the Legislature ought long since have satisfied itself that, in entrusting even the smallest and simplest duty to such persons, they are effectually defeating their own object. It is astonishing and melancholy to see how completely in such matters the representative system breaks down, inasmuch as it places important responsibilities in the hands of men who know nothing, and care as little to release themselves of them.

The Economy of Hill Stations in Indian Military Sanitation.

The history of the 58th Regiment during its stay in India affords a very valuable and conclusive evidence of the faultiness and wastefulness of the existing regimental arrangements in that country; and, as an illustration to this effect, the *Pall Mall Gazette* has recently called attention to the health statistics of the regiment.

It so happened that for a long period half the regiment was camped in the plains and half in the hills, under conditions in which a comparison of the effects of climate in the two cases could be made with every chance of a sound conclusion being drawn. The 58th, composed of very young soldiers, was ordered to India in 1864, and while quartered at Benares in 1865 began to suffer much from sickness; so much so, that the ordinary hospital accommodation had to be supplemented by special means. At the end of the year the regiment, out of an average of 772 men, had lost 43 by death, and 41 by invaliding, or 108·8 per 1,000; further, "it would be difficult to exaggerate the enfeebled condition presented by the regiment on parade towards the end of the year," and the truth of this statement is attested by the fact that the admissions to hospital were 1,945 during the twelvemonth out of the 772 men. The right wing was now ordered to Senchal, a Himalayan station, 8,600 feet above sea level, with this result, that only two died and thirteen were invalidid during the first year of residence. In the following two years only three died, and the average daily sick did not exceed ten in a strength of over 400; in fact, the right wing exhibited a condition of health quite unsurpassed in any other station in the world. In the left wing there was quite another state of things. It remained at Benares, and during three years lost annually 27·2 by death and 44 by invaliding per 1,000; or, in other words, death took away seven times as many men in the left as the right wing, the invaliding being twice as great in the former as the latter, and the rate was rather increased in the right wing from the fact that a certain number of sick were sent to Senchal from time to time. Now came a change. The regiment in 1866 was ordered to reassemble at Allahabad in new cantonments. It did so, and lost during the next year 123 by death—53 being from cholera—and 81 by invaliding, or 279·8 per 1,000 from death and invaliding out of a force of 729 men, each of whom had been on an average in hospital three times during the twelve month. As the men of one wing suffered in about equal proportions with those of the other, Dr. Ambrose concludes that the assertion that troops which have resided a long time in the hills are more liable to be attacked by endemic disease in the malarial plains of India, when called upon to serve there, is not true. Dr. Ambrose forcibly reminds us of the costliness of the present system of keeping the great bulk of European troops in the pestiferous plains of India. Taking the cost of replacing each European soldier in India at £100, he remarks that in one year (1869) the loss to the State induced by disease in the 58th was 204 men out of 729, or £20,400 exclusive of minor expenses for hospital extras, moving from camp to camp, &c.

The Fever Epidemic in Liverpool.

At a special meeting of the workhouse committee, on Wednesday, the Chairman explained that the workhouse committee had thought it right to ask the district medical officers to meet with them so that they might consult with them and get their opinion as to the probable cause of the fever, and whether they would suggest that the patients should be treated at home, or ask the select vestry for more hospital accommodation.

Mr Hagger, vestry clerk, said they had altogether accommodation for 860 patients. They had now in hospital 731 patients, and last week they had resolved to set to work to make additional accommodation for 150 more, making a total accommodation for a number slightly over 1,000. The question came upon the committee whether they should content themselves with the present accommodation, and ask the medical officers to send in only such cases as absolutely required to be sent to the hospital, or whether the committee should provide still further accommodation.

In response to the wish of the committee, the medical gentlemen then each gave his individual experiences in the matter. With only one exception they were strongly in favour of the removal of the patients to the hospital, as they were there better treated, and their removal tended to prevent the spread of the infection. They were all as one as to its being highly infectious. Dr. De Zouche, in whose district it first broke out, said he could not say the fever was abating. If all the patients went into the hospital a great deal more accommodation would be required. A great many refused to go there, and he had treated as many at their own houses as he had sent to the hospital.

In reply to Mr. Hagger, Dr. Kirkpatrick said there had only been five or six deaths in the hospital from relapsing fever out of 300 or 400 patients.

Mr. Scott moved that a shed for the accommodation of sixty patients be at once erected at a cost of £360, which was seconded by Mr. Fowler.

The resolution was then put, and was carried by seven to three votes.

Cheap Physic.

The Metropolitan Mutual Medical Aid Society is not the only one—nor the worst of its kind. We have been favoured with a circular of one in Kent that in parsonic style "implores the working men *for their own good* to join the club that the clergy of the district support, and that offers them advice and medicine" at the munificent rate of one shilling and threepence a year. Cheap enough. Is it "cheap and nasty?" as the proverb goes.

Cholera.

A letter from Russia this week tells us of great fears about cholera, which, as we have already announced, has appeared at Odessa and other towns. Coupled with the rumours from the Seat of War, these indications are of great moment.

The Social Science Congress is to be held at Newcastle-on-Tyne, from the 21st to the 28th of September. R. Rawlinson, Esq., C.E., will preside over the Health Department.

Amendment of the Medical Act.

The following letter, which sufficiently explains itself, appeared in the *Times* of the 1st of September:—

Sir,—With reference to a recent report in your columns, we beg to state that at the late meeting of the British Medical Association, held at Newcastle-upon-Tyne, we found ourselves compelled to resign our seats on the council of that body.

As members of the General Council of Medical Education and Registration, we had advocated the main provisions of the Amended Medical Bill introduced into the House of Lords by the Lord President of the Privy Council—provisions which, in our judgment, were of the utmost importance to the public weal.

The Bill, it is believed, was withdrawn in the House of Commons by Mr. Forster, in consequence of the course pursued by the Direct Representation Committee of the Association. That course was subsequently approved by a vote of the Association at Newcastle.

We, therefore, could not, in justice to ourselves or to the members of the Association, continue any longer to belong to its executive.

The question of the permanent construction of a Medical Council of Education is one of grave importance. It is intimately connected with other questions and interests entirely extra-professional, and it cannot, therefore, be properly dealt with by any hasty or one-sided legislation.

We are, Sir, your obedient servants,

George Paget, Cambridge.
William Stokes, Dublin.
Henry W. Acland, Oxford.
H. Wildbore Rumsey, Cheltenham.
Dennis Embleton, Newcastle-on-Tyne.

The Result of the Newcastle Meeting.

The waning power of the British Medical Association is seen in the fact that the Newcastle Meeting has been followed by the resignation of Drs. Stokes, Acland, Paget, Rumsey, and Embleton—perhaps the five most influential and important names, all members of the Medical Council also. Who will now deny that the Association is ruled by a clique? We are glad that these upright men have withdrawn their countenance from such a body as that which sealed its own doom by its action at the Leeds meeting. Newcastle, we are told by those of our staff who were present, was more than discontented, not only about Medical Reform, but about the other conduct of the Council and its precious committee.

Cypress and Laurel.

Scarcely a week elapses that we have not the melancholy duty of recording the decease of some esteemed and gifted member of our Profession. Last week, we regret to learn, Dr. John Wilson, F.R.S., died. During the long period of an eventful life, this gentlemen did much valuable service in exalting his calling, and benefiting his fellow men. Being on the retired Naval list, his important services were forgotten, and, when in the decline of life, he was offered knighthood, he refused it. There is no profession, other than that of medicine, where the honours are offered too late; or what is worse, most frequently not at all. The odour of the fresh gathered laurel-wreath is not much

needed, when the cyprus tree beckons to rankly waving grass beneath. Surely, it is high time the State paid honour to our leading men in the three kingdoms. Members of what class, or profession, of living men have done more than these for suffering humanity? We pray the State not to tarry over this matter, but confer the honours whilst they will prove acceptable.

The Humanity of Guardians.

We have been favoured with the following, addressed to a correspondent of ours :—

[ORIGINAL.]

"Sir,—The following remark is entered in my application book by the Chairman of the Board yesterday, in reference to the case of J. M., wife of ——

"'The Board think it strange meat should be given to a dying person.'

"I am, yours, &c.,
"G. A., Relieving Officer.

"August 24th, 1870."

The inhumanity and ignorance of the Board from whom such a production emanated is scarcely worthy of alluding to, but the absurdity of the Chairman is only equal to the hard-heartedness and ignorance of men of his class, who occupy a position for which nature never intended them. Meat ordered for the purpose of preparing beef-tea, even for a dying person, ought not to be "strange." Perhaps the Chairman never heard of beef-tea, and labours under the delusion that the person for whom it was intended should eat it as *he* would. We suppose, "Where ignorance is bliss it is folly to be wise."

The Hunter's Rupture.

The season has again come round for recommencing the invigorating and exciting amusement of "riding across country" after the hounds or harriers. Hunting is one of the few pleasures which the country practitioner may claim his own, and of which he often takes advantage. It is no unusual thing to find the doctor after hurrying through his morning visits, in full chase in the hunting field. No one knows better than the doctor what risks corpulent men advancing in years, run in the excitement of fast riding over a rough country, taking fences as they come. Their own experience recals in the past frequent cases of rupture produced by hard riding, where the violent pressure from the diaphragm and abdominal muscles led to sudden protrusion of the bowels, where the parietes were weakest. Owing to the violent bodily exertion of leaping a high fence, where rising in the saddle was followed by falling heavily forwards, we have known the conjoined tendons yield, and *direct* hernia occur. Persons ruptured should never dare, unless they can thoroughly command themselves, to hunt, lest, carried away by a mad excitement, they convert an old, simple, reducible hernia, into an irreducible and strangulated one. For some seasons we have been in the habit of recommending patients of corpulent habit, who refused to deny themselves hunting, the wearing of closely-fitting abdominal supports, in the form of flannel belts. These should be made to fit accurately the person for whom they are intended, coming down to the pubes in front, and kept in position by a narrow perineal strap on either side fastened by buttons; any undue pressure upon any particular part will be thus overcome, whether produced by a concussion in the saddle, or violent pressure upon the abdomen by the diaphragm after fast riding.

Use of Anæsthetics in War Hospitals.

We learn with much dissatisfaction that the barbarity towards wounded soldiers involved in omitting the use of anæsthetics for operations on them is being practised at the Seat of the Prusso-French War, in a degree no less than that which it reached in the Crimea and in the inhuman American conflict.

To state that it is found impossible to make use of anæsthetics for capital operations in military hospitals is as much as to say that it is impossible to make medical war arrangements at all nearly perfect.

We imagine, however, that the disuse of anæsthetics is rather a matter of indifference than of inconvenience, and that surgeons are responsible in many cases for omitting to employ them when, though perhaps inconvenient, their use would be quite feasible. It may be that surgeons care less (under such circumstances than they might) for the infliction of pain, and we can easily understand that the desire to maintain a courageous bearing under all trials, would prevent the poor wounded soldier from asking to be saved the torture of an amputation, or extraction of a ball, performed on his quivering body. Every allowance should be made for the fact that surgeons in a war hospital are not to be placed in the same category as operators displaying their skill in an hospital theatre, yet we can conceive no insuperable difficulty in the administration of chloroform by an assistant while the case waits its turn for operation.

We confess we cannot regard as feasible the suggestion put forward by Dr. Thudichum in the *Times* that bottles of nitrous oxide should be supplied to the military hospitals. That agent has hardly established its superiority even in short operations in well-fitted laboratories; and for operations for gunshot wound, or for use by inexperienced hands, and in *impromptu* and unorganised hospitals, it appears to be the very worst anæsthetic which could be employed. If similar difficulties were involved in the use of all anæsthetics, it would be simply out of the question that they could be used at all.

The Working of Syphilis Prevention in India.

The Correspondent of the *Times*, writing from Calcutta, says :—

"I see that the opponents of the Contagious Diseases Acts in England appeal to India for facts to support their views. I express no opinion on either side, but it may interest you to know the latest facts on the subject in military cantonments and in the cities of Calcutta and Madras. In the former, an attempt has been made for years to secure freedom from enthetic disease by periodical inspection. Here and there a Lock hospital has been established. When the doctor and the commanding officer of a regiment worked well together, and the former was zealous in this special direction, all testimony goes to show that disease was kept under. Some years ago cantonment Acts were passed, under which inspection ought to have become systematic—I mean of the women. The cases seem to be rare in which the old parades of the men are kept up. This ought to have become systematic, but never has been so. I have carefully gone over the three latest sanitary reports for 1868 of the three Indian armies, British and Sepoy, and each is clear on this point, that the Lock hospital system had not been properly worked. On the whole, there has been a slight reduction of enthetic disease, but it would be too much to say that the diminution is due to preventive measures, just as it is to say

that preventive measures have been tried and have lamentably failed. The experiment has yet to be made on a proper scale, and to be continued with unflagging uniformity in every corps as well as every cantonment, and for a considerable radius round each cantonment. What are the facts? In all India, except Madras, Burmah, and Bombay, the number of British soldiers admitted to hospital with this class of diseases was in a mean strength of 33,452 so many as 217·7 per thousand in 1866, was 166·6 in 1869, and 199·2 in 1868. Half of all the admissions were due to fevers, but next to these come the enthetic diseases in each year. The reduction might seem in favour of the Contagious Diseases Acts, but Dr. Cunningham, the Sanitary Commissioner, writes of Lower Bengal that the fact that 663 soldiers out of only 2,059 were treated shows that the Lock hospitals had not produced the beneficial effect so much desired. He does not give the explanation, however, that with large cities like Calcutta, and civil stations close to cantonments, it was impossible to work these hospitals. If we look at daily sick alone, these diseases stand above fevers—365 British soldiers were on an average unfit for duty every day of the year from this cause, while only 311 were so unfit from fevers. We are soon told the cause. "In many stations the registration has been very incomplete. . . The women have frequently escaped surveillance." Again, "The irregularity in the attendance of the women . . . has been complained of . . . but the remedy which the rules provides for this had not been put in force as it ought to have been." It is a remarkable fact that the native army, though practically as many of them are unmarried or separated from their families as among the Europeans, suffer very little from these diseases in the very stations where there are most European victims. The proportion of admissions per thousands of Sepoys was 54 in 1866, 45 in 1867, and 43 in 1868. Caste, cleanliness, and other causes have much to do with this difference. In Madras the state of the case is much worse. The proportion of diseased British soldiers per thousand in a mean strength of 10,766 was 562·2 in 1866, was 412·7 in 1867, and 435·8 in 1868, or almost every second man. Again, we are told that many of the women escape registration, and there is much clandestine intercourse. In Bombay, in 1868, the admissions were 202 per thousand in a strength of 10,524 rank and file, or one fifth of the total sickness. Here also we are assured that 'a systematic and satisfactory supervision has not been attained in any of the large stations in the Presidency.'"

Worm Cakes.

We are led to understand the trade in worm-cakes is rapidly increasing, and that the quantities consumed in some districts is truly enormous. Correspondents, resident in manufacturing localities, tell us of the common and baneful practice which only too generally exists of parents indiscriminately administering to their children these cakes upon the first approach of indisposition, which is usually assigned, upon presumptive evidence, to the existence of worms in the intestinal tract. Some of these nostrums, we believe, contain scammony, baked with brown sugar and flour into an agreeable cake which children freely eat.

A correspondent narrates to us a series of cases wherein a most violent and serious, and, in three cases, fatal, form of diarrhœa was induced by the consumption of cakes manufactured by a certain maker, which he considers contain calomel. The process of baking in the oven is against this. One description of worm-nut, we are told, has santonine, and another simple jalap. Be the exact formula what it may, our duty owing to the pernicious, we may say dangerous, nature of an absurd practice of treating every child without discrimination for worms is to enter our protest against it, and to recommend when fatal cases of diarrhœa occur traceable to these cakes, for the medical gentleman in attendance to communicate with the Coroner.

We are pleased to hear that Dr. Andrew Wood has in the press a volume of translations from Horace.

The annual meeting of the British Archæological Association is now being held at Hereford.

Hampstead Heath seems again to be in danger. Since the law suit was held over, more land has been enclosed. This seems to be a want of good faith.

According to the *Eastern Post* the Prussian Government has ordered 200,000 wooden legs in this country. What a grim comment on glory!

The Government has expressed its willingness to appoint a gentleman who is opposed to the Contagious Diseases Acts as one of the commissioners for inquiring into the working of these Acts.

The late Sir F. Pollock was standing counsel to the Royal College of Surgeons of England, and otherwise intimately associated with the profession, in which he always evinced great interest.

The fracas between a surgeon and a solicitor, which has created a good deal of interest and gossip in and around Nottingham for the past few days, has been settled out of Court, by mutual arrangement, our confrère handing over to the fund for the sick and wounded a cheque for £5.

We regret to announce the death of Dr. Bolley, the celebrated Professor of Chemistry at Zurich. The deceased professor was but fifty-eight years of age. His famous work on *Technico-Chemical Research* may probably be known to many of our readers.

In our supplement last week we announced the decease of Mr. Clement, M.P. He practised many years in Shrewsbury, which was his native town. He was one of the very small band of actual practitioners who have obtained a seat in the House of Commons. He was a Fellow of the Royal College of Surgeons of England, author of an essay on "Urinary Diseases," and several contributions to the medical journals.

Apropos of the meeting of volunteer medical officers, our able contemporary, the *Globe*, inquires what they have hitherto been thinking about. Perhaps the inquiry may stimulate them to more than talk. At a time like this the volunteer-surgeon should be as effective in his department as the rifleman in his. We have already directed attention to methods of obtaining experience. Let us add that gentlemen should not enter this service who are too engrossed in practice to attend to it, nor with the idea that it is a merely ornamental one.

EDINBURGH.

The University.—Mr. Brodie has completed his busts of the late Professors Goodsir and Lee, which are shortly to be presented to the Senatus of the University.

Correspondence.

A VISIT TO PARIS IN WAR TIME.

[LETTER FROM DR. C. R. DRYSDALE.]

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Nothing can be more afflicting to those who, as all members of the Medical Profession do, take an interest in the physical welfare of their neighbours, than the position of this great and wealthy city at the present moment. Every question relating to the good of the sick and suffering is postponed to a more convenient season. No topic is of the slightest interest to anyone, medical or non-medical, at present but that of how to kill the Prussians. What a deplorable effect is produced by the ambition of the few, and the professional zeal of those officers and military grandees who alone, surely, can ever be gainers by such a terrible slaughter as is afflicting all our hearts at present. To think that the countrymen of La Place, Lænnec, and Voltaire are killing and being killed by the countrymen of Gœthe, Schiller, and Virchow is a bitter thought, and might make anyone less confident in the ultimate power of science in civilising mankind despair of the future of the race. Intellect, it must be confessed, is but a weak force in society as yet; but, as science, "the only regenerator of mankind," is daily being more widely worshipped by members of all civilized nations, we may, even in the din of battles, maintain a hope of lasting peace after this sanguinary conflict.

Thus, notwithstanding my intense sympathy with our charming French neighbours of Paris, and the almost futile task of attempting to obtain any information upon ordinary subjects this year, I have, nevertheless, been able to visit one or two gentlemen whose opinion I have long wished to hear upon certain questions of national importance, as the matter of public hygiene—*e.g.*, I have long taken a great interest in the question of whether the results of the French system of regulating and registrating prostitutes had really produced good results or not in France, even in the matter of the prevention of disease. Our most respected writer, Mr. Acton, seems quite convinced that the French system has made Parisian prostitution much less dangerous to the health of those who make use of it. And I think that Mr. Berkeley Hill is of the same opinion, although he has not *publicly* stated his conviction to this effect, as far as I know. To assist me in my researches in this matter, I first called the other day on M. Lefort, but found that he had gone off to the war as surgeon to the first ambulance. Check number one. I then went to the famous police office at the Rue de Jerusalem, so familiar to the readers of the works of Balzac, and asked for the head of the *Bureau des Mœurs*, M. Lecour, who has just written an admirable work on the subject of prostitution in Paris and London.

This gentleman, to whom I was not unknown, as he has mentioned my name as an authority on this subject in his recent work, received me with great kindness; but, after a very short conversation, informed me that his functions as Chief of the Bureau at the Préfecture of Police were quite at an end at present, and that he was constantly and absorbingly engaged with his duties as *Commissaire Interrogateur* "on account of the war." He referred me, therefore, for this year to his work for all his opinions, merely adding that he had received from Mrs. Josephine Butler pamphlets on the side of abolition of the system for which he is so staunch an advocate. We separated, in hopes of better times, when murder and rapine may again give away to peace; and schemes for the amelioration of unfortunate women, and the diminution of indigence may again be considered as the grand aims of all truly-civilised and intelligent citizens.

In his work on "La Prostitution à Paris et à London, 1789-1870," M. Lecour asks the question—"How many venereal patients are there in Paris?" and attempts to answer it by saying that in 1868 the Midi Hospital received 3,185 cases; the Lourcine 1,024; and that the general hospitals, in the same year, 1,551 cases; whilst Saint Lazare had 1,694 venereal cases in that year, and the Military Hospitals 1,907 cases. He adds to these 435 cases among the military of the department, and makes a sum total of the number of cases of venereal disease of about 9,500 among hospital patients. This cypher is not sufficiently accurate for my taste. For instance, I asked at the Hôpital du Midi whether there were not many cases of syphilitic and venereal disease treated in the out-patient departments of the larger hospitals. M. C. Mauriac replied that it depended on the surgeon who gave consultations at the large hospitals how many were seen there. I do not think, then, that M. Lecour, who, I believe, is *not* a medical man, is sufficiently aware of these facts; and I therefore believe that his hospital statistics are almost worthless, except in so far as the Midi, Lourcine, and Saint Lazare Hospitals are concerned. In addition to this, there are large dispensaries, or *consultations*, held by Dr. Langlebert and other doctors of the "Ecole Medicale Libre," where only venereal cases are seen, and these are not spoken of by the able author, Lecour, in his statistics.

He says, indeed, that without fear of being taxed with exaggeration, we may consider the cypher (9,500) as representing the fifth part of the number of venereal patients at Paris, who are treated at home by doctors, or who go for prescriptions to chemists' shops; and proposes the figure 47,500 as the number of cases of venereal disease in Paris annually. I believe that he has been greatly deceived in giving such a low figure, although it certainly shows that all the *reglementation* in the world has anything but got rid of the contagion it has been framed to prevent.

Had M. Lecour done as we did in the Harveian Society's Committee in 1867—*i.e.*, written notes to each hospital to ask what was the average number of venereal patients, in and out patients, of each hospital, and the proportion borne by these to the total number of cases seen, both in Paris and in the larger towns in France, he would, in my opinion, have found that the returns would have shown a much larger cypher than that of 9,500 for the hospitals of Paris. I say this the more frankly because I see that M. Lecour has quoted largely from the report on the quantity of venereal diseases, draw up chiefly by myself in 1867 from replies sent to our Harveian Committee by a large number of hospital surgeons or house-surgeons in England, Scotland, and Ireland.

A notable fact must be kept in mind, *i.e.*, that the size of the two cities, London and Paris, seems not to be so very different as it was. Thus, according to Lecour, the census of 1865 showed that Paris contained 2,150,916 inhabitants, and London had by that year's estimate 2,803,989.

The work of M. Lecour is a curious proof how persons may demonstrate a proposition to others, and yet think that they have clearly shown the very contradictory fact to be true. He shows that for the last twenty years there has been going on in France a work of social transformation. "The religious sentiment is weakened; toleration for venal and scandalous gallantry has become a part of our manners, whilst prostitutes have invoked, or rather other folks have invoked for them, immunity as citizens . . . . so that, whatever the police does to repress and watch over these women (and the duty of the police is a more complex one than most persons dream of), it does not satisfy the exclusive exigences of medical science, whose thoughts are solely occupied with the peril arising from syphilitic contagion."

In another part of his work (chap. xvi.) he shows that the control of prostitution is slipping out of the hands of the police, as follows:—In 1855 there were 611 girls inscribed on the police rolls; in 1869 only 370 In 1855 there were 204 tolerated houses; in 1869 only 152. In 1855 there were 1,860 women in these same houses; in 1869 only 1,206. In 1855 there were 2,429 isolated prostitutes; in 1869, 2,525. And, lastly, a state of things affecting to the mind of any true French policeman, or English imitator of that type, there is a considerable increase every year of the number of women styled *insoumises*, or unsubjected. This is, you know, Mr. Editor, the most thorough "subjection of women" known either among white or black nations. These women scarcely ever marry, or get out of the *souricière* or trap laid for them by the Bureau des Mœurs; but continue at their miserable trade till death releases them, whilst in our benighted London, where there are no *sousmises, as yet*, the girl of the town gets married, perhaps as easily as her sister, and leaves this business in a short time for ever.

There are, you know, in London and many of our provincial towns, societies called Refuge Societies, where some benevolent persons strive to recall some of their unfortunate fellow countrywomen to the paths of industry, frugality, and temperance by addressing them in the words of the great founder of Christianity, "Neither do I condemn thee." I have myself seen my friends Mr. Wilson and Mr. D. Cooper handing cards to the poor young things, whom poverty and accursed circumstances, for the most part, have driven upon the streets,

inviting them to come, when tired of this life, to one of the offices in London, when they will be taken into a home, and assisted in every way to re-enter industrial life, and become again honest and useful members of society. I have seen this with great pleasure—and the only oasis, in my mind, in the Parisian system of total subjection and slavery of prostitutes is the fact that there is some slight, but most inadequate attempt made to get a few of these poor "white slaves" to quit their business.

As far back as the year 1198, a hospital, which has now been made into the General Hospital of Saint Antoine, received converted public girls. At present, the only benevolent institutions at Paris, which are in relation with the police office are, for Catholics, L'Œuvre du Bon-Pasteur, and L'Ouvroir de Notre-Dame de la Miséricorde; for Protestants, L'Œuvre des Dames des Prisons; for Jews, la Maison de Refuge. The Œuvre du Bon-Pasteur was founded in 1819 by Abbé Legris-Duval, with the aid of two ladies, de Croisy and de Vignolles. It receives, in an Asylum placed under the direction of the nuns of Saint Thomas de Villeneuve, young girls from sixteen to twenty-three, who have been drawn into vice by abandonment, solitude, or bad example. The ladies of this Asylum go to seek the girls, either in the Lourcine Hospital, or even in the Saint Lazare Prison. They instruct them and exhort them with a view of making them virtuous; occupy themselves individually with each; take all kinds of pains to render their return to virtue easy; and, without preventing aid to them by other methods, as, for example, their being taken by provincial families as domestics, they open the doors of their convent to them. Those whose condition of absolute loneliness, or the unworthiness of whose parents seems peculiarly to condemn them to a life of misery, are preferred for admission into the Bon-Pasteur, where their time is divided between religious exercise and sewing. I wonder, Mr. Editor, how many men would become chaste if this were the reward of their chastity? Women, however, are easily contented. These girls, whose admission into the convent is gratuitous and voluntary, are always left free to quit it when they please.

This Convent of the Bon-Pasteur, as it covers, in some measure, with its protection orphans and abandoned and suffering girls, who are the least fitted to confront the difficulties of life, has but little renewal of its protegées. It contains about 135 young girls. The annual number of admissions is only about 25; and most generally the vacancies are caused by the death of one of the young women from consumption, or "some disease contracted during their time of debauch. Many of these unfortunates, whose health has been ruined, become infirm, and a prey to sufferings which medical science cannot cure." The Convent of the Bon-Pasteur is insufficient as a building and resource for all the unfortunate girls who ask for its aid; and thus the ladies of this charity seem to occupy themselves almost entirely with the unsubjected girls at Saint Lazare.

The introduction into the service of the Saint Lazare Hospital Prison of the Nuns of the order of Marie-Joseph had, as a consequence, the creation by these nuns of a "work" called the "Ouvroir bleu," a name derived from the colour of a ribbon which distinguishes the young girls received into it. The nuns, who are daily called upon by their mission at Saint Lazare to endeavour to raise the character of the girls confided to their care, could not long remain indifferent to the masks of repentance exhibited by some of these girls. They were terrified at the ideas of such re-entering debauchery again as inscribed prostitutes, or at such girls in whom they had developed good feelings, being jostled upon the streets; and, to secure the means of continuing out-of-doors their work of charity towards these latter, they founded, provisionally, in the prison of Saint Lazare itself, with the assent of the police, the work just spoken of, and in which they retained, in the name of hospitality, and until they could get a place for them, the girls who asked them to do so, and who, if they went out, would be likely to find themselves exposed without any asylum. This society ceased to exist after having attained admission for its protegées into the Ouvroir de Notre-Dame de la Miséricorde, in the Rue Paris-Vangirard, No. 440. This "home" is placed under the direction of the nuns of the order Marie-Joseph, and was founded in 1843. It receives not only the class of girls taken in by the Bon-Pasteur, but also all girls who are commencing to be prostitutes, and who would inevitably fall back into it were they to quit the Prison Saint Lazare without aid and guidance. The girls who enter are employed in sewing; and, at present, there are about 90 of them, consisting of 86 young girls, aged from eighteen to twenty years, and 4 married women. After a certain sojourn in this establishment, and when they appear to be likely to conduct themselves well out of doors, they are placed by the nuns as domestic servants, or work-girls, or reconciled with their parents. Since 1862, 57 have returned to their parents; 62 have become servants; 25 have become work-girls; 19 have got married; and 7 died. I need not say how miserable the result seems in comparison to the thousands who are rescued from prostitution by the London Societies. A certain part of their wages is set apart for them to buy clothes with when they leave this "home." It would be well if public charity would help on so good a work as this.

The special *work* for the protestants, called "Œuvre Protestante des Prisons de Femmes de Paris," was founded in 1839, and is now attached to the institution of the *Diaconesses*, founded in Paris in 1841 by a protestant pastor named Vermiel. This contains, independently of a reformatory, where are imprisoned some vicious children at the desire of the parents, the quarter called the "Refuge et la Retenue," where young girls who repent, and women, are received. In the twenty years ending 1861, the work of the Diaconesses has received more than 4,000 persons (sick persons, children, and repentant women). Besides the girls received into the Refuge, the Association assists women when liberated from prison, and whom, in the visits paid to Saint Lazare, its members think to be most worthy of being assisted. It sends some of them home to their families or native provinces, and for those who cannot quit Paris it tries to take them into the Refuge, or get them into service. About 100 women prisoners, half of them French, are annually assisted.

The *work* of the Refuge for young Jewish girls is of quite recent creation—it dates from 1866, and has for its principal object those young women of the prisons judged by the application of the Articles 66 and 67 of the penal code—that is, who must remain in the house of correction until a fixed age. This Society also receives besides some young girls, for the most part orphans, who cannot remain left to themselves, or whose conduct is not free from reproach, There is also the Société of Patronage for the sending home of the young girls who have no place, and of women abandoned by their friends. Since the year 1844 this Society has paid the fare of more than 9,835 women to their native country.

M. Lecour makes a remark, which will be felt to be most true by all persons who have occupied themselves with such subjects in London and Paris—"Out of the circle of their assistance, and of the pious persons who devote themselves to this service, and who thus fulfil a true priesthood, these different societies, so beneficent and of such lofty aims, are, with us (in Paris), almost unknown by the public and the poor. In England, where individual action and private imitation play an important part, such like institutions would call down the attention of all upon them, and would soon see flow towards them many charitable gifts, which could not choose a better employment." With this sentiment of M. Lecour's I heartily sympathise; but I wonder that he does not see in it the explanation of the failure of the French system, which he has so well exhibited in his work, to *moralise* the French prostitute, or prevent the utter degradation of so many unfortunate French women. Many of his compatriots understand this far better than M. Lecour.

For instance, I found, in a conversation which I had the day following with Dr. Pascal, the eminent editor of the medical journal, entitled the *Mouvement Médical*, that he quite took my view of the system, remarking that as a means of public hygiene, it was most dangerous to take the matter of protection from venereal disease under the command of any police. In this, as in many other questions of hygiene, the only way to get rid effectually of such contagions is to instruct the citizens of the dangers he or she incurs by prostitution, and to provide, said Dr. Pascal, sufficient occupation for the female sex. All other measures are dangerous to liberty, and to public health itself, as they give a fallacious sense of security, and thus tempt persons into dangerous *liasons*. As to the proposal of M. Lefort to include some 30,000 women in Paris in the ranks of the subjected, we both agreed that it was a *reductio ad absurdum* of a system, which has *had its time*; but now requires to be swept away before better systems can be applied. There are some other remarks on the causes of prostitution contained in the works of M. Lecour which, if you will grant me space in your most catholic journal, I should like to criticise in a short time. This epistle is already too long.

I have seen very few of the wounded soldiers from the wars. Presumably, they will soon be sent into Paris, as beds are being kept for them at the Midi and Saint Louis, and other hospitals. Still, I do hope that very few of them will be put in the really very unhygienic Parisian Hospitals, or we shall hear of a terrible mortality among these poor sufferers from the madness of a few. So great is the patriotism of all with whom I come in contact here, that I think it probable that all, save the smallest minority, could easily find place in private houses, or small suburban or provincial hospitals. I am glad to hear that subscriptions for these brave men are pouring in both in England, and in Ireland and Scotland. It is not the poor soldiers who are in fault, but the thinkers and writers of Germany and France, and the accursed love of power and military glory which still exists in both Prussia and France.

I remain, Sir, yours obediently,

CHARLES R. DRYSDALE, M.D.,
M.R.C.P.L., F.R.C.S.E.

Paris, August 21, 1870.

THE TRAVELLING OF NEEDLES UNDER THE SKIN.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—After reading the interesting case narrated in your independent journal of the 17th inst., from the pen of your clever contributor Dr. Z. L. Johnston, of London, and the *apropos* communication of your much respected correspondent Dr. Sharkey, of Ballinasloe, Ireland, respecting the meanderings of needles under skin, and their removal, I feel tempted to lay before your numerous readers the following history of a regular *human pincushion*, which I find recorded in Wylie's "Old and New Nottingham" :—

"Kitty Hudson, who at one period was known as the 'Arnold Post,' was born at that village in 1765, and when six years of age was left with her grandfather, Mr. White, the sexton of St. Mary's, Nottingham. Here a young woman resided in the capacity of a servant, who used to reward Kitty with a stick of toffy for every 'mouthful' of pins she procured in sweeping the pews and aisles of the church. The poor child followed this practice till she could neither eat, drink, nor sleep without pins or needles in her mouth. Often she got out of bed to supply herself with them that she might induce sleep. To such an extent did she carry this strange practice that, ere it was discovered by her friends, her double teeth had almost disappeared. At length she began to perceive a constant numbness in her limbs, and a great inability to sleep. After various medical applications, she was removed to the general hospital. Between the time of her admission and June 12th, 1785, when she was finally 'dismissed cured,' she underwent a most astonishing series of operations. Quantities of pins and needles, and pieces of bone were extracted from her feet, legs, arms, and other parts of her body, while portions of her breasts were cut off with the knife. While in the infirmary, a young man named Goddard, who 'had sweethearted her from a child,' happened to be an out-patient for a complaint in the head, through which he lost an eye. He used to cheer her by saying he would marry her if she lost all her limbs, provided her life was spared; and she afterwards said it was the kindness of this young man, and her attachment to him, which enabled her to bear up under her protracted sufferings. Six months after her discharge from the infirmary, she was married to the faithful Goddard, to whom she bore nineteen children. It is supposed she died in Derbyshire, whither she went on her husband's death."

Dr. Sharkey will allow in Ballinasloe *parlance* that the above "bangs Banagher;" and I think Dr. Johnston will admit, however ready and clear his plan of curing a patient who baffled so many, that Kitty Hudson takes the sunshine out of "Windfull's" husband.

Your obedient servant,

Aug. 25th, 1870. CANTHARIDES.

LIQ. PEPSINÆ AND "LIQ. ERGOT (LONGS)."

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In the very favourable mention, made in your last number of the preparations of "Liq. Pepsinæ" and "Liq. Ergotæ" introduced by me some time since, and described in former numbers of your valuable paper, the writer through some misunderstanding, says, "it was to be regretted that the manufacturers, Hamilton, Long, and Co., had patented the preparations, thereby adding to the cost."

As this would lead many to suppose that the price was so high, as to limit their being generally used, I wish to say, that these preparations have not been patented, but on the contrary, the formulæ freely published in former numbers of your paper, with the feeling, that medical men have a right to know what they order in every instance, as the use of secret nostrums is mere quackery.

The Government stamp, which was affixed to the bottles, is necessary in compliance with the law in England, with regard to all preparations of medicine made up for sale; no such import is levied in Ireland.

I may add that "Liq. Ergotæ" to which these remarks more particularly apply, is vended at about the price of powdered Ergot, some mere trifle being added to cover cost of bottles, &c.

Your obedient servant,

EDWARD LONG.

Dublin, September 2nd, 1870.

PRIVATE LUNATIC ASYLUMS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

DEAR SIR,—Permit me briefly to thank you for your favourable article in your last issue on the subject of "Private Asylums for the Insane," especially as such are so seldom noticed, except unfavourably in the public newspapers and journals, and as their alleged abuses so frequently form subjects for sensation chapters in novels and paragraphs in newspapers.

But would it not now be but just to us in Ireland to favour our establishments with visits similar to that paid by you to our brothers in Wales, and if we shall be found to deserve the same favourable publicity of names, arrangements, &c., as he has been so fortunate as to secure, that such shall be allowed us.

I do not hesitate to say that, notwithstanding considerable difficulties, existing in Ireland, not in England, my establishment can favourably compare with that of our Welsh friend. I also can introduce you amongst the voluntary inmates—insane and sane.

I do not doubt that my brother proprietors of "Private Lunatic Asylums," in Ireland, feel as I do in this matter, and can equally with me fearlessly invite your inspection.

You will, I doubt not, see the justice of publishing this letter, especially as, unfortunately, without sufficient reason, their exists in Ireland a tendency Englandward, in more matters than the treatment of the Insane, without much probability of a return flow of patronage.

Very faithfully yours,

DAVID JACOB, M.D.,
Proprietor, Midland Retreat.

Maryboro, September, 1870.

[Our Correspondent only anticipates our intention to give the fullest credit to the excellent arrangements of Private Asylums in Ireland. We had intended noticing the subject in connection with the "Report of the Inspection of Lunatic Asylums," which has just issued from the press, and would have done so in our present publication, but that we cannot, in view of the issue of the "Student's Number," next week take up new work. The matter shall have the earliest attention.—ED. M. P. AND C.]

Medical News.

Ipecacuhana.—It is satisfactory the *Asiatic* remarks that, amidst all the turmoil and excitement of financial perplexities, the authorities are not neglecting the material interests of India, by directing their attention to the introduction of one of the most useful plants of the world, ipecacuhana. The efficacy of ipecacuhana in the case of dysentery is said to have been satisfactorily established. The plant thrives both on the plains and the hills, the gardens at the Neilgherries and Calcutta being equally favourable to its growth. Dr. John Murray has the credit of directing the attention of Government to the subject, and as a nursery is to be established in England, from which strong and healthy plants will be sent to India, we may fairly calculate on complete success, and the steady extension of this valuable remedy.

University of London.—The following gentlemen have passed the First M.B. Examination for Honours:—

Anatomy.—*First class.*—Henry James Benham, Exhibition and Gold Medal, University College; Ebenezer Geer Russell, Gold Medal, Guy's Hospital.

Second class.—William Smith Greenfield, University College; George Birt, Sydenham College, Birmingham.

Physiology, Histology, and Comparative Anatomy.—*First class.*—Henry James Benham, Gold Medal, University College; Sidney Coupland, University College—Ebenezer Geer Russell, Guy's Hospital, equal.

Second class.—William Smith Greenfield, University College.

Organic Chemistry, and Materia Medica and Pharmaceutical Chemistry.—*First class.*—Charles Atkinson Nankivell, Exhibition and Gold Medal, University College; William Smith Greenfield, University College; Ebenezer Geer Russell, Guy's Hospital; George Birt, Sydenham College, Birmingham.

Second class.—Sidney Coupland, University College; Henry James Benham, University College.

Sewage.—Mr. Henry Bird, of Christow, writes to the *Field*:—Having some years ago recommended the use of aluminous compounds, sulphate of zinc, middle current tanks, and acre filter beds, to unload sewage waters of the sewage they have conveyed from towns, I trust you will do me the favour to insert in your paper the following remarks:—1. That the use of sulphated clay in large middle current tanks will so unload the sewage water, that it will flow into large streams and the sea without causing any nuisance. 2. That acre filter beds, one-sixth part being used at a time, the other five parts being cultivated, will secure the filter beds from the growth of the sewage plant, and render the waters fit to flow into any streams and for any purposes. One acre filter bed is sufficient for a population of 1,000 persons. 3. Burned bones greatly assist in purifying sewage, and increase the value of the dried sewage. 4. Sewage dried with diluted sulphuric acid contains most ammonia, and is worth £1 1s. per ton, and equal in value to 100 tons of liquid sewage. 4. Sewage irrigation and all sewage works should be made at a distance from any residence, for all plans give off unpleasant smells in certain states of the atmosphere. In drying sewage (with ordinary care) there is no smell occasioned; the burned bones and other deodorants prevent it. 5. For small towns and villages iron charcoal commodes are the best for collecting sewage. 6. A pair of large tanks or ponds with a vertical and horizontal culvert, and the use of 2lb. of sulphate of iron twice a day, would render waters inert, from mines containing lead, arsenic, and copper.

Unfounded Charge against a Surgeon.—On Thursday last, the jury without hesitation, returned a verdict of "Death from Exhaustion," in the case of Mrs. Walker, who died from flooding after delivery. The husband however, refused to believe this, and actually charged Mr. Simpson of Clerkenwell, with causing her death by the use of instruments. At the trial it was proved that no instruments whatever were used in the accouchment, and that he had no reason whatever for such a complaint. Such conduct deserves severe punishment.

American Statue to Harvey.—*Nature* announces that it is proposed to erect a statue of Harvey, the discoverer of the circulation of the blood, in the Central Park, New York, and large subscriptions have been received for that purpose. It is to be of bronze, of colossal proportions, representing "Harvey at the moment he felt convinced he had made the great discovery that has immortalised his name." Verily the American sculptors have a pleasant task before them. How does a philosopher usually look under such circumstances.

Luxuries without Licence.—Mr. Oakman, a surgeon of Battersea, was last week fined £60 for keeping a horse, carriage, and servant, without the licence required by the new Act. We commend this to the attention of any of our readers who may have overlooked the requirements of this Act.

The Siamese Twins.—We hear that Chang and Eng, arrived in Jersey City on the 13th of August from Europe. Our readers will remember that some time since they came to this country to take medical advice as to whether they could safely be severed from each other. About two days out from Liverpool Chang was stricken by a paralytic shock, depriving him of the use of his left side, and is now far from being well, while Eng continues in perfect health.

NOTICES TO CORRESPONDENTS.

*** Correspondents not answered in the current number should look at the notices in the following week.

Notice to Subscribers.—*The Publishers beg respectfully to remind those Gentlemen who have not paid their Annual Subscription, now overdue, that the most convenient mode of remittance is by Post-office Order, or cheque, which should be made payable, in England, to Albert Alfred Tindall; Ireland, Moffatt and Co.; Scotland, Maclachlan and Stewart.*

A Constant Reader.—The Conference in Geneva, in October, 1863.—Captain Brackenbury thus sums up the work it accomplished:—"The Conference was attended by thirty-six delegates, fourteen governments—including those of Great Britain, France, Spain, Austria, Prussia, Italy, Russia, and Sweden—being officially represented. A proposed code of international enactments was discussed during four days; and the main recommendations agreed to were the formation in each country of a committee, to co-operate with the army sanitary service, in communication with the Government; that such committee should occupy itself in peace with preparing supplies of hospital stores, training volunteer nurses, &c.; that during war national committees should furnish supplies and nurses in aid of their respective armies, neutral nations being invited to aid—and that, if permitted by the military authorities, volunteer relief agents should be sent to the battle-fields, wearing a badge of a red cross on a white ground. The Conference urged Governments to aid such national committees, and to declare the neutrality of hospitals, of the official *personnel* of the sanitary service, the unpaid nurses, the inhabitants of the country who might aid the wounded, and even the wounded themselves: and suggested the adoption of a distinctive and uniform badge for all hospitals and sanitary officials. Within a few months fifteen States expressed their willingness to accept these propositions as part of an international code, and the Swiss Federal Council summoned a Congress to complete an international convention. The representatives of sixteen States assembled in Geneva on the 8th of August, 1865, and accepted, with small modifications, a treaty embodying the proposals of the Conference held in the preceding year. Twelve of the sixteen representatives signed the treaty at once. It has since received the accession of all the civilized powers of the world, with the exception of Austria, Turkey, and the United States."

To the Editor of "The Medical Press and Circular."

Dear Sir,—How will the "Poisons' Bill" for Ireland, as published in last Press and Circular, affect physicians and surgeons not acting as apothecaries, but supplying medicines to their own patients, &c., and in very many cases not *using labels*! Will they be obliged to comply with the provisions of the "Bill," and be eternally scribbling in a book when they give any preparation of opium, ergot of rye, &c., &c.? 2. Does the well established etiquette in our Profession of attending, gratis, on its members, extend to the widows of same?

L.K.Q.C.P.I.

*** The Bill will affect all who supply medicines for gain, and they will be obliged to keep the necessary record of poisonous prescriptions. It is not usual to refuse gratuitous attendance upon the widow of a professional brother, so long as she remains a widow, and desires to claim the privilege.

Dr. Martin.—You will receive proof of your communication in due course.

Dr. Moore is thanked for his translation, of which proof shall be sent him.

M.R.C.S.—You will find the paper you refer to in the number of this journal for March 2nd.

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

Physiological Essays. By Robert Bird, M.D. London: Trübner and Co.

The True Story of the Introduction of Chloroform. By David and George Waldie.

The Sanitary State of St. Giles's Parish. By George Ross. M.D.

British Journal of Dental Science, Boston Medical Journal. Food Journal. New York Medical Gazette. The Dominion Medical Journal. Homœopathic Review. Science Gossip. The Practitioner. Nature. Pacific Medical Journal.

VACANCIES.

Kent County Ophthalmic Hospital—House-Surgeon. Salary £100, with residence.

Surrey Dispensary—House-Surgeon. Election, September 26th.

Sussex County Hospital—Assistant-Physician. Election, 14th inst.

Newport Union—Resident Medical Officer for the Marshfield District. Salary, £40, exclusive of fees.

Billericay Union—Medical Officer. Salary, £72, with extra fees.

Shrewsbury Infirmary—A Dispenser. Salary, £70.

North Shields Dispensary—House-Surgeon. Salary, £100, with residence.

Castlebar Union—Medical Officer. Salary, £90, exclusive of fees (see advt).

APPOINTMENTS.

Greenhow, E. H., M.D., a Physician to the Middlesex Hospital.

Istance, R., M.R.C.S., Medical Officer for the Risca District of the Newport Union, Monmouthshire.

James, J., M.R.C.S., Assistant Medical Officer to the North Wales Counties Lunatic Asylum, Denbigh.

Rugg, B.A., Resident-Surgeon at the Bournemouth Dispensary.

Woodman, J., F.R.C.S., Surgeon to the London and South-Western Railway Company for Exeter, and Surgeon to the London and South-Western Railway Friendly Society for the Exeter District.

Wyllie, R., Medical Officer for the Scalby District, Scarborough Union.

Marriage.

WHISHAW—OSBORNE.—On the 1st inst., at St. James's Church, Piccadilly, Dr. Wishaw, of the Indian Service, to Miss Willoughby, daughter of General Osborne.

Deaths.

BRETT.—On the 19th ult., E. S. Brett, M.R.C.S., of Bridlington, aged 66.
CLEMENT.—On the 29th ult., at Shrewsbury, W. J. Clement, M.P., F.R.C.S., aged 65.
GORMAN.—On the 30th ult., Dr. John Gorman, of Jeffrey road, Clapham road, formerly of Cadiz, aged 79.
JOHNSON.—On the 24th ult., at Birmingham, David Johnson, Esq., Surgeon, late of Newhall street, aged 41.
SNITCH.—On the 31st ult., in London, Charles J. Snitch, M.D., aged 74.

LIGHT WINES.—Although the consumption of Light Wines has trebled in England since the reduction of the rate of duty, they have not at present taken the position as beverages of daily and general consumption that we may confidently anticipate for them in the course of the next few years. That there has not been a more rapid increase is due in some measure to the high prices of that particular description of Light Wines, viz., those from the district of the Medoc, which more than any other is suited to the taste and requirements of this country. Looking at the many millions of Claret produced annually in the districts around Bordeaux, it must be admitted that past prices have been somewhat fictitious. Thus, although the vintage of 1868 was as abundant and similar in quality to those of 1864 and 1865, the prices of that year were higher than were ever before known in Medoc. Fortunately, however, the year 1869 has also produced an abundant and equally fine vintage, and this has caused a great change; the prices for most growths having been less than half that of 1868, and the remaining wines of the 1868 vintage in Bordeaux have been sold at prices little in excess of 1869. Thus, while the ordinary growths of the Medoc have been secured at prices admitting of their being sold as cheaply as the ordinary wines of less favoured districts, the choicest growths of the various châteaux need no longer be regarded as luxuries beyond our reach. The reports from Bordeaux mention considerable purchases having been made by the firms of Gilbey, Cruse, Clossman, Schröder, Southard, Wustemburg, &c., and we may presume that a large portion of these are intended for the English market. The fact that good wholesome Claret, which when diluted with water forms a beverage equally as cheap as beer, and far more refreshing, can be obtained through the medium of such agencies as Gilbey's and other houses, of the grocers in almost every town and village, is a great boon, and will no doubt bring about what medical men and other authorities so much desire, viz., a large consumption in this country of Light or Natural Wines. As far as price is concerned, there is no reason why Claret should not be consumed as freely as in Paris, the charges for duty and conveyance being about the same to London as to the French capital.—MORNING POST.

NATIONAL SOCIETY FOR AID TO THE SICK AND WOUNDED IN WAR.

President—H.R.H. the Prince of Wales, K.G.

Chairman of Central Committee—Lieutenant-Colonel Loyd-Lindsay, V.C., M.P.

A Donation of £5 (payable to Messrs. Coutts and Co., Strand), or an Annual Subscription of 5s. (payable to the Secretary), constitutes Membership.

The Central Committee request that each Local Committee will remit every Wednesday, to Messrs. Coutts and Co., the amount collected, advertising details in local papers, and forwarding a list of Subscribers to the Secretary.

They also request each Local Committee to establish its own Store, and send each Saturday to the Secretary a statement of Stores in hand, so that he may draw upon them as necessity requires.

C. J. BURGESS, Secretary.

2 St. Martin's place, Trafalgar square, London.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

Founded 1788. Incorporated by Royal Charter, 1864. The Members are reminded that a QUARTERLY COURT OF DIRECTORS will be held on the 12th OCTOBER next, at which Candidates for admission into the Society can be proposed. It is desirable that the Forms of Proposal be filled up and forwarded to the Secretary at least a week before the meeting. The Forms of Proposal may be obtained of the Secretary. The benefits of the Society are restricted to the Families of Deceased Members of not less than Two years' standing. The Secretary attends at the office every WEDNESDAY and FRIDAY, from 4 to 5 o'clock.

J. B. BLACKETT, Secretary.

53 Berners Street, W., September, 1st, 1870.

APOTHECARIES' HALL, BLACKFRIARS.—

The next EXAMINATION in ARTS will be held at the HALL on FRIDAY and SATURDAY, SEPT. 23rd and 24th, 1870. A Syllabus of the Subjects for Examination may be had on application.

An Examination in ARTS will again be held in the month of JANUARY, 1871. R. H. ROBERTSON, Secretary to the Board.

PRIZES IN MATERIA MEDICA AND PHARMACEUTICAL CHEMISTRY.

THE NEXT EXAMINATION for the SOCIETY of APOTHECARIES' ANNUAL DISTRIBUTION of PRIZES in MATERIA MEDICA and PHARMACEUTICAL CHEMISTRY will be held at the HALL of the SOCIETY on WEDNESDAY, the 19th, and FRIDAY, the 21st of OCTOBER, at TEN a.m. The Prizes consist of a Gold Medal and a Silver Medal and a Book.

Gentlemen intending to compete for these Prizes must send a written notice of their intention to the Beadle, on or before the Seventh Day of October, which notice must be accompanied by evidence of their being in attendance on the THIRD WINTER SESSION of their Medical Studies.—By order of the Court of Assistants,

R. B. UPTON, Clerk to the Society.

Apothecaries' Hall, London, August, 1870.

UNIVERSITY OF DURHAM.—COLLEGE OF MEDICINE, NEWCASTLE-UPON-TYNE.

The WINTER SESSION will commence on MONDAY, OCTOBER 3RD, at 2 p.m., when the President, the Rev. Canon WHITLEY, M.A., F.R.A.S., will present the Medals and Certificates of Honour to the successful Candidates.

The Annual Report of the Council will be read by the Registrar, LUKE ARMSTRONG, L.R.C.P.Ed.

The Inaugural Address will be delivered by T. C. NESHAM, M.D.

WINTER SESSION, commencing October 3rd, 1870.

Physiology—William Murray, M.D.
Anatomy—T. C Nesham, M.D.; Luke Armstrong, M.R.C.S., and J. Russell, M.R.C.S.
Dissections—T. C. Nesham, M.D., and Luke Armstrong, M.R.C.S.
Medicine—E. Charlton, M.D., and D. Embleton, M.D.
Surgery—G. Y. Heath, M.D.
Principles of Chemistry—A. F. Marreco, M.A.
Practical Pharmacy—Barnard S. Proctor.

SUMMER SESSION, commencing May 1st, 1871.

Midwifery—C. Gibson, M.D.
Botany—J. Thornhill and W. C. Arnison, M.D.
Medical Jurisprudence—A. S. Doukin, M.D.
Materia Medica and Therapeutics—Thomas Humble, M.D.
Practical Chemistry—A. F. Marreco, M.A.
Operative Surgery—G. Y. Heath, M.D.
Pathological Anatomy—C. J. Gibb, M.D., and G. H. Philipson, M.D.
Medical Tutor, Supervisor of Dissections, and Curator of the Museums—W. H. Spencer, M.A., F.L.S.

Hospital Practice at the Newcastle Infirmary, which contains 230 beds, and in which the required Clinical Lectures are delivered. Number of Patients last year, 21,479.

Perpetual Fee, 17 guineas.

Two Resident Clinical Clerkships, four Resident Dresserships, and four Non-resident Dresserships, are gratuitous, at the disposal of the Physicians and Surgeons.

Midwifery, Diseases of the Eye, Insanity, and Vaccination can be specially studied.

Perpetual Fee to all the Lectures, 44 guineas.

The Laboratories, Libraries, and Museums are open daily.

Medical Scholarships in the University:—Four Scholarships of £25 a year, each tenable for four years by Students residing at Durham or Newcastle, and not of sufficient standing to proceed to a License in Medicine. A Scholarship will be awarded in October next.

Dickinson Memorial Scholarship, viz., £15 for general proficiency.

At the end of each Session a Silver Medal and Certificate of Honour will be awarded, after examination, to the best Student in each class.

By a recent Act of Convocation, the terms necessary for Degrees in Medicine and Surgery may now be kept by residence either at Durham or Newcastle.

LUKE ARMSTRONG, L.R.C.P., Registrar.
W. CHA. ARNISON, M.D., Secretary.

Newcastle-upon-Tyne, August 1870.

LABELS CUT BY MACHINERY.

ADHESIVE FOR MARKING GOODS, 1s. per 1000: Dispensing or Chemical, 2d. per 100, kept in stock; with Name and Address, 2s. per 1000; Mixture, Pills, &c., equally moderate. An assortment of Labels of all trades. Contracts with large consumers.

J. CROSS AND SON, Engravers, Steam Machine Printers, Lithographers and Stationers, 18 Holborn-Hill, E.C.—Established 1813.

St. GEORGE'S HOSPITAL MEDICAL SCHOOL.

THE WINTER SESSION will commence on MONDAY, 3rd OCTOBER, with an Introductory Address by Mr. BRODHURST, at 2 p.m., in the Hospital.

Consulting-Physicians.—Dr. Wilson, Dr. Bence Jones, Dr. Pitman.
Physicians.—Dr. Fuller, Dr. Barclay, Dr. John Ogle, Dr. Wadham.
Assistant-Physicians.—Dr. Dickinson, Dr. William Ogle.
Physician-Accoucheur.—Dr. John Clarke.
Consulting-Surgeons.—Mr. Cæsar Hawkins, Mr. Cutler, Mr. Tatum.
Surgeons.—Mr. Hewett, Mr. Pollock, Mr. Henry Lee, Mr. Holmes.
Assistant-Surgeons.—Mr. Rouse, Mr. Pick.
Ophthalmic Surgeon—
Orthopædic Surgeon—Mr. Brodhurst.

A Maternity Department and Departments for Ophthalmic and Dental Surgery are arranged in connexion with the Hospital School.

LECTURERS.

Descriptive and Surgical Anatomy	Mr. Rouse.
Physiology and General Anatomy	Dr. Wm. Ogle.
Chemistry	Dr. Noad, F.R.S.
Medicine	Dr. Barclay.
Psychological Medicine	Dr. Blandford.
Surgery	Mr. Holmes.
Ophthalmic Surgery	
Orthopædic Surgery	Mr. Brodhurst.
Operative Surgery	Mr. Rouse.
Pathology and Morbid Anatomy	Dr. John Ogle.
Midwifery	Dr John Clarke.
Materia Medica	Dr. Dickinson.
Forensic Medicine	Dr. Wadham.
Dental Surgery	Mr. Vasey.
Botany	Mr. Child, F.L.S.
Comparative Anatomy	Dr. Cavafy.

Clinical Lectures by the Physicians and Surgeons every week.

A Medical Tutor is appointed to superintend the studies of the pupils, and hold periodical examinations.

On payment of one hundred guineas at entrance, a Pupil becomes perpetual to the Hospital Practice and all the Lectures.

Compounders pay forty guineas on admission, forty guineas for the second year, and ten guineas for each subsequent year, until their payments shall have reached one hundred and ten guineas, when they become Perpetual Pupils.

Gentlemen may enter separately to Medical or Surgical Practice, or to any single course of Lectures.

Dental Pupils are admitted on payment of £45.

The Pupils attending the Practice of the Hospital will be divided into classes among the Physicians and Surgeons in rotation, and each of them will be required to act as Clinical Clerks and Dressers to the Medical Officer to whom they are attached.

Special Demonstrations of Skin Diseases and Lectures on Public Health will form part of the course of Lectures on the Practice of Medicine; and Students will be required also to attend the separate courses of Lectures on Pathology and Psychological Medicine.

In connexion with the Lectures on Surgery, Demonstrations will be given on the use of the Laryngoscope. A separate course of Lectures on Diseases of the Eye, with Demonstrations of the use of the Ophthalmoscope, will be given, as well as Lectures on Orthopædic Surgery, with Illustrations of Deformities and their Treatment. Attendance on each of these courses will be required of Surgical Pupils.

In the Maternity Department, special Clinical Instruction will be given on Diseases peculiar to Women, and Practical Instruction in Vaccination to those who require certificates of proficiency.

House-Physicians and House-Surgeons are selected from among the senior Students according to merit, without further payment beyond a small sum paid to the Hospital for board.

The offices of Obstetric Assistant, Curator of the Museum, Medical and Surgical Registrars, and Demonstrator of Anatomy, with salaries of from £50 to £100 attached to each, are held out for competition annually. The William Brown Exhibition of £40 per annum, tenable for three years, is bestowed after a competitive examination. Clinical Prizes are offered annually by Sir Benjamin Brodie and Dr. Acland. Sir Charles Clarke's "Good Conduct" Prize, the Thompson Medal, and the Johnson Memorial Prize are also to be competed for each year. A general examination of all the Students is held at the end of the Summer Session, and Prizes and Certificates of General Proficiency are given to the most deserving.

Further information may be obtained from Dr. Barclay, the Treasurer, or Dr. Wadham, and from any of the Lecturers and Medical Officers of the Hospital.

GLASGOW. ANDERSON'S UNIVERSITY.

THE MEDICAL SESSION will be opened on TUESDAY, the 25th OCTOBER, 1870. The SUMMER SESSION on the FIRST TUESDAY of MAY.

Anatomy	Professor George Buchanan, M.D.
Chemistry	Professor Thorpe, Ph.D.
Institutes of Medicine (Physiology)	Professor Eben Watson, M.D.
Materia Medica	Professor Morton, M.D.
Surgery	Professor Dunlop, M.D.
Practice of Medicine	Professor M'Call Anderson, M.D.
Midwifery (In Summer)	Professor J. Gurlson, M.D.
Medical Jurisprudence (do.)	Professor P. A. Simpson, M.D.
Ophthalmic Medicine & Surgery	Dr. Wolfe.

Fee for each Course of Lectures, £2 2s.

A Syllabus, with full particulars, may be obtained from the Janitor, at 204 George Street, or from

ARTHUR FORBES, Solicitor, 146 Buchanan Street,
Clerk to the Medical Faculty of Anderson's University.

August 30th, 1870.

The Irish Medical Journal

BEING THE JOURNAL OF THE

Irish Medical Association

No. 132. PUBLISHED EVERY WEDNESDAY New Series

LIMERICK UNION

THE CASE OF DR. PORTER, CASTLECONNELL.

The Clerk announced that he had received a sealed order from the Commissioners, which he read, dismissing Dr. Frank Thorpe Porter from the office of Medical Dispensary Officer for Castleconnel and Annacotty.

Dr. O'Sullivan said he would wish to be informed whether a sworn investigation was asked for into the charge preferred against Dr. Porter, and whether it was refused. He had been told by one member of the committee of management that such was the fact, and by another that it had not been asked for.

Mr. Gabbett said he would very shortly give them what occurred. There was a meeting of the committee of management held by the directions of the Poor-law Commissioners, to pass their observations on a report which was furnished to them by Dr. Porter. As secretary of the committee, he furnished Dr. Porter with a copy of the resolution, and in reply to the proposition made in it, he received a letter from Dr. Porter in which he declined to accede to the request expressed in the resolution, namely, that he would resign his situation as Dispensary Officer for Castleconnel and Annacotty. In the letter, Dr. Porter said, "I wish for an investigation; but hope that my accusers will not be my judges," or words to that effect. Commissioners wrote to Dr. Porter requiring his explanation on the subject. He wrote a letter back to them which they did not deem satisfactory, because he (the secretary) shortly afterwards received a letter enclosing the sealed order for his dismissal.

Alderman Tinsly said he wished to supply one link in the statement Mr. Gabbet had made. Dr. Porter, in the letter, as he was accused of a criminal offence, asked the Commissioners for a copy of the letters which he was charged with having written, and that when he received them he would give the explanation, and not until then. The Commissioners replied to that letter by saying that Dr. Porter's asking for a copy of the letters was an aggravation of the offence, and that they would not supply a copy of the letter.

Mr. Gabbett.—And they gave it as their opinion, too, that he was the writer of the anonymous letter. He (Mr. Gabbett) said that the question was merely between the Poor-law Commissioners and Dr. Porter, and it was not a matter to be interfered in by the Board of Guardians.

Alderman Tinsly said Mr. Gabbett had made an addition to what he had stated,—namely, that the Commissioners had expressed their opinion that Dr. Porter was the writer of the anonymous letter. What right had the Commissioners to say such a thing when they had no proof that he did write it, and when they would not give him an opportunity of defending himself? (Hear, hear.) Several members of the committee stated their opinions that the act of the Commissioners in the matter was very arbitrary. They also stated that no matter what was the rank of a man in life, he had a right—a perfect right—to be allowed to defend himself from any charge preferred against him, and had a right to get a trial. What Dr. Porter, and what he, as an independent member of that board and of the dispensary committee, complained of was, that he was not allowed an opportunity to defend himself from the charges preferred against him. Dr. Porter should be presumed to be innocent until he had been found guilty; but that was not done, and the strongest censure the Commissioners could pass upon him—a censure which would deprive him of being able to earn his bread as a professional man, was passed upon him—the censure of dismissing him by sealed order. At the end of the meeting an anonymous letter was produced by one of the members, and it was stated to have been written by Dr. Porter. The doctor was then present; and when that letter was produced he became most excited, and in a very warm manner repudiated in the strongest terms that he either wrote the letter, or induced any one to write it, or that he knew anything at all about it. He became so excited that the chairman requested him to leave the room, and he did so. During his absence from the room, the majority of the members present passed a resolution calling on the Commissioner to call on Dr. Porter for his resignation of the office he held. Before the meeting of the committee broke up on that day, he (Alderman Tinsley) expressed it as his opinion that they were acting prematurely in expressing their opinion on that day, and he proposed that they should adjourn the consideration of the subject for one week, in order to give an opportunity to Dr. Porter to defend himself. That proposition was rejected, and they would not give one hour to him, but passed a resolution calling upon him to resign. That was extremely harsh (hear, hear). It was quite out of the question, even if he were innocent, as he (Alderman Tinsly) believed he was, it would be quite impossible for him to maintain his position in the Castleconnell Dispensary District.

Mr. Browne defended the conduct of the committee in acting in the manner in which they did, and said that in reference to the annonymous letter, when it was produced and compared with one written by Dr. Porter, there was not a member of the committee who had the slightest doubt that they had not been written by the same hand.

Alderman Tinsly.—I was there and did not believe they were written by the same hand.

Mr. Laffan.—Neither did I.

Mr. Browne referred to the fact that when the letter was produced, and before a word had been said of what it contained, or who wrote it, Dr. Porter stood up, and declared he never wrote the letter.

Dr. O'Sullivan again, when Mr. Browne had concluded, asked for an answer to his question, whether the investigation had been asked for, and was refused?

The Chairman said there was no doubt but it was asked for and refused.

Dr. O'Sullivan proposed that the Commissioners should be called upon to hold a sworn investigation.

The resolution, which was seconded by Mr. Cronin, was

subsequently withdrawn, it having been proposed by Mr. Browne, and seconded by Mr. Laffan, two members of the committee, that the Commissioners be requested to withdraw the sealed order, and that Dr. Porter be allowed the option of resigning the situation.

This was agreed to unanimously, and the Board soon after adjourned.

THE DISMISSAL OF DR. PORTER.

The Chairman read a communication from the Commissioners, in reply to a resolution of the Board, requesting them to withdraw their sealed order dismissing Dr. Porter from the Castleconnel dispensary, stating that in consequence of the offensive character of his letters, they thought it right to remove him, and would, therefore, decline to accede to the request of the guardians. His removal would not, however, as the guardians feared, deprive him of a situation in future under the Poor-law Commissioners, but his future appointment would be subject to their approval, and they did not think that such appointment was probable.

After discussion, in which Messrs. Hosford, Cronin, Cregan, and Sampson denounced the conduct of the Commissioners,

On the motion of Mr. Cronin, seconded by Dr. O'Sullivan, it was agreed that the Commissioners request the committee to furnish the Board with all letters and correspondence on the subject.

It was resolved, on the motion of Mr. Cregan, seconded by Alderman Tinsley, that the Board consider the correspondence already received from the Commissioners incomplete, and that they had no doubt the grounds on which they dismissed Dr. Porter were insufficient.

The Board soon after adjourned.

BELFAST BOARD OF GUARDIANS.—Tuesday.

The clerk read the following letter :—

"Poor-law Commission Office, Dublin,
"29th August, 1870.

"Sir,—The Commissioners for Administering the Laws for the Relief of the Poor in Ireland desire to acquaint you, for the information of the Board of Guardians of Belfast Union, that, Dr. Knox having resigned the office of Poor-law and Medical Inspector, the union has been placed under the charge of Mr. O'Brien.

"By order of the Commissioners,
B. Banks, Chief Clerk.

"To the Clerk of Belfast Union."

Mr. Teirney proposed the following resolution :—"That we cannot allow this opportunity to pass without conveying our unanimous vote of thanks and respect to Dr. Knox for the kind manner in which he performed his duties towards the deserving poor of the union, and in seeing that the Laws of the Relief of the Poor were mercifully administered by the guardians of this union during his term of office ; also for his uniform urbanity and gentlemanly conduct towards all the guardians connected with the board."

Mr. Gaffikin seconded the resolution, which was unanimously agreed to. The remaining business was routine.

MALLOW UNION.—Friday.

Mr. Hutch proposed that the salaries of the medical officers of the Buttevant dispensary district be increased from £70 to £100 a year each. He said that in that district the population amounted to 8,551, and the number of tickets issued during the past year was 2,171, while the salaries of the two medical officers amounted to but £140 a year. In the Ballyclogh district the population was 3,122, and the number of tickets issued in 1869 was 741, yet in that district the medical officer had £100 a year. In Rahan, too, the medical officer had £100 a year, while the number of tickets issued there during the past year was but 479. The same state of things prevailed in other districts, which showed that infinitely more work was done by the medical officers of the Buttevant district than by the others, and yet the former had but £70 a year each while the latter had £100. He considered that the Buttevant physicians were well entiled to the same salary, and he had much pleasure in moving that their salaries be increased to £100 a year. (Hear, hear.)

Mr. Moriarty seconded the proposition, and it was evident there was a necessity for two medical officers in the Buttevant district or else they would not be placed there, and when it was necessary to have them they should be kept in a suitable position. (Hear, hear.) He considered that £100 a year was the lowest salary that could be paid them, and where the increase was recommended by the local committee, who were the best judges in the matter, he thought the Board should unanimously grant the increase. (Hear, hear.)

Mr. Purcell said he should on principle oppose the proposition. He had not the smallest word to say against the ability, efficiency, or activity of the medical officers in question, but he thought the guardians ought to exercise every means of economy towards the ratepayers. (Hear, hear.) He did not see any ground for raising the salaries. There were two gentlemen in the Buttevant district to discharge duties which in other districts quite as large were efficiently done by one. (Hear, hear.) Therefore, he saw no just grounds for the increase, and he believed if the situations were vacant to-morrow there would be plenty of men competing for them. (Hear, hear.) The fact was the raising of salaries was becoming too common in all unions (hear, hear) ; but he thought the officers holding the situations should resign, and then if good men could not be got to do the duties at the salary let it be raised. (Hear, hear.)

Mr. Green said that when the other doctors salaries were raised they were not called on to resign. (Hear.)

Mr. Barry said that lately additional work had been imposed on the medical officers in Buttevant, and that was a fact that ought to be taken into consideration. (Hear.)

Mr. Magarth, while objecting to the increase asked, would not object to pay something additional for the increased duties thrown on the medical officers.

Mr. Purcell moved as an amendment, that the gentlemen be called on to resign before the question of increasing their salaries was entertained. (Hear, and no, no).

No one seconded this.

The Chairman said that the argument put forward in favour of the Proposition was, that the medical officers of the Buttevant district had more work to do than those in other districts, which at first sight had a very plausible appearance, but to his mind it was conclusive against the proposition, for not only was the work in the Buttevant district greater than in any other district of the union, but it was greater than in any other similar district in Ireland. The conclusion he arrived at was, that there was an unwarrantable amount of tickets issued there, and that the relief was most indiscriminate and unjustifiable. (Hear, and no.)

Mr. Hutch said that in the Mallow district the population was less than in Buttevant, yet the number of tickets issued was almost the same. (Hear).

The Chairman said the amount of medical relief given in Buttevant was enormous, and as an amendment he would move that it was hoped the Commissioners would not sanction any increase of salary to the Buttevant medical officers until it was satisfactorily explained that the comparatively enormous issue of tickets there, involving as it did increased and most probably superfluous duties on the part of the medical officers, did not itself constitute a very grave abuse requiring reform.

Mr. Williamson seconded the amendment.

Mr. Green, Mr. Moriarity, and other Guardians protested against such an amendment, as it involved a charge against the Buttevant Dispensary Committee.

The Chairman said he made no charge, but his belief was there was an unwarrantable issue of tickets in Buttevant.

Mr. Hutch said that such an amendment was an insult to the committee.

The Chairman modified his amendment, and then put it to the Board, when it was rejected without a division.

Mr. Magarth then moved as an amendment that an increase of £15 a year be granted to each of the two medical officers.

Mr. Barry seconded this, but it was rejected also.

A conversation ensued, after whibh Mr. Hutch withdrew his proposition, and a division was taken as to whether the increase should be £15 or £20 a year to each officer. For £15 there appeared seven votes, and for £20 ten. The latter was accordingly carried by a majority of three.—Adjourned.

CLONMEL UNION—Thursday.

CHOLERAIC DISEASE.

The following letter was read :—

"Clonmell, August 24, 1870.

"Sir—I think it my duty to inform the Board of Guardians that, for the last ten days, there have been a great many cases of choleraic diarrhœa, with some very decided cases of cholera, one of which died in Mall lane ; he came to Clonmell from Carrick-on-Suir, very ill. Another has been sent into a cholera ward in the fever hospital. I would suggest that there was an action taken at once in the matter. If there be any increase in the disease, it would be perfectly impossible for me, single-handed, to attend to all the cases, as it is, I have worked rather too much. They should be compelled to go into hospital, and a proper mode of conveyance for their transmission provided ; and there should be a thorough cleansing and whitewashing wherever those cases occur.—I have the honour to be, Sir, your obedient servant,

"P. Fitzgibbon."

The Chairman said he had the authority of Dr. Gitzgibbon for stating that he never saw the lanes of Clonmell better attended as to whitewashing and cleanliness. His (Mayor's) instructions to the Corporate Inspector was, to carry out whatever directions he received from the Doctor, as to whitewashing, &c., wherever sickness occurred. Dr. Fitzgibbon requested him to mention that the vehicle used for the conveyance of patients to the hospital was not suitable, and he recommended that a kind of ambulance waggon should be procured, in which patients could lie down.

Dr. Scully said it would be quite dangerous to leave such patient on a seat for ten minutes.

Mr. Davis should think there ought to be something done for the town, independent of any action of the Board of Guardians. Within the borough the Guardians had no authority.

The Chairman said there was no sanitary board within the borough, so that the Guardians where the proper authority.

Dr. Cantwell said that the Guardians had control outside the borough, but, inside, the Corporation was the authority. Mr. Cantwell here said that he was very sorry to be obliged to bring before the board, for the third time, a terrible nuisance that existed on the Cahir road ; and if some steps were not now taken, he would communicate with the Commissioners direct. There had been a habit of throwing dead horses into the old quarry at Tubberaheena ; but latterly they had left the carcases at the quarry at the top of the hill. This morning two were there exposed, and the stench from them was fearful. It was the duty of the Board, he thought, to take immediate action in the matter.

The Chairman said the remedy was very plain and simple. The parties who created the nuisance should be summoned ; the place was outside his jurisdiction.

Mr. M'Eniery—If the stench is so terrible, how is it that the other magistrates don't get it ?

Mr. Cantwell—If you doubt what I say, Mr. M'Eniery, you can go out yourself to the place and take a smell (laughter).

The Mayor said that the Constabulary had power to prevent this nuisance. No person could act as knacker without a license.

Mr. Cantwell observed that he had brought the matter under the notice of the police, and they certainly did what they could.

After some discussion, it was decided that the clerk should communicate with the police authorities.

The discussion of Dr. Fitzgibbon's letter was resumed by

Mr. Davis, who said they should take it step by step. One of the first things to be done, according to a circular from the Commissioners in 1866, was, when they receive a communication announcing the existence of cholera, to issue notices according to a form prescribed, setting forth the situation of the dispensary ; and that when persons suffered from diarrhœa, they should at once go for medical advice, which they could have without any ticket. The Guardians ought also at once decide on a ward in the hospital for cholera patients.

Dr. Scully said that the one case admitted was now convalescent. He told Dr. Fitzgibbon that he would receive in hospital any cases of cholera sent there, and attend to them.

The Chairman would not recommend the posting of the notices suggeted in the Commissioner's letter, referred to by Mr. Davis, as doing so would only create alarm.

Mr. Cantwell, as to assistance for Dr. Fitzgibbon, referred to the fact that in 1866, when there we similar reports to the present, Mr. Ward was appointed inspector of nuisances. He thought a similar course might be adopted now.

Mr. Riall—It would not help us one iota.

Mr. Davis.—If Mr. Ward were a medical man he might help us, but he is not. The relieving officer has a very simple duty to perform ; he need not wait for authority from the Board to get houses whitewashed and cleansed where necessary.

The Chairman said if there was likely to be a continuance of the disease they might get assistance for Dr. Gitzgibbon, but there was nothing to prevent them waiting for a week. The town was in a very satisfactory condition, except as to water, as two or three pumps had lately run dry.

A minute was drawn up stating what course the Guardians were prepared to adopt, and the master was directed to go to the Artillery Barracks in order to see an ambulance waggon with a view of having one constructed.

DUNDRUM DISPENSARY.

Superannuation Allowance to Dr. Bernard.—At the last meeting of the Rathdown Board of Guardians, it was moved by Emanuel James Bayly, J.P., seconded by General Hall, C.B., that "Recognizing the long and meritorious services of Dr. Bernard, late medical officer of the Dundrum portion of the Dundrum and Glencullen Dispensary District, thirty-one years in the Dundrum, and four years in the Glencullen portion of the district, and that in the exercise of his duties he has contracted a permanent infirmity which altogether incapacitates him from the efficient performance of the duties of medical officer. This Board concurs in the resolution of the Dundrum and Glencullen Dispensary Committee assembled at the extraordinary meeting on the 18th July, and unanimously agreed to, 'That the highest amount of superannuation allowance be recommended for Dr. Bernard, and request that the Commissiondrs will sanction the same.'" The motion was carried unanimously, and £60 per annum voted.

NORTH DUBLIN UNION.

Mr. Wm. L. Ensor has given notice "that on Wednesday the 14th September he will propose that the salaries of the medical officers, visiting and resident, of the North City District, shall be increased by £25 per annum."

Mr. Franklin gave notice "that on this day fortnight he shall move that the doctors' salary of the rural district of the North Dublin Union be increased £25 per annum."

After the disposal of some routine business, the Board adjourned.

Poor Law Inquiry.—An investigation was opened on Friday last at the Kildorry Hospital, County Cork, by William O'Brien, Esq., Poor-Law Inspector, into charges preferred against Dr. William H. Rogers, the physician of the dispensary, by several inhabitants of the district. These people were examined at great length, and, if the report of their evidence in the local papers be correct, they charged the doctor with the habitual use of abusive language to them when they sought his professional help, negligence in attending to them, and intoxication. It was elicited from most of the witnesses or complainants, on cross-examination, that the circumstances of which they complained took place as long as two years since, and that they would not have made any complaint of Dr. Rogers if their priest, the Rev. Mr. Riordan, had not advised them to do so. Captain Bowen bore testimony to Dr. Rogers' urbanity and attention to his duties. The inqury has terminated, but no action has yet been taken by the Commissioners thereon.

THE HIGH-HANDED COMMISSIONERS OF POOR LAWS.

It is now quite certain that the three gentlemen who sit in the Custom House, Dublin, and regulate the affairs connected with the administration of the Poor Laws in Ireland, are determined to carry matters with a high hand in relation to the Castleconnell Dispensary district. They have sent a letter, we understand, to the authorities, stating their determination to adhere to their sealed order dismissing Dr. F. T. Porter from his position as resident medical officer; and the letter has been received this morning. We need not say that the arbitrary course taken by the Commissioners has caused universal pain, dissatisfaction, and disgust. Even if Dr. Porter were guilty of the act imputed to him—that of writing an anonymous letter to a member of the Committee, is it impossible to find something like a parallel case not far from home? Surely our readers must have exceedingly short memories if they be not aware of the facts to which we refer, and of the reward, not the degradation, which has resulted. We do not propose to vindicate Dr. Porter, but we do protest loudly—emphatically—and in the spirit of even-handed justice, against the course that has been adopted in his regard. It is doubtful if the course be legal; and in the interests of persons who hold offices under the Poor-law, as well as in the interest of Dr. Porter, the legality or illegality of the extremely arbitrary steps taken by the Commissioners against him ought to be tested in a court of law, in order that it should be ascertained above board whether the course in question is consistent with law—we do not add with fair play. We do not believe that that course is in accordance with the spirit of the Constitution; and it is due to those who have given a consistent and unbiased support to Dr. Porter to see that in this case at least the powers which the Commissioners assume should be legally tried before the competent tribunal, and in a manner which will develope the facts in all their fulness on every side. What Dr. Porter's opinions in the matter are we do not know; but we do know the opinions of all those who are independent of the adverse influences which have prevailed against him; and these opinions are decided, strong, and earnest. Even the Dispensary Committee became remorseful and repentant when they witnessed the severe usage to which the sealed order without a trial subjected him; and the Board of Guardians unanimously agreed to request the Commissioners to withdraw the summary dismissal, and permit Dr. Porter to resign a situation which it is obvious he could not hold in the face of a strong and persistent opposition. If tenure depends on so slender a thread as the dictum of the Commissioners, the sooner the law is changed the better.—*Limerick Reporter.*

We have over and over again endorsed in anticipation the foregoing observations, and though well aware of the futility of our doing so, we continue to protest against the arbitrary nature of the powers wielded by the Commissioners. Whether Dr. Porter did or did not commit the fault attributed to him, or did or did not deserve dismissal, is nothing to us. The Commissioners are as little in a position to decide the question as we are, for they have never taken the trouble to inquire, by any of the means at their disposal, which justice requires that they should avail themselves of.

Their inspector did, in point of fact, investigate prior accusations, and did practically acquit Dr. Porter, and now the Commissioners have dismissed him, not because he has been proved to have neglected his duty or disregarded his instructions, not because a clique in his Dispensary Committee have a dislike to him and accuse him of a fault which there is not the least public reason to believe he ever committed. While we freely acknowledge the general impartiality of the Commissioners in their arbitration between doctors and their taskmasters, we repeat that neither they nor any other persons should be invested with absolute and irresponsible power, which from time to time, as in the case of Dr. Wright, of Acklow, they have been betrayed by the whisperings of influential persons into using without warrant of justice.

Fruit.—We believe the quality and quantity of the fruit crop is above an average this year. We learn the plum trees are laden, and that in most places they are to be obtained in profusion at a very cheap price. Apples, it appears, are very abundant, but in this they are equalled by pears which are to be seen hanging very thickly "on walls, pyramids, espaliers, and standards." Other fruits are also plentiful, as apricots, peaches, and nectarines; but we confine ourselves to those kinds which are most consumed by the public. Good ripe plums we consider nutritious, but they should be always consumed after meals. We have known them produce a very severe and intractable form of diarrhœa. Apples, unless very ripe, should be baked. The number of cases of diarrhœa in children, induced by eating green, acrid, and hard apples, is, weekly, very great. We agree with a writer in *The Field* who deplores that pears are not more extensively used as an article of diet; for he considers, and we see nothing against it, that good young, ripe pears eaten with bread ought to be most pleasant and healthful; when they are not ripe we recommend them to be stewed, when, if eaten with bread, they not only make a pleasant meal, but prove exceedingly nutritious. It is to be regretted that fruits are more viewed in the light of extras, and partaken of at improper times. If fruit be good, gathered fresh, ripe, and free from rot or insects, eaten with care and prudence, it will be healthful. After six o'clock in the evening, no fruit should be eaten, owing to returning chilly evenings, the stomach is slow to digest cold, acid articles of diet, so that the earlier time of the day will be found safest. A little fruit by way of *dessert* after a hearty dinner is an exception to the rules we enforce.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, SEPTEMBER 14, 1870.

STUDENTS' NUMBER.

WE have always felt that the information necessary for the guidance of the expectant Student in Medicine or his guardian is embodied only in very unsatisfactory and insufficient form in Official Regulations, which, when desired, are always at command. We have, therefore, accorded to such matter the smallest possible space consistent with clearness, confining our erasures as much as possible to technical redundancies, and omitting from them nothing which seemed of the least importance.

Into the space which this epitomizing has given us, we have endeavoured to compress as much practical, everyday information as we conceive to be necessary, and writing as we do for the Students of the United Kingdom, and not solely for London, we have endeavoured to give predominance to the educational arrangements of no special locality.

THE CAREER OF THE ENGLISH STUDENT.

THE young gentleman who is about to enter the Medical Profession in England has more than one course open to him, whether he decide on fulfilling his curriculum in London or in one of the provincial schools. The latter course is generally determined by local causes with which pupil and parent are both familiar. We propose, therefore, in this place, to point out a few things that concern alike the London or provincial medical student.

First of all, as to apprenticeship. The only English corporation that absolutely requires an apprenticeship is the Society of Apothecaries, which is bound by Act of Parliament. The clause, however, is very liberally interpreted, and the apprentice may, during his term, fulfil part or the whole of the curriculum. The master must possess the licence of the Company, but he may practise any department of the Profession. There is much difference of opinion as to the value of an apprenticeship. Some profess to despise it, and regard it as a badge of trade. There are, however, many advantages in the system, if carried out in the liberal mode we have spoken of; and we feel sure neither pupil nor parent would ever regret having entered into such an agreement with a medical gentleman of position and honour. Thus, suppose a pupil to be bound apprentice to a Licentiate of the Apothecaries' Company for a period of five years, with the right to attend lectures and hospital practice during the last three years, he enjoys the following advantages: In the early part of his pupilage he not only learns practical pharmacy, and becomes acquainted with the more generally used articles of the Materia Medica, but may be assisted in preparing for the Preliminary Examination. Moreover, he prepares himself to take, should he ever wish to do so, the post of assistant to a general practitioner, as the experience he has thus acquired will procure him a situation in preference to prizes, gold medals, and even university distinctions. Again, this experience is of the very highest value, should he decide on settling in general practice after he is qualified. On the whole, then, this modified apprenticeship system is equal to any, and parents who know a practitioner to whom they would willingly entrust their sons, cannot do better than pay him a fair premium. Those residing near will occasionally be able to arrange for an out-door apprenticeship.

Supposing, on the other hand, that the plan of apprenticeship be rejected, a young man may still become the pupil of some one in practice. This is often done by those who aim at the higher branches of practice. A physician or surgeon who will give some time to the superintendence and direction of a pupil's study certainly offers him great advantages, and those who can afford thus to act will not regret the expense of providing their sons with such a guide.

Lastly, a pupil may enter at any of the London hospitals without any such preparation. He has only, provided he has passed a preliminary examination, to pay the first year's fees, and he is admitted at once to all the dignity of a medical student. He should decide on the diplomas he requires, and guide his studies accordingly. Most of the schools now have a composition fee, entitling to all required for the ordinary qualifications in medicine and surgery. They also mostly have another sum, very little higher, entitling the student to perpetual attendance on all lectures and hospital practice. It is better to take out the perpetual ticket, as all contingencies are thereby provided for. The fees are mostly payable in two or three instalments, at the commencement of each Winter Session. The Dean will always forward details, as well as any special information of which a student may find himself in need. The first instalment varies from forty to fifty guineas; the second is a like sum; the third usually only makes the whole paid a hundred guineas or a little over.

The student who comes from the country to enter in London not unfrequently requires lodgings. Those who can live with relatives and friends are, of course, best suited; but not a few find themselves very comfortable in furnished apartments, which are to be had in respectable streets near all the hospitals. Two brothers or two friends can, of course, do this a little less expensively than one. We have known a good sitting-room and bed-room hired for the Session at half a guinea a week. The price varies

with the season a little, and some can afford more than others, and therefore can always have a selection of better rooms.

Residence settled, student life begins on the 1st of October, by hearing the Introductory Lecture, at the conclusion of which the fees may be paid, unless they have already been handed over.

It should be mentioned that one or two of the medical schools have collegiate institutions in connection with them, where rooms may be had instead of the more usual plan of taking lodgings. Some of the lecturers at most schools receive pupils, and all of them will at any time afford special information to those who may inquire of them. It is therefore a good plan to communicate with any one of them with whom the intending pupil or his parents may have any acquaintance, or to whom an introduction can be obtained. Or, in any case, the Dean will at once reply to inquiries by post and forward a full prospectus.

As to contending for prizes, there are differences of opinion. Diligent attendance on the classes and in the wards will enable the student to store his mind with knowledge fitting him for his profession, and this should be his first aim. Gold and silver medals are honourable distinctions, but only secondary ones. We never competed for them, nor encouraged others; and some of the most eminent men hold the same views. Others, however, differ from us, and the pupil may judge for himself. Competition for appointments to dresserships and other offices, where much practice is seen, stands on a different footing. No prize can equal such posts; and the possibility of getting them should influence largely the choice of a school. In some schools they must be paid for. In others, the diligent gain them without extra expense. The student, having selected his hospital and school, has chosen his teachers. We have only to remind him that however able they may be, the result depends on his own application. Let him supplement their efforts by giving all his energy to the pursuit of knowledge, and there is not one of our schools of medicine in which he will not acquire such a knowledge of his profession, that when the time comes he will pass his examination with ease, and, what is more important still, will then be able to practise in our noble profession with benefit to the sick to whom he may minister.

The information most important to students may be divided into two parts—first, the regulations with which they must comply before they can present themselves for examination to any of the Licensing Bodies; second, the means that exist to enable them to do so. In the first category are to be placed the regulations of the Corporations; in the second, some account of the many Schools of Medicine and Hospitals where professional education can be pursued. A natural supplement to this information is a brief sketch of the career open to young men after they have obtained their diplomas, especially in the Public Services. Hence we furnish some particulars that will be interesting to those who contemplate entering the Army or Navy, or taking service under the Poor-law Board.

According to this plan, we proceed to consider, first of all, the regulations of the Qualifying Bodies.

Treatment of Hæmatemesis.

In the same report it is stated that alum whey is very effectual in hæmatemesis in cases of perforating ulcer of the stomach.

THE UNIVERSITIES.

Oxford and Cambridge.—The elder English Universities have of late years opened their doors much wider than heretofore, and that without losing any of the prestige they possessed. Those who propose to follow their course of education need not any longer enter at any particular College or Hall, although it will probably be long before lodger students will be very numerous. There are advantages in the College life that will not be willingly given up by those who can afford it, and, for a purely medical career, it would be perhaps preferable for those who would not like to enter a College to graduate at the London University.

We would here urge upon every student who may enter any University the great advantages they would derive from a course of study in the Faculty of Arts, and we strongly advise every one who has the time to take a Degree in Arts before commencing his medical curriculum. A Degree in Arts stamps a man for life; and as some examination must be passed before the commencement of professional study, it would always be best to take such a degree. A University Degree in Arts is recognized universally as the preliminary examination, and possesses its own value, besides exempting from other tests.

University of London.—The medical degrees of this University have now obtained a reputation second to none, and no student can therefore propose to himself a higher qualification. The training is rather longer than that required for the diplomas of most of the corporations. The examinations are very stringent, and it is in after years that the student will feel the gratification of having obtained such a degree. Every student is required to go through the full course of hospital studies *after* he has passed the matriculation examination. It is, therefore, very desirable he should matriculate before entering a medical school, otherwise two years will be lost. The matriculation examination of this University is accepted as a preliminary by the Medical Council, and therefore the labour bestowed in preparation will serve the student's purpose even if he do not proceed to a degree. The medical degrees of the University are Bachelor and Doctor of Medicine, and Bachelor and Master in Surgery. Degrees of Bachelor and Doctor of Science are also now obtainable. There are, at each stage of the graduate's career, examinations for honours, which afford the student the opportunity of gaining highly-prized distinctions in various branches. There are also scholarships for the most successful.

University of Durham.—The degrees of Bachelor and Doctor of Medicine are granted by this University, as is also the degree of Master of Surgery. There is also a licence in medicine, to obtain which residence is not essential. A licentiate cannot pass to the M.B. until he has obtained the degree of B.A., or passed an equivalent examination. Only M.B.'s of twenty-one terms' standing can proceed to M.D.

There is a medical scholarship of £25 tenable for four years, and the fees, both Collegiate and University, are very moderate.

THE CORPORATIONS.

From the Universities we pass to the other bodies that can give authority to practise.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

THE FELLOWSHIP.

The Fellowship is only attainable by election. No one can be proposed who is not a Member of four years' standing. The mode of election has long given much dissatisfaction, as the readers of The Medical Press and Cir-

CULAR are well aware. There is a general admission as to the justice of our strictures, and from the liberal feeling of the majority of the Fellows, a reform has already been initiated, which is sure to bear good fruit.

THE MEMBERSHIP.

A person may become a Member of this College without holding a degree in Medicine, or indeed any other diploma. This is not very often done; for the Membership gives no right to the use of the title doctor, though some Members not possessed of a degree do so style themselves. This is, however, in direct violation of the rules of the College to which a Member pledges himself on admission. The curriculum extends over four years.

Graduates in Medicine of any British University are admitted to an examination for the Membership. Such graduates are exempt from some parts of the examination —*e.g.*, anatomy and physiology. Even foreign graduates of accredited Universities have no difficulty in being admitted to examination.

THE LICENCE.

This diploma authorizes the holder to practise his Profession as a Licentiate of the College. Unless a graduate of some University, he is forbidden to use the title of doctor, but we regret to say many do so. At first it was regarded as a medical diploma for the general practitioner, intended to supersede that of the Apothecaries' Company. The examination is conducted by specially appointed examiners, and is complete in the several departments. It has been proposed to give this licence to Licentiates of the Apothecaries' Company, on payment of a fee, *without examination*.

Not quite two years ago we had to record the most important change that has ever occurred in reference to the qualifications of general practitioners. This licence of the London College of Physicians was then recognized by the Poor-law Board as a qualification in surgery as well as medicine. Consequently, this single diploma is sufficient to enable any one to take a Poor-law appointment. It ought, therefore, to become a single authority to practise every department of the Profession. In such case, any one contented with the diploma of L.R.C.P. Lond., would have all he needed, and the one faculty system so long desired by earnest reformers would be established.

It is to be supposed that the College will follow up its advantage, and protect all its Licentiates in the exercise of all branches of the Art of Healing.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

No Corporation has exercised so great an influence over the Profession in England as this. Without the M.R.C.S. it is not easy to obtain any English surgical appointment. In a parish appointment, its membership, though no longer essential, carries great weight. Hence, most English students intend to prepare themselves for this, which, together with a medical qualification, suffices for every purpose of the general practitioner. The College has two grades, Member and Fellow. It also gives a diploma in midwifery, but this is mostly confined to those who are already Members.

THE FELLOWSHIP.

Members of long standing can be admitted by election. As, however, this grade is also obtainable by examination, this is the more usual mode. Consulting surgeons mostly take the Fellowship by examination, though there are many hospital surgeons in London who have contented themselves with remaining Members.

A Member of the College of eight years' standing is admitted to examination on the production of a certificate of three Fellows, that he has been engaged for eight years in the practice of surgery, and is a fit and proper person to be admitted a Fellow.

THE MEMBERSHIP.

This diploma gives no vote in the affairs of the College. It is in effect only a licence to practise, and corresponds with the licentiateship of the Edinburgh and Dublin Colleges. Yet, during the past year, the Members, as well as the Fellows, were invited to a public meeting in the College.

In future, candidates for the diploma will be examined in the practice of medicine, and also in the practical employment of splints, bandages, and other surgical appliances.

APOTHECARIES' SOCIETY OF LONDON.

THE Licence of the Worshipful Society of Apothecaries is perhaps the most useful medical diploma for the general practitioner in England. The monoply enjoyed by this body for many years, in this respect, is not easily to be disturbed. The laws of many institutions require their medical officers to hold this diploma, and these laws are not readily altered. Though other medical qualifications are recognized by the Poor-law Board, there is no doubt that the guardians throughout the country—and they elect the medical officers—are familiar with the diploma of the Apothecaries' Society, and it is to them more of a guarantee than other qualifications, of the value of which they are ignorant. The drawback to many a student is that, constrained by the Act of Parliament, the Society requires apprenticeship. This clause has, however, received a very liberal interpretation, and every pupil of a licentiate, who is certified to have served *after the manner* of an apprentice, is considered to have fulfilled the requirement. During this term he may also have carried on his hospital studies. Everyone, therefore, who can show this certificate, intending to settle *in England* as a general practitioner—even if he take other diplomas—would probably consult his own interest by becoming a Licentiate of the Apothecaries' Society; and as the fee is only six guineas, a very large number of young men will, we doubt not, secure this possible avenue to appointments.

The next "Examination in Arts" will be held on Friday, the 23rd, and Saturday, the 24th inst., and the next "Registration" will be commenced on the 1st of October and ended on the 15th.

Having now considered the qualifying bodies of England, we pass on to the second consideration—the schools of medicine and hospitals—and first of all take those of the Metropolis.

Educational Institutions.

THE Schools of Medicine and the Hospitals to which they are attached next demand attention, inasmuch as at one of them the Student has to go through the curriculum prescribed by the licensing bodies.

In entering a School of Medicine, application is to be made to the Dean. In London the fees range from 80 to 120 guineas for the course of study required for the ordinary diplomas. The sum, if paid at once, is less than if paid in two or three instalments. From 40 to 45 guineas at the commencement of each of the two first years is an ordinary arrangement, the remainder being paid on entering the third winter. The amount of the fees does not differ so much as to make it of importance in the selection of a school.

We now proceed to name some of the characteristics of the most important London Schools.

THE LONDON HOSPITAL.

THIS large hospital is situated at the east end of London, in a district where accidents are of frequent occurrence, and as a field for the study of surgery has always been pre-eminent. It contains upwards of 500 beds; of these 160 are devoted to medical cases, and the remainder to surgery. About 200 are reserved for cases of accidents. The in-patients number about 5,000 a year; the out-patients 35,000. Special departments have been organised

for diseases of the eye, ear, and skin. Special wards are also set apart for venereal and obstetric cases. There are many prizes offered, and perhaps no school offers so many clinical appointments to the student without extra fees.

ST. BARTHOLOMEW'S HOSPITAL.

The great city hospital has always attracted large numbers of students from all parts of the country, so that the school is very flourishing.

H.R.H. the Prince of Wales is the President of the hospital, which receives within its walls upwards of 5,000 in-patients annually, and its out-patients and casualties amount to more than 100,000 annually. It contains 650 beds, of which 403 are allotted to surgical, including ophthalmic, orthopædic, aural, and syphilitic cases, and 247 to medical cases and diseases of women and children. One of the Assistant-Physicians sees the medical out-patients daily, between eleven and two ; and one of the Assistant-Surgeons sees the surgical patients daily, between twelve and two.

Accommodation is provided for residence of students in the college connected with the institution, for which an entrance fee of 2*l.* 2s., and a further payment of caution money, 3*l.* 3s., is required. The cost of maintenance varies from 30s. to 33s. per week, payable in each term ; and the term of residence is unlimited.

GUY'S HOSPITAL.

This old favourite borough school still attracts as many students as ever. The school is, we believe, one of the most popular in the metropolis, and from the excellence of its appointments, its situation, and superior staff, it still keeps up its old renown. In special departments, Guy's is the most advanced. This hospital has set the example of giving the appointments to its special departments to gentleman not on the staff. This liberality has enabled it to secure the leading specialists of the country in its service, and has done more than all the other hospitals together to put down all improper coquetting with specialism.

Guy's is situated close to the London Bridge Railways. Hence great facilities for getting to any part of London or the country. It is quite practicable for students to reside a little distance down either of the lines that converge at this point, and thus enjoy the benefit of country air during their hospital career. For those who wish to live close to the hospital, there are many lodgings to be had at a moderate price.

ST. THOMAS'S HOSPITAL.

This is the borough hospital which was removed for the Charing-cross Railway. The new hospital on the site at Stangate will soon be finished, when a new impetus must be given to the charity and the school.

There will be accommodation for residence and free maintenance in the College-house for the two house-surgeons, resident accoucheurs, one dresser, one obstetric clerk, and assistant obstetric clerk, which appointments are awarded by competition.

UNIVERSITY COLLEGE AND HOSPITAL.

This is situated in a very central position, near the Gower street Station of the Underground Railway, affording facilities for gentleman residing in many parts of London. The College gives instruction in every department of knowledge, and specially prepares students for degrees in all the Faculties at the University of London. There is, however, no theological faculty, the College, like the University with which it is in intimate connection, being founded on the non-sectarian principle. The Medical Faculty and the Hospital are very complete and flourishing as educational institutions. The University College School specially prepares boys to be ready at a proper age to enter the College.

KING'S COLLEGE.

This College gives instruction in all the faculties, and has a Theological Department. It was established by Church of England persons, in opposition to University College, which is a non-sectarian institution. King's, then, is the Church of England College. The College is situated close to Somerset House, having a frontage on the new Thames Embankment, within a few minutes' walk of a station on the Underground Railway. There is also a junior school in connection with this College, to prepare boys to enter the College at a proper age. The Hospital is only a short distance from the College, and although small, the renown of its staff has always kept up its reputation, so that King's is one of the most popular of the medical educational institutions in London.

CHARING CROSS HOSPITAL.

This hospital, though one of the smaller ones, derives from its situation great advantages. It is in one of the most central positions in London, where there is constant communication with every part. In connection with it the practice of the Royal Western Ophthalmic Hospital close by, affords an excellent opportunity for the study of that branch of the profession. Other special departments have been established, and the authorities seem to have the courage to establish them on a liberal basis, the hospital staff not monopolising these appointments.

ST. GEORGE'S HOSPITAL.

The chief advantage of this School is its unrivalled position, at the corner of Hyde Park—perhaps the most salubrious part of the metropolis. Students can easily find lodgings within half an hour's pleasant walk. It is, perhaps, the most aristocratic of the London schools, and the present staff maintain their position as worthy successors of Hunter, Brodie, and other worthies who formerly taught in it.

MIDDLESEX HOSPITAL.

The hospital contains upwards of 300 beds, of which 184 are for surgical, and 120 for medical cases. There is a special department for cancer cases affording accommodation for thirty-three in-patients, whose period of residence in the hospital is unlimited. Wards are also appropriated for the reception of cases of uterine disease and of syphilis, and beds are set apart for patients suffering from diseases of the eye.

Special attention is bestowed on the clinical instruction of the students both in the wards and out-patients' rooms. Three clinical prizes, including the governors', prize of twenty guineas, are annually awarded to those students who pass the most satisfactory examination at the bedside, and in the *post-mortem* room. Class prizes are also given, and six resident clinical appointments are annually awarded after competitive examination, to students who have completed their education and complied with the regulations of the school. The officers thus appointed reside and board in the hospital free of expense.

The college tutor assists all general students free of charge, especially those who are preparing for examination, and his daily instruction is arranged with a view to avoid the necessity of students obtaining any private teaching apart from that of the medical school.

WESTMINSTER HOSPITAL.

This is near the Abbey and the Houses of Parliament, and will be found convenient for all in that neighbourhood. It is well appointed in every respect, and one of the most moderate in respect to fees. The whole course of study for the usual examinations may here be completed for seventy-five guineas, payable in instalments. The perpetual fee is only eighty guineas. Resident appointments,

clerkships, and dresserships are all conferred without extra payments. Suitable lodgings may be obtained in the neighbourhood, and at not more than a quarter of an hours' walk from the hospital.

ST. MARY'S HOSPITAL.

THERE is a Medical School in connection with this hospital, which is located at Paddington, in close proximity to the Great Western Terminus. Students with slender purses will find the neighbourhood of the hospital a very moderate one as regards lodgings, and easy of access by omnibus and the Underground Railway to all parts of London. The Clinical Department is very complete. Wards are devoted to the Diseases of Women, including Ovariotomy, and to Ophthalmic Cases. Special study is also provided for in the Out-patient Department for Diseases of the eye, the ear, the skin, and the throat. Three resident medical officers are appointed for twelve months, and an obstetric officer for six months, who board free of expense in the hospital. A resident registrar is also appointed from amongst the students, with a salary of 100*l.* a-year. These appointments are awarded after competition, without additional fee.

Instructions to Students about to enter the Medical Profession.

1.

IN order to be registered as a Medical Student it is absolutely necessary to pass a *Preliminary Examination in Arts.*

The following are the Examinations, Certificates of which are at present recognised by the General Medical Council.

a. A *Degree in Arts* of any University of the United Kingdom, or of the Colonies, or of such other universities as may be specially recognised from time to time by the Medical Council.

b. A Certificate of either of the following :—

Preliminary Examination in Arts of Royal College of Physicians, Edinburgh ; Royal College of Surgeons, Edinburgh ; Royal College of Surgeons, Ireland ; Faculty of Physicians and Surgeons of Glasgow ; Apothecaries' Hall, Ireland.

Oxford—Responsions or Moderations.

Cambridge—Previous Examinations.

Durham—Examinations for Students in their Second and and First years.

Durham—Registration Examination for Medical Students.

Oxford, Cambridge, Durham—Local Examinations (Senior), Certificate to include Latin and Mathematics.

Aberdeen, Edinburgh, Glasgow, St. Andrew's—Preliminary Examination for Graduation in Medicine or Surgery.

Edinburgh—Examination of (Senior) Candidates for Honorary Certificates under the local Examinations of the University of Edinburgh.

Dublin—University Entrance Examination.

Queen's University, Ireland—Entrance Examination ; Examination for the Diploma of Licentiate in Arts ; Previous Examination for B.A. Degree.

First Class Certificate of the College of Preceptors.

University of Calcutta, Madras, Bombay—Entrance Examination ; Certificate to include Latin.

M'Gill College, Montreal—Matriculation Examination.

University of Toronto ; King's College, Toronto ; Queen's College, Kingston ; Victoria College, Upper Canada—Matriculation Examination.

University of King's College, Nova Scotia—Matriculation Examination or Responsions.

University of Fredericton, New Brunswick—Matriculation Examination.

University of Melbourne—Matriculation Examination, Certificate to include all the subjects required by the General Medical Council.

University of Sydney—Matriculation Examination.

Codrington College, Barbadoes—1. English Certificate for Students of two years' standing, specifying the subjects of Examination. 2. Latin Certificate, or 'Testamur.'

Tasmanian Council of Education—Examination for the Degree of Associate of Arts, Certificate to include Latin and Mathematics.

Christ's College, Canterbury, New Zealand—Voluntary Examination, Certificate to include all the subjects required by the General Medical Council.

2.

Supposing a Student not to possess a Certificate of any one of the preceding, it will be necessary for him to pass one or other of the following Preliminary Examinations before he can be registered as a Medical Student or enter a Medical School. (A.) The Royal College of Surgeons. (B.) The Apothecaries' Hall. (C.) The University of London. The last is by far the best, as it gives a certain status.

3.

REGISTRATION OF MEDICAL STUDENTS.

Every Medical Student must be registered in the manner prescribed by the General Medical Council, within fifteen days of commencing study.

Every person desirous of being Registered as a Medical Student must apply to the Branch Registrar of the division of the United Kingdom in which he is residing ; and produce or forward to the Branch Registrar a Certificate of his having passed a Preliminary Examination, as required by the General Medical Council, and a statement of his place of Medical study.

The several Qualifying Bodies are required not to admit after October, 1870, to the final Examination for a Qualification under the Medical Acts, any Candidate (not exempted from Registration) whose names had not been entered in the Medical Students' Register at least four years previously.

In the case of Candidates from other than Schools of the United Kingdom, the Branch Councils have power to admit exceptions to this Recommendation.

SPECIAL DETAILS AS TO REGULATION OF QUALIFYING BODIES THAT DO NOT REQUIRE RESIDENCE.

REQUIREMENTS OF QUALIFYING BODIES.

UNIVERSITY OF LONDON.

Degrees in Medicine and Surgery are granted by the University. Students are required to pass—1st, the Matriculation Examination (General Education) ; 2nd, the Preliminary Scientific (including Inorganic Chemistry, Mechanical and Natural Philosophy, Botany and Zoology). The Senate of the University recommend Students to pass this Examination before commencing their Medical studies ; 3rd, the first M.B. Examination (including Anatomy, Physiology, Materia Medica, and Organic Chemistry) ; 4th, the second M.B. Examination (including Medicine, Surgery, Midwifery, Forensic Medicine, Pathology, Hygiene and Therapeutics, and Hospital Medical and Surgical Practice). The total fees for the M.B. degree are 17*l.*, for the M.S. degree 5*l.* additional.

ROYAL COLLEGE OF PHYSICIANS OF ENGLAND.

Attendance on the following course of Lectures is required for the license of this body, *i.e.*, Anatomy (with Dissections) and Physiology, during two winter session ; Chemistry, six months ; Practical Chemistry, Materia Medica, Practical Pharmacy, and Botany, three months each ; Morbid Anatomy, six months ; Principles and Practice of Medicine, during two winter sessions ; Clinical Medicine during three winter and three summer sessions ; Principles and Practice of Surgery, during two winter sessions ; Clinical Surgery, during two winter and two summer sessions ; Midwifery and the Diseases peculiar to Women, and Forensic Medicine, three months each ; Hospital practice—*Medical*, three winter and three summer sessions ; *Surgical*, three winter and two summer sessions ; Diseases of Women, six months ; Clinical Medical Clerk, at least six months. The fee for the license is fifteen guineas. The examination is divided into two parts, from the first of which a candidate is exempted, provided he has passed the first or Anatomical Examination of any other Examining Board.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The following courses of Lectures and Hospital Practice are required for the diploma of this body; Practical Pharmacy, three months; Descriptive and Surgical Anatomy, Dissections, Physiology, Surgery, two courses each of six months' duration; Medicine and Chemistry, one course each of six months; Materia Medica, Midwifery, with practical instruction, one course each, of three months; Instruction and Proficiency in Vaccination. Hospital practice—*Surgical*, with Clinical Lectures, three winter and two summer sessions; *Medical*, with Clinical Lectures, one winter and one summer session; Dressership, or charge of patients, six months after the completion of the second year of professional study. The fee for the diploma is 22*l*. There are two examinations, the first at the end of the second winter in Anatomy and Physiology, the second at the end of the fourth year in Surgery, Surgical Pathology, Medicine and Midwifery also.

WORSHIPFUL SOCIETY OF APOTHECARIES OF LONDON.

The following courses are required for the license: Descriptive and Surgical Anatomy, Physiology and Dissections, Medicine, two courses, of six months each; Chemistry and Morbid Anatomy, one course, of six months each; Practical Chemistry, Materia Medica, Midwifery, Forensic Medicine, and Toxicology, and Botany, one course, of three months each. Hospital Medical Practice and Clinical Lectures, two winter and two summer sessions. An apprenticeship of five years. The fee for the license is 6*l*. 6s. The examination is divided into two parts.

THE SCOTTISH DOUBLE QUALIFICATION.

Candidates for the licences of these bodies are required to attend the following courses of Lectures: Anatomy, Practical Anatomy, Physiology, Medicine, and Surgery, two courses of six months each; Materia Medica, Practical Chemistry, Forensic Medicine, Midwifery, and Diseases of Women and Children, Pathological Anatomy, Practical Pharmacy, one course of three months each. Hospital practice—Medical and Surgical, with Clinical Lectures, two winter and two summer sessions each; Certificate of Proficiency in Vaccination. The fee for the Double Qualification is 16*l*. There are two Examinations.

VACATIONS.

There are Three Months' Vacations during the year—viz., APRIL, after the Winter Session, and AUGUST and SEPTEMBER, after the Summer Session.

ORDER OF STUDY.

The following Order of Study meets the regulations of all the above Examining Boards:—

FIRST WINTER SESSION.—Chemistry, Anatomy, Physiology, Dissections, Surgical Hospital Practice, Surgical Clinical Lectures.

FIRST SUMMER SESSION.—Materia Medica and Therapeutics, Botany, Practical Chemistry, Practical Pharmacy, Surgical Hospital Practice, Surgical Clinical Lectures.

SECOND WINTER SESSION.—Anatomy, Physiology, Dissections, Principles and Practice of Medicine, Principles and Practice of Surgery, Medical Hospital Practice, Surgical Hospital Practice, Surgical Clinical Lectures.

SECOND SUMMER SESSION.—Midwifery, Medical Jurisprudence, Medical Hospital Practice, Medical Clinical Lectures, Surgical Hospital Practice, Surgical Clinical Lectures, Demonstrations of Morbid Anatomy.

THIRD WINTER SESSION.—Principles and Practice of Medicine, Principles and Practice of Surgery, Medical Hospital Practice, Medical Clinical Lectures, Surgical Hospital Practice, Surgical Clinical Lectures, Demonstrations of Morbid Anatomy, Practical Midwifery.

THIRD SUMMER SESSION.—Medical Hospital Practice, Medical Clinical Lectures, Demonstrations of Morbid Anatomy, Practical Midwifery.

FEES PAYABLE FOR ALL LECTURES AND HOSPITAL PRACTICE REQUIRED FOR THE ABOVE DIPLOMAS.

LONDON.	£	s.	d.
St. Bartholomew's (in three half-yearly instalments of 31*l*. 10s, 31*l*. 10s., and 30*l*. 15s.)	99	15	0
Charing-Cross (in three yearly instalments of 36*l*. 15s., 31*l*. 10s., and 14*l*. 14s., in the case of Matriculated Students a deduction of 8 per cent.)	82	19	0
St. George's Hospital (in yearly instalments of 42*l*., 42*l*., and 10*l*. 10s.)	94	10	0
Guy's Hospital (in three yearly instalments of 40*l*., 49*l*., and 10*l*.)	90	0	0
King's College (in one sum)	100	0	0
,, (in instalments of 5*l*. 10s., 42*l*., and 10*l*. 10s.)	105	0	0
London Hospital (in two instalments of 44*l*. 2s. each.)	88	4	0
St. Mary's (in one sum)	84	4	0
,, (in instalments by arrangement with the Dean)	84	5	0
Middlesex, unlimited (or in yearly instalments of 35*l*., 35*l*., and 20*l*., and 10*l*. each succeeding year)	90	0	0
St. Thomas's (in yearly instalments of 40*l*., 40*l*., and 10.)	90	0	0
University College (payable in yearly instalments of 54*l*. 6s., 33*l*. 12s., and 7*l*. 7s.)	95	5	0
Westminster (in one sum)	70	0	0
,, (in yearly instalments of 35*l*., 30*l*., and 10*l*.)	75	0	0

THE PROVINCES.			
Birmingham—Queen's College and Hospital	84	0	0
Birmingham—Queen's College and General Hospital	84	0	0
Bristol Medical School and Bristol Royal Infirmary	103	15	0
Bristol Medical School and Bristol General Hospital	92	10	0
Leeds Medical School and Infirmary (in two yearly instalments)	86	2	0
Liverpool Royal Infirmary School (Lectures only)	42	0	0
Liverpool Royal Infirmary School and Northern Hospital	68	5	0
Manchester Medical School and Infirmary	84	0	0
Newcastle School and Infirmary (in one payment)	64	1	0
Sheffield Medical School and Infirmary	76	15	0

Special Details respecting Educational Institutions.

QUEEN'S COLLEGE, BIRMINGHAM.

Professors of the Medical Faculty.—Winter Courses: Medicine, Dr. James Russell, Dr. Balthazar W. Foster; Surgery, Mr. Oliver Pemberton, Mr. Furneaux Jordan; Anatomy, Mr. Charles J. Bracey, M.B. Lond., and J. F. West, F.R.C.S.; Physiology, Dr. Richard Norris, Mr. T. H. Bartleet, M.B. Lond.; Chemistry, Dr. Alfred Hill, F.C.S.; Demonstrator of Anatomy, Mr. William Thomas, M.B. Lond., F.R.C.S. Summer Courses: Midwifery, Mr. John Clay, Mr. John Bassett; Diseases of Women and Children, Mr. Samuel Berry and Dr. R. C. R. Jordan; Forensic Medicine and Toxicology, Mr. Thomas Swain and Dr. Alfred Hill; Practical Chemistry, Mr. Alfred Anderson, F.C.S.; Botany, Dr. Wiliam Hinds; Materia Medica and Therapeutics, Mr. J. St. S. Wilders and Mr. Edward Mackey, M.B. Lond.; Ophthalmic Surgery, Mr. J. Vose Solomon; Dental Surgery, Mr. Thos. Hawkins; Comparative Anatomy, Dr. Thomas Savage; Medical Tutor and Registrar, Mr. James Hinds, M.B. Lond.

Hospital Practice may be attended at either the General Hospital or the Queen's Hospital, which are equidistant from the College.

Resident Students.—Students may reside within the College, where they will be provided with rooms and board, and will be under the supervision of the Warden and Resident Tutors, Resident Students are expected to attend the College Chapel, unless specially exempted by the Warden.

Resident Tutors.—The Professor of Classics, the Profesor of Mathematics, and the Medical Tutor.

Scholarships and Prizes.—Two Warneford Scholarships, the Sands Cox Prize (value of 20*l*.), the Warden's Prize (of the value of five guineas), the Percy Prize (books of the value of five guineas), and Class Prizes, Medals, and Certificates of Honour are awarded annually.

The prospectus of the Medical Department, and further information, may be obtained by application to the Rev. the Warden at the College; or to Professor Foster, M.D., 4 Old square, Birmingham, Physician to the General Hospital; or to Professor Furneaux Jordan, Colmore row, Birmingham, Surgeon to the Queen's Hospital.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

Physicians, Dr. Fleming, Dr. Johnston, Dr. Heslop. Surgeons, Mr. West, Mr. Gamgee, Mr. Furneaux Jordan, Mr. J. St. S. Wilders. Dental Surgeon, Mr Adams Parker. Resident Physician and Medical Tutor, Dr. Sawyer. Resident Surgeon and Surgical tutor, Dr. Jolly.

Several Clinical Prizes are offered for competition to Students of the second, third, and fourth years. They vary from 2*l.* 2s. to 5*l.* 5s. in value.

The Hospital has special wards for Diseases of Children and Venereal Diseases. Clinical Lectures and Instruction are delivered daily at the Hospital by the Physicians and Surgeons. Fees are to be paid to Mr. H. C. Burdett, Resident Secretary to the Hospital. The register of tickets for attendance on Clinical Lectures, and on Medical and Surgical Practice, is open at the Hospital from October 1 to October 15, 1870, and May 1 to May 15, 1871. Special instruction in Dental Surgery by Mr. Adams Parker. Fee, 2*l.* 2s.

GENERAL HOSPITAL, BIRMINGHAM.

Physicians, Dr. Bell Fletcher, Dr. Russell, Dr. Wade, Dr. Foster. Surgeons, Mr. Alfred Baker, Mr. Oliver Pemberton, Mr. T. H. Bartleet, Mr. W. P. Goodhall. Resident Physician and Tutor, Dr. Welch. Resident Surgeon, Mr. May.

Clinical Lectures are delivered by the Physicians and Surgeons every week during the Session.

BRISTOL MEDICAL SCHOOL, SESSION 1870-71.

The Winter Session will commence on Monday, October 3, 1870. Medicine, Dr. Martyn and Dr. Fox, Surgery, Mr. Coe and Mr. Leonard. General Anatomy and Physiology, Messrs. Atchley and Steele. Descriptive and Surgical Anatomy, Mr. Lansdown and Mr. Tibbits. Superintendence of Dissections, Messrs. Dowson and Dobson. Chemistry, Mr. Coomber.

The Summer Session will commence on May 1, 1871. Midwifery, and Diseases of Women, Dr. J. G. Swayne. Forensic Medicine, Mr. E. C. Board. Materia Medica and Therapeutics, Dr. G. F. Burder. Botany, Mr. A. Leipner. Practical Chemistry, Mr. Coomber. Comparative Anatomy, Mr. Atchley.

Competitive Examinations are held amongst Students of the first, second, and third years respectively; and prizes of money, instruments, and books, are annually awarded.

Medical and Surgical Hospital Practice and Clinical Lectures are attended at the Royal Infirmary or at the General Hospital.

BRISTOL ROYAL INFIRMARY.

The Infirmary contains 242 beds. Physicians, Dr. Brittan, Dr. Fairbrother, Dr. Fox, Dr. Beddoe. Surgeons, Mr. Bernard, Mr. Leonard, Mr. Clark, Mr. Tibbits, and Mr. Steele.

Clinical Clerks are appointed without extra fee. A Gold Medal and other Prizes are awarded annually. Patients admitted in 1869; In-patients, 2,655; out-patients, 21,933; total, 24,588.

BRISTOL GENERAL HOSPITAL.

The Hospital contains 130 beds. Physicians, Dr. Martyn, Dr. Burder, Dr. Fripp. Surgeons, Mr. Coe, Mr. Lansdown, Dr. H. Marshall, Mr. G. F. Atchley. Physician-accoucheur, Dr. Swayne. Two Scholarships of 15*l.* each are awarded annually. Also a Scholarship, called the Sanders Scholarship for the study of Medicine and Surgery, being the interest of 500*l.* (to be given annually), bequeathed to the Hospital by the late J. N. Sanders, Esq.

Resident Pupils (including board, lodging, and washing), 100*l.* for the first year, 60*l.* for each subsequent year. Or for five years, with apprenticeship to the Hospital, 260*l.*

LEEDS SCHOOL OF MEDICINE.

The Winter Session will commence on Monday, October 3, 1870. Anatomy, by James Seaton, M.R.C.S., Robert T. Land, M.D., M.R.C.S., and John A. Nunneley, M.B., M.R.C.S. Physiology, by William Hall, M.R.C.S., and Thomas R. Jessop, F.R.C.S. Principles and Practice of Medicine, by Charles Chadwick, M.D., F.R.C.P., John D. Heaton, M.D., F.R.C.P., and T. C. Allbutt, M.A., M.D., F.L.S. Principles and Practice of Surgery, by Claudius G. Wheelhouse, F.R.C.S., and T. Pridgin Teale, M.A., F.R.C.S. Chemistry, by J. Chapman Wilson, F.C.S. Materia Medica, by John E. Eddison, M.D. Midwifery, by W. Hall, M.R.C.S. Forsenic Medicine, by Thomas Scattergood, M.R.C.S. Botany, by Edward Atkinson, M.R.C.S., F.L.S. Comparative Anatomy, by C. G. Wheelhouse, F.R.C.S., and T. C. Allbutt, M.A., M.D., F.L.S. Assistant-Demonstrators of Anatomy, Robert Parr Oglesby, M.R.C.S., and Charles James Wright, M.R.C.S. Demonstrations in Operative Surgery, by Messrs. S. Hey, C. G. Wheelhouse, and Pridgin Teale. Demonstrations of Skin Diseases, by Dr. Allbutt, at the Infirmary. Ophthalmoscopic Demonstrations, by Mr. T. Prigdin Teale.

Prizes.—At the close of each Session, Examinations for Prizes are held, when Silver and Bronze Medals, Books, and Certificates of Honour are presented according to merit. Two Clinical Prizes of 10*l.* each, a Forsenic Medicine prize of 10*l.*, and two Chemical Scholarships, are awarded to Students.

Clinical Clerkships and Dresserships.—In accordance with the recent requirements of the Examining Boards, it is now arranged that every Student in turn shall pass through the offices of Clinical Clerk and Dresser. No Certificate of Hospital Practice will be granted to Students who have not held these offices.

Resident Medical Officers.—Four House-Surgeons are elected for the service of the Infirmary, to work under the direction of the Resident Medical Officer. They are chosen from those senior Students who have shown industry and skill as Dressers and Clinical Clerks. They are provided with private apartments, board, gas, and coal, in the Hospital, without charge.

Honorary Medical Officers of the Hospital.—Consulting Surgeon: William Hey, F.R.C.S. Physicians: Charles Chadwick, M.D., F.R.C.P.; John Deakin Heaton, M.D., F.R.C.P.; and T. Clifford Allbutt, M.A., M.D., F.L.S. Surgeons: Samuel Hey, F.R.C.S.; C. G. Wheelhouse, F.R.C.S.; T. Pridgin Teale, M.A., F.R.C.S.; T. R. Jessop, F.R.C.S.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

The Introductory Address will be delivered on October 3, 1870, at 3 p.m., by Dr. Brown.

Hospital Practice, Royal Infirmary.—Physicians, Dr. Vose, Dr. Turnbull, Dr. Inman. Surgeons, Mr. Stubbs, Mr. Bickersteth, Mr. Hakes. Assistant-Surgeons, Mr. Harrison. House-Surgeons, Dr. Cleaver and Mr. Matthews. Pathologist, Mr. Banks. Dental Surgeon, Mr. Snape.

Lectures, Winter Session.—Medicine, Dr. Cameron. Surgery, Mr. Harrison. Physiology, Dr. Waters. Anatomy, Mr. W. M. Banks. Dissection, Dr. Glynn and Mr. E. A. Browne. Chemistry, Dr. Brown.

Lectures, Summer Session.—Midwifery, Dr. Steele. Diseases of Children, Dr. Gee. Materia Medica, Dr. Nevins. Medical Jurisprudence, Dr. E. Whittle, Toxicology and Practical Chemistry, Dr. Brown. Botany, Dr. W. Carter. Ophthalmic Medicine and Surgery, Dr. Hibbert Taylor. Comparative Anatomy and Zoology, Dr. Davidson.

Exhibitions.—Royal Infirmary Medical Scholarship—value 42*l.*—consisting of Gold Medal, value 10*l.* 10s., and Six Months' Free Board and Residence, with Clerkship and Dressership, in the Royal Infirmary.—Four Exhibitions—value 31*l.* 10s. each—consisting of Six Months' Free Board and Residence in the Royal Infirmary.

NEWCASTLE-ON-TYNE SCHOOL OF MEDICINE.

Hospital Practice is obtained at the Newcastle Infirmary, which contains 230 beds, and in which the required Clinical Lectures are delivered. Two Resident Clinical Clerkships, four Resident Dresserships, and four Non-resident Dresserships, are gratuitous, at the disposal of the Physicians and Surgeons. There are four Scholarships of 25*l.* a-year, each tenable for four years by Students residing at Durham, or Newcastle, also the Dickinson Scholarship of 15*l.* for general proficiency. At the end of each Session a Silver Medal and Certificate of Honour will be awarded, after examination, to the best Student in each class.

SHEFFIELD SCHOOL OF MEDICINE.

THE practice at this school affords an excellent field for study, especially Operative Surgery, in consequence of the large number of Accidents continually occuring in the manufacturing Establishments surrounding. The Sheffield Royal Infirmary contains 150 beds, and is an admirably appointed institution.

MANCHESTER ROYAL SCHOOL OF MEDICINE AND SURGERY, FAULKNER STREET.

The Winter Session will commence October 3, with an Introductory Address by L. H. Grindon.

Winter Session, 1870-71.—Physiology, by Mr. Smith. Descriptive Anatomy, by Mr. Lund and Mr. Bradley. Practical Anatomy, by Mr. S. M. Bradley. Chemistry, by Mr. Stone. Principles and Practice of Medicine, by Dr. Roberts and Dr. Morgan. Principles, Practice, and Operations of Surgery, by Mr. Southam. Anatomy, Physiology, and Pathology, of the Eye, by Mr. Hunt.

Summer Session.—Midwifery and Diseases of Women and Children, Dr. Thorburn. General Pathology and Morbid Anatomy, by Dr. Simpson. Materia Medica, Medical Botany, and Therapeutics, by Mr. Somers. Forensic Medicine, by Mr. Harrison. Botany, by Mr. Grindon. Practical Chemistry, by Mr. Stone. Comparative Anatomy, by Mr. Bradley.

Scholarships.—In addition to prizes, amounting to 36 guineas, for general proficiency, Three Scholarships for perpetual students will be offered for competition—one of 20*l.* for third year's students; one of 15*l.* for second year's students; one of 10*l.* for first year's students.

ROYAL INFIRMARY, EDINBURGH.

In this Hospital a portion of the beds is set apart for Clinical Instruction by the Professors of the University of Edinburgh. Courses of Clinical Medicine and Surgery are also given by the Ordinary Physicians and Surgeons. Separate Wards are devoted to Fever, Small-pox, Venereal Diseases, Diseases of Women, Diseases of the Eye; also to cases of Incidental Delirium or Insanity. Post-mortem Examinations are conducted in the Anatomical Theatre by the Pathologist, who also gives Practical Instruction in Pathological Anatomy and Histology. Professors of Clinical Medicine, Dr. Bennett, Dr. Laycock, Dr. Maclagan, Dr. Sanders. Extra Physician and Lecturer on Diseases Peculiar to Women, Dr. J. Matthews Duncan. Ordinary Physicians and Lecturers on Clinical Medicines, Dr. Rutherford Haldane, Dr. Geo. W. Balfour, Dr. T. Grainger Stewart. Assistant-Physicians, Dr. Claud Muirhead, Dr. Thos. R. Fraser. Consulting-Surgeon, Dr. Dunsmure. Professor of Surgery, Mr. Spence. Ordinary Acting-Surgeons, Dr. J. D. Gillespie (Lecturer on Clinical Surgery), Dr. P. H. Watson, Mr. Thos. Annandale. Professor of Clinical Surgery, Mr. Lister. Ophthalmic Surgeons, Mr. Walker, Dr. D. A. Robertson. Assistant-Surgeons, Dr. Joseph Bell, Dr. John Duncan. Dental Surgeon, Dr. John Smith. Pathologist, Dr. James B. Pettigrew. Hospital Tickets.—Perpetual, in One Payment, 10*l.*; Annual, 5*l.* 5*s.*; Half-yearly, 3*l.* 3*s.*; Quarterly, 1*l.* 11*s.* 6*d.* Separate payments for Two Years entitle the Student to a Perpetual Ticket. No Fees are payable for any Medical or Surgical Appointment in this Hospital.

UNIVERSITY OF ABERDEEN.

Faculty of Medicine—Session 1870-71.

Winter Session commencing on Wednesday, October 26.—Anatomy, Professor Struthers, M.D., 3*l.* 3*s.* Practical Anatomy and Demonstrations, Professor Struthers and the Demonstrator, 2*l.* 2*s.* Chemistry, Professor Brazier, 3*l.* 3*s.* Institutes of Medicine, Professor Ogilvie, 3*l.* 3*s.* Surgery, Professor Pirrie, 3*l.* 3*s.* Practice of Medicine, Professor Macrobin, M.D., 3*l.* 3*s.* Midwifery and Diseases of Women and Children, Professor Inglis, 3*l.* 3*s.* Zoology, with Comparative Anatomy, Professor Nicol, 3*l.* 3*s.* Medical Jurisprudence, Professor Ogston, 3*l.* 3*s.*

Summer Session, commencing on the first Monday in May.—Botany, Professor Dickie, 3*l.* 3*s.* Materia Medica (100 Lectures), Professor Harvey, 3*l.* 3*s.* Practical Anatomy and Histology, Professor Struthers and the Demonstrator, 2*l.* 2*s.* Practical Chemistry, Professor Brazier, 3*l.* 3*s.* Zoology, with Comparative Anatomy, Professor Nichol, 3*l.* 3*s.*

Matriculation Fee for the Winter and Summer Sessions, 1*l.* For the Summer Session alone 10*s.*

Royal Infirmary: Perpetual Fee to Hospital Practice, 6*l.*; or First Year, 3*l.* 10*s.*; Second Year, 3*l.* Clinical Medicine, Drs. Harvey and Smith, 3*l.* 3*s.* Clinical Surgery, Drs. Pirrie, Kerr, and Fiddes, 3*l.* 3*s.* Pathology, Dr. Rodger, 2*l.* 2*s.* Dental Surgery, Mr. Williamson.

UNIVERSITY OF GLASGOW.

Faculty of Medicine.—The Classes open for the Winter Session on Tuesday, October 25, 1870, when an Introductory Lecture will be given by Professor Young.

Chemistry, Practical Chemistry, and Chemical Laboratory, Dr. Anderson, 3*l.* 3*s.* Practice of Physic, Dr. Gairdner, 3*l.* 3*s.* Anatomy, Anatomical Demonstrations, and Practical Anatomy, Dr. Allen Thomson and Demonstrator, 8*l.* 8*s.* Materia Medica, Dr. Cowan, 3*l.* 3*s.* Forensic Medicine, Dr. Rainy, 3*l.* 3*s.* Surgery, Dr. Macleod, 3*l.* 3*s.* Midwifery, Dr. Leishman, 3*l.* 3*s.* Institutes of Medicine, Dr. A. Buchanan, 3*l.* 3*s.* Clinical Medicine and Clinical Surgery, Physicians and Surgeons of Royal Infirmary.

ANDERSON'S UNIVERSITY, GLASGOW.

WINTER SESSION 1870 OPENS OCTOBER 26.

Chemistry, Practical Chemistry, and Laboratory, Vacant; Surgery, Dr. James Dunlop; Institutes of Medicine (Physiology), Dr. Watson; Anatomy, Anatomical Demonstrations, Practical Anatomy, or Dissection, Dr. G. Buchanan; Practice of Medicine, Dr. M'Call Anderson; Materia Medica, Dr. Morton; Hospital Practice in Royal Infirmary; Clinical Lectures in Royal Infirmary.

SUMMER SESSION.

Midwifery, Dr. J. G. Wilson; Medical Jurisprudence, Dr. P. A. Simpson; Surgical Anatomy, Practical Anatomy, Osteology for beginners, Dr. George Buchanan; Practical Chemistry, Vacant.

Class Fees: For each of the above Courses of Lectures, first Session, 2*l.* 2*s.*; second Session, 1*l.* 1*s.*; afterwards free.

Anatomy Class Fees: For both Courses (Lectures and Demonstrations), first Session, 4*l.* 4*s.*; second Session, 4*l.* 4*s.*: afterwards free.

Practical Anatomy; The Dissecting-room is free for two Sessions to those who attend both Courses of Anatomy. After the second year the fee for Practical Anatomy is 1*l.* 1*s.* per Session.

The Fees for all the Lectures and Hospital Practice required of Candidates for the Diplomas of Physicians and Surgeon amount to 45*l.*

GLASGOW ROYAL INFIRMARY.

The Winter Session commences on November 1, 1870. Physicians, Drs. W. T. Gairdner, Steven Perry, M'Call Anderson, and Scott Orr. Surgeons, Drs. E. Watson, Dewat, Macleod, G. Buchanan, and J. Morton. Fever Physicians, Drs. James Maclaren and M. Charteris.

Number of beds, 583.

Besides the Clinical Instruction given at the bedside, Lectures on the Cases are given four times weekly, at 9 a.m., during the Winter and Summer Sessions. Regular Operating days—Wednesdays and Saturdays.

The valuable Pathological Museum is open to all Students who desire to examine the Preparations.

Five Physicians' and Five Surgeons' Assistants perform the duties of House-Physicians and House-Surgeons. These offices, held for one year, are open to Students of the fourth year. They are lodged and boarded in the Hospital for 25*l.* per annum. Dressers to the Surgical Wards and Clerks to the Dispensary are appointed without fee.

Fees admitting to the Medical and Surgical Practice and the Clinical Lectures:—For Ticket: the first year, 3*l.* 3*s.*; second year, 3*l.* 3*s.*; third and perpetual, 1*l.* 1*s.*; for six months' attendance, 2*l.* 2*s.*; three months', 1*l.* 11*s.* 6*d.* Practical Pharmacy, six months, 3*l.* 3*s.*

Fees for Clinical Lectures, on Medicine, 3*l.* 3*s.*, on Surgery, 3*l.* 3*s.*

IRELAND.

THE practice of the Profession in Ireland, though not nearly as remunerative as in England, still affords a certain prospect to any Medical man who is content with modest independence. Irish Medical men pride themselves on holding a higher social position than the English general Medical practitioner. They are entitled to meet the gentry of their locality on terms of equality, and it is not necessary or usual for them to endanger their prestige by the adoption of the trading or Christmas bill system which obtains elsewhere. In fact, what they lose in income they gain in rank.

In order to put the career of the Irish Student as plainly as possible, we narrate the progress of an ideal person, from the day on which he takes his first step towards medicine to the hour of his issue from the *cocoon* of studentship, a fully-developed surgeon.

The parents and guardians of Master Robert Sawyer have, after much discussion, decided that he shall be a doctor. He has had a moderate amount of schooling, at least the very moderate amount which is essential for the Medical preliminary examinations, and his father is ready to expend at least £130 on his Medical education, that sum being divided over four years, or paid down in order to secure the advantage of a considerable saving.

THE CHOICE OF SCHOOLS AND COLLEGES

will depend on various circumstances, and on the aspirations of Master Sawyer. If he's intended to make a fortune and enlighten his generation as a metropolitan practitioner, and if money and education are plenty, he will probably take University degrees in Arts and in his profession. If the attainment of fair professional rank on moderate terms be desired, the College of Surgeons and College of Physicians will serve every purpose. If cheapness and the obtaining a licence to practise without much trouble or severe study be the object, there are Licensing Bodies who will be glad to meet the views of the candidate.

The choice of a School, Hospital, and College having been made, Master—now *Mister*—Sawyer is perhaps sent to those to pass his

PRELIMINARY EXAMINATION

in general education, but if he be either lazy or ignorant, he may adjourn that unpleasant process, *de die in diem*, until the eve of his final qualification as a Surgeon. The preliminary examination is, however, not to be feared, inasmuch as most Licensing Bodies are anxious to secure students by making the first steps in learning very easy.

The preliminary examination (of the subjects of which details will be found in the official regulations of each College) having been passed or postponed, Mr. Sawyer comes to town to begin work.

He may do so either (1.) on his own account, or (2.) he may become voluntarily a pupil of some Medical man, usually a teacher or hospital surgeon, who can assist him in his studential course. This is by no means a requirement of any of the Colleges; it is purely a matter of option. Should the student pursue the first course, he usually comes to town, takes a lodging close to his School and Hospital, either by himself or in companionship with some *chum*, and either arranges to maintain himself or to board with his landlady. There is, of course, every degree of expense and of comfort, but we should say that reasonable yet frugal living may be had in Dublin at about 10s. per week for lodging, and £5 to £6 per month for maintenance.

We would here, as a matter of private judgment, remark that it is better for parents to have board provided on a good substantial scale by the house. Young men are too apt to spend their money on luxuries or extravagancies, and make up the deficit by using insufficient food, to the great injury of the health.

APPRENTICESHIP.

Should the student prefer becoming a pupil of some Medical man, hospital surgeon or lecturer, he can make terms by private agreement, either as a resident in the house of his master or as an extern pupil. The terms for such advantages vary considerably. A usual bargain is that the master shall, in consideration of a payment varying from £125 to £150, undertake to pay all educational expenses whatsoever, and, in addition, the intern pupil pays £6 6s. per month for his maintenance during the nine months he is in town. Under other arrangements the master will receive, say £100, for a session of nine months, and will undertake all expenses, whether professional or domestic.

These sums are what we would consider fair to both sides; but as it is a matter of voluntary arrangement and of superiority of advantages, experience, and success offered, we can only suggest what seems equitable.

COST OF EDUCATION.

Should the student proceed on his account, the lectures necessary for the L.R.C.S.I. will amount to £65; hospital attendance about £25; lying-in hospital from £4 4s. to £7 7s. These, with the diploma fee of £26 5s., represent the essentials. The sum of £52 10s., paid down at the commencement, is taken by the College of Surgeons as payment in full for all lectures requisite, and all the hospitals allow a considerable discount. Thus, the absolute payment will amount to somewhere about £83, taking the minimum mode of payment. In addition to this sum are to be considered the payments for "grinding" or "coaching," as the Londoners call it, the fixed sum is, for private teaching, £15 15s. for the surgical and medical qualifications, and £5 5s. for pharmacy, &c. Should the candidate "grind" for the army and navy examinations, a fee varying from £10 10s. to £21 is, we believe, usual. Should the candidate perform operations on the subject as a practice, they will cost something extra. So that, assuming the extras or voluntary costs are incurred, the total will vary say from £114 to £120 on a moderate scale; it is of course to be expected that pupil holders should have some extra payment, we, therefore, have named £155.

If Mr. Sawyer becomes an apprentice, he need trouble himself nothing about his payments. If he is his own manager, he must enter his name with the Secretaries of the School and Hospital, and pay for the Lectures and Hospital he intends to take out. If he is wise he will not adjourn the majority of his lectures, as he may, to the next year, but will take in his first year a full third of his curriculum. He is supposed to pay the Professor's fee or Hospital fee in full on entering his name, but few students do so, and many, we are sorry to say, are in the habit of entering for the minimum allowable number of lectures, and paying the minimum allowable proportion of the fee, putting off the attendance perhaps for ever, certainly until the last moment, and adjourning the payment until they must take up the certificates.

The entry of names and commencement of study is supposed to date from the 1st of October in each year, but really does date from the 1st of November, and may be delayed by the dilatory until the 25th of the same month.

Mr. Sawyer then begins work, attending Hospital each morning at nine o'clock, and occupying his day from half-past eleven to five between lectures and dissections. His holidays —if the term be not ignoble—are a fortnight at Christmas and a week at Easter, and he finally returns home at the end of July.

The progress of each year is the same, except that he usually devotes more attention to "grinding," dissection, and hospital dresserships, and less to lectures in his latter years of study, and after the expiration of his third session, his student-life, whether it begin in laziness and end in hurry and incompetency, or whether it commence in diligence and end in the

confidence of proficiency, ends with his last examination, and he goes forth into the world either an ignoramus or a reliable surgeon, whichever his choice may have been.

Regulations and Bye-Laws of Licensing Bodies in Ireland.

UNIVERSITY OF DUBLIN.

THE following Degrees and Licences in Medicine and Surgery are granted by the University of Dublin :—

1. Bachelor in Medicine. 2. Doctor in Medicine. 3, Master in Surgery. 4. Licentiate in Medicine. 5. Licentiate in Surgery.

Matriculation.

Every student must be matriculated by the senior lecturer, for which a fee of five shillings is payable ; but he need not have his name on the College books, or attend any of the academical duties, unless he desire to obtain a Licence or Degree in Medicine or Surgery. No student can be admitted for the Winter Courses after the 25th of November.

QUALIFICATIONS FOR DEGREES AND LICENCES.

Bachelor in Medicine.

Candidates must be graduates in Arts, and may obtain the degrees at the same commencements as the B.A., or at any subsequent one. The medical education of a Bachelor in Medicine is of four years' duration, and comprises the following lectures :—

Winter Courses.—Anatomy and Physiology—Practical Anatomy with Dissections—Surgery—Chemistry—Practice of Medicine—Midwifery.

Summer Courses.—Botany—Materia Medica and Pharmacy—Institutes of Medicine—Medical Jurisprudence.

Hospital attendance on Sir Patrick Dun's during nine months, with three consecutive courses of clinical lectures. Also nine months' additional attendance on a recognised hospital, and Practical Midwifery.

Any of the courses may be attended at any recognized medical school, and three of them at Edinburgh University, provided the candidates have kept an Annus Medicus in the School of Physic.

The schools recognised are—1. The School of the Royal College of Surgeons in Ireland. 2. The Carmichael School. 3. The School of Steevens 'Hospital. 4. The Ledwich School. 5. The Cecilia-street School.

An Annus Medicus may be kept in three ways—1. By attending two winter courses. 2. Or one winter and two summer courses. 3. By nine months' attendance on Sir Patrick Dun's Hospital and Clinical Lectures : together with one winter course or two summer courses of three months' duration.

The fee for nine months' attendance at Sir Patrick Dun's Hospital is twelve guineas.

The fee for the *Liceat ad Examinandum* is £5.

The fee for the degree of M.B. is £11.

Doctor in Medicine.

A doctor in medicine must be M.B. of at least three years' standing, and requires no other qualification.

Total fees for this degree, £13.

Master in Surgery.

This degree can only be obtained by Bachelors of Arts. The curriculum is the same as that for the Licentiate in Surgery, as given below.

Candidates will also be required to perform surgical operations on the dead subject.

Total amount of fees for the degree of Ch.M., £16.

Licentiate in Medicine.

Candidates for the licence in Medicine and Surgery must be matriculated in Medicine, and must have completed four years in medical studies, and must pass an examination in Arts, including Greek, Latin, English, and Mathematics, unless they be students in the Senior Freshman, or some higher class. The medical course necessary for a Licence in Medicine is the same as for the degree of M.B. A fee of £5 is charged on taking the Licence. Licenciates in Surgery of the Royal Colleges of Surgeons, on passing the Art Examination, will be admitted to examination for the Licence in Medicine. Such candidates will be exempted from examination in Anatomy and Surgery : Fee for the *Liceat ad Examinandum*, £5. Fee for the Licence in Medicine, £5.

Licenciate in Surgery.

Candidates must have kept one full year in Arts, and will be required to perform surgical operations on the dead subject. The curriculum extends over four years, and is as follows :—Two courses each of Anatomy and Physiology, and Theory and Practice of Surgery ; three courses of Demonstrations and Dissections ; and one course each of Practice of Medicine, Chemistry, Materia Medica, Midwifery, Laboratory Chemistry, Botany, and Medical Jurisprudence. Also attendance for three Sessions, each of nine months, on a recognized hospital. Of the courses of lectures, which are of six months' duration, not more than three can be attended during any one session. Any of the above-named courses may be attended at any of the medical schools at Dublin, provided the candidate has kept an *Annus Medicus*. A fee of £5 is charged for the licence, and £5 for the *Liceat*.

SESSIONAL EXAMINATIONS.

Candidates for degrees and licences will be subjected to two examinations, one of them preliminary, which will be held at the close of the second year, and the other, after the full curriculum has been completed. The subjects of the preliminary examination are the following : Descriptive Anatomy, Botany, and Materia Medica, Pharmacy, Chemistry, theoretical and practical, with Chemical Physics. The best answers at the preliminary examinations will be elected to the scholarships, provided they are in the Senior Freshman, or some higher class, and have kept one *Annus Medicus*.

PRIVILEGES OF MEDICAL STUDENTS.

Medical students, being junior or senior sophisters, and in attendance on the full courses necessary for an *Annus Medicus*, are exempted from the classics of the junior sophister year, and from one of the three optional courses (Mathematical Physics, Experimental Physics, or Classics) of the senior sophister year. To obtain this privilege the student must be matriculated, and the certificate of his attendance on lectures be submitted to the senior lecturer.

FREE COURSES.

Students in Arts having their names on the College-books will be permitted to attend one course free of expense with the Professor of Botany, and to attend the lectures of the University Professors at half price.

MEDICAL SCHOLARSHIPS.

Two medical scholarships are given annually, value 20*l.* per annum each, tenable for two years, the examinations for which are held each year in June, in the following subjects :—Anatomy, Physiology, Chemistry, Materia Medica, and Botany.

Medical School Exhibitions.

The professors of the University school give three exhibitions annually : two senior, value 15*l.* and 10*l.*, open to all students who have been three years attending the school. The subjects being—Practice of Medicine, Surgery, Pathology, and Forensic Medicine.

One junior, value 15*l.*—the time and subjects of examination being the same as those for the medical scholarship.

Expense of obtaining the degrees of Bachelor in Medicine and Master in Surgery in the University of Dublin :—Lectures, 49*l.* 7s. ; Hospitals, 28*l.* 7s. ; Degree Fees, 32*l.*=109*l.* 14s. ; Private Tuition, say, 20*l.* ; Total, 129*l.* 14s.

N.B.—As no degrees in Medicine or Surgery are conferred except upon graduates in Arts, the expense of the degree of Bachelor in Arts, amounting altogether to 83*l.* 4s., should be added to the foregoing, making the total cost something over 200*l.*

The Board of Trinity College have recently passed orders :—1. That three-fourths of the courses of lectures must be in all cases attended. 2. That the system of perpetual pupils be abolished. 3. That a daily roll be called by each Professor. 4. Students in Arts shall be entitled to attend one course in Botany, and to receive a certificate free of charge. 5. Candidates for degrees and licences in Surgery shall be required to attend one course only on Anatomy, for which he shall be charged three guineas. 6. The two courses delivered by the Professor of Surgery shall include practical instruction in Operative Surgery on the dead subject : and for each the professor shall charge four guineas. 7. The Professor shall

charge three guineas for the winter lecture in Chemistry. 8. Laboratory instruction shall be substituted for the second course of chemistry, hitherto delivered, for which the Professor of Chemistry shall charge five guineas. 9. Students in Arts may attend the Professors of Surgery and Chemistry, and to receive certificates on payment of half the fees. 10. That after Shrovetide, 1868, all candidates in Medicine shall produce certificates in practical Midwifery, incuding at least six deliveries.

See advertisements of School of Physic and Sir Patrick Dun's Hospital.

THE QUEEN'S UNIVERSITY IN IRELAND.

FACULTY OF MEDICINE.

DEGREE OF DOCTOR OF MEDICINE.

Each candidate for the degree is required—

1. To have passed in one of the Queen's Colleges the examination for Matriculation in Arts,* and to have been Matriculated in Medicine. 2. To have attended in one of the Queen's Colleges, Lectures on one Continental language for six months, and on Natural Philosophy for six months. 3. To have attended, in some one of the Queen's Colleges, two other courses of the medical curriculum. For the remainder of the courses, certificates will be received from the Lecturers in Schools, recognized by the Senate. 4. To pass two University Examinations—the First University Examination and the Degree Examination.

The curriculum of Medical study extends over four years, and is divided into two periods of two years each.

The first period comprises attendance on Chemistry, Natural History, Anatomy and Physiology, Practical Anatomy, and Materia Medica. Practical Chemistry in a recognized Laboratory is also to be attended during the first period, and the practice during six months of a Medico-Chirurgical Hospital, containing at least sixty beds, together with the Clinical Lectures delivered therein.

The second period comprises attendance on Anatomy and Physiology, Practical Anatomy, Theory and Practice of Surgery, Midwifery and Diseases of Women and Children, Theory and Practice of Medicine, Medical Jurisprudence. During this period Students attend Practical Midwifery, and eighteen months' practice of a Medico-Chiurgical Hospital, containing at least sixty beds, and in which clinical instruction is delivered.

At least two of the above courses of Lectures must be attended in some one of the Queen's Colleges; the remainder may be taken at the option of the candidate, in any University, College, or School recognized by the Senate of the Queen's University.

The University Examinations are held twice in each year, in June and September.

The June Examinations are Pass Examinations, and commence on the Tuesday following the second Saturday in June.

The Honour Examinations commence on the last Tuesday in September, and are followed by Pass Examinations.

Each candidate for examination in June must forward to the Secretary, before the 1st of June, notice of his intention to offer himself, along with his certificates; and each candidate for examination in September or October must forward similar notice, along with his certificates, before the 1st of September.

THE FIRST UNIVERSITY EXAMINATION IN MEDICINE.

The First Examination may be passed either in June or September.

Students may present themselves for this Examination at the termination of the first period of the Curriculum, or at any subsequent period.

Before being examined, each Candidate must produce evidence of having completed the course recommended for study during the first period.

The First University Examination comprises the subjects recommended for study during the first period, along with which any Candidate may present himself for Examination in Experimental Physics and Modern Languages, if he has attended in one of the Queen's Colleges the courses on these subjects.

* The following are the subjects of Examination. Homer's *Iliad*, Books I, II (omitting Catalogue of Ships), III: Lucian's *Dialogues* (Walker's edition); Xenophon's *Anabasis*, Books I, II, III; Virgil, *Æneid*, Books, I, II, III; Sallust; Horace, *Satires*; Latin Prose Compositon; English Prose Composition; English History; Modern Geography; Arithmetic; Algebra, to the end of Simple Equations; Euclid, Books I, II, III.

English Composition forms a part of all University Examinations.

HONOURS.

Competitors for Honours will be examined in all the subjects of the First Medical Examination, including Experimental Physics and Modern Languages.

Two Exhibitions, one consisting of two instalments of 20*l.* each, the other of two instalments of 15*l.* each, are awarded under certain conditions at this examination.

The candidates who pass with Honours will be arranged in three classes.

Candidates who defer passing their First Medical Examination until they present themselves at the degree examination are not eligible for Honours with the First Examination.

Honour and Pass Examinations are held in September. The Examination held in June is a Pass Examination.

DEGREE EXAMINATION IN MEDICINE.

Examinations for the M.D. will be held in June and September. The fee is 5*l.*

Each candidate must produce—

1. A certificate from the Secretary of the Queen's University, that he has passed the previous examination, unless he presents himself for both examinations simultaneously.

2. From the Council of his College that he has passed a full examination for Matriculation in Arts, and has been admitted a Matriculated Student in the Faculty of Medicine.

3. That he has attended in the College lectures on one Modern Language, on Experimental Physics, and two other courses.

4. That he has completed all other prescribed courses.

The Degree Examination comprises the subjects recommended for study during the second period, along with Experimental Physics and one Modern Language, unless an Examination in these subjects have been already passed at the previous Medical Examination.

The Examination for the Degree of M.Ch. comprises in addition an examination in Operative Surgery.

Candidates who graduated with Honours will be arranged in three classes. Candidates who take a first class will receive a medal and prize. Candidates who take a second class will receive a prize. Candidates who take a third class will receive a certificate of honour.

The examination for the Degree with Honours will commence on the last Tuesday in September, and will be followed by the examination of those candidates who seek to graduate without honours.

See advertisements of Queen's Colleges, Belfast and Cork.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The Royal College of Surgeons is the principal Surgical Licensing Corporation of Ireland, and confers the great majority of the surgical qualifications granted in that division of the United Kingdom. Although there is a medical school attached to it, the College receives and grants its diplomas on certificates from all medical schools of standing. The letters testimonial confer the title of licentiate, with full qualification to practise; but the exercise of the privileges of attending and voting as a member of the College is reserved for Fellows. The Medical School of the College is under the superintendence of the Council, by whom the Professors are elected. Important modifications have been recently made in the system of examination, quarterly sessions of the court having been established, and voting by numbers instead of "Yes" and "No" introduced. Full information as to these changes will be found in the appended regulations. Operations on the subject are required to be performed by candidates for the diploma, and after January 1, 1871, clinical examinations will also be carried out.

REGISTRATION OF PUPILS.

Every person, and without any examination, shall be registered as a pupil on the college books on payment of five guineas, which is allowed in his diploma fee as part payment.

Registered pupils can study in the museum on two days in each week, and read in the library every day, from ten to one. They may also attend the Lectures on Comparative Anatomy, and obtain the certificate without payment. No student is admitted to the sessional or final examination for

letters testimonial until he becomes a registered pupil, but he may register at any time previous.

CLASSICAL EXAMINATION.

Students are admitted to this examination at any period previous to the final examination for letters testimonial.

The following are the subjects for the Preliminary Examination :—The English Language, including Grammar and Composition. Arithmetic, including Vulgar and Decimal Fractions. Algebra, including Simple Equations. Geometry, first two books of Euclid. Latin and Greek, including Translation and Grammar. In Greek—The Gospel of St. John, the Menippus of Lucian, or the First Book of Xenophon's Anabasis. In Latin—The First and Second Books of the Æneid of Virgil, the Jugurthine War of Sallust, or the Third Book of Livy. These examinations are hald quarterly, viz. :—On the third Wednesday in January, April, July, and October, in each year. Fee, ten shillings.

THE FELLOWSHIP.

Candidates must be twenty-five years of age, have studied six years, and have attended a course on Comparative Anatomy, on Botany, and Natural Philosophy. The fee is thirty guineas for a resident in Dublin, and twenty for a non-resident, having been previously a licentiate.

LETTERS TESTIMONIAL.

Every registered pupil shall be admitted to an examination if he shall have laid before the Council—*a.* A receipt showing that he has lodged twenty guineas. *b.* A certificate of an examination in Greek and Latin. *c.* Certificates of four year's study. *d.* Certificates of three years' hospital attendance.* *e.* Certificates of attendance on the following lectures :—

Three Courses.—Anatomy and Physiology; Theory and Practice of Surgery ; Dissections with Demonstrations.

Two Courses.—Chemistry (or one on general and one on practical Chemistry).

One Course.—Midwifery ; Medical Jurisprudence ; Botany; Materia Medica ; Practice of Medicine.

DIPLOMA IN MIDWIFERY.

Any Fellow or Licentiate shall be admitted to an examination upon the following documents :—

a. Certificates of one course of lectures on Midwifery and Diseases of Women and Children.

b. That he has attended a recognized lying-in hospital for six months ; or a recognized dispensary for lying-in women and children, devoted to this branch of surgery alone.

c. That he has conducted thirty labour cases. Candidates for the Midwifery Diploma shall be examined on the organization of the female ; the growth and peculiarities of the fœtus ; the practice of Midwifery, and the diseases of women and children.

The Candidate pays £1 6s. for the Midwifery Diploma provided he takes it out within one month from the date of his Letters Testimonial; after that date the Fee will be Two Guineas.

REGULATIONS AS TO EXAMINATIONS.

Letters Testimonial.

Five examiners at least are present. Each candidate shall be examined upon Anatomy, Physiology, the Theory and Practice of Medicine and Surgery, Materia Medica and the form of prescription, and shall perform such surgical operations or dissections, or explain such anatomical and pathological preparations as the examiners may require.

Licentiates of a college of physicians or graduates in medicine of a University, shall be examined in general and descriptive Anatomy, Physiology, the Theory and Practice of Surgery, and Operative Surgery. Rejected candidates cannot present themselves until after six months. In addition to the oral examinations, candidates are required to give written answers to written questions.

FELLOWSHIP EXAMINATIONS.

Five examiners at least, together with the president, or vice-president, and two members of the Council shall be present. Each candidate shall be examined on two days. The subjects of the first examination shall be Anatomy and Physiology (human and comparative) ; those of the second, Pathology, Therapeutics, the Theory and Practice of Medicine and Surgery. In addition to the oral examinations, candidates shall be required to give written answers to written questions. The candidates shall also perform dissection and operations on the dead body. Rejected candidates cannot present themselves until after one year.

ORDER OF QUARTERLY EXAMINATIONS.

1st. Candidates shall return their names to the Registrar, and lodge their fees and certificates one week before examination.

2nd. Candidates shall be examined in alphabetical order.

WRITTEN EXAMINATION.

3rd. The candidates assemble at three o'clock P.M., when twelve, selected according to alphabetical order, will each (for the junior class) receive three written questions on Anatomy and Physiology, and one on Materia Medica, and (for the senior) four written questions on Surgery and Practice of Medicine, which they will be required to answer within one hour ; at the end of the hour each candidate shall enclose his questions and answers in an envelope, with his name on the back, and hand same to the examiner superintending.

ORAL EXAMINATION.

4th. The seven examiners shall attend on each day at four o'clock, to commence the Oral Examinations, and four of them shall examine for a quarter of an hour, at four separate tables in the junior class—viz., three on Anatomy and Physiology, and one on Materia Medica, and in the senior class, three on Surgery and Practice of Medicine, and one on the form of prescriptions.

5th. Two councillors shall be summoned to witness the examination of each candidate, and shall accompany him from table to table till his examination be completed, when the voting papers having been examined, and the result declared, the name of each successful candidate shall be enrolled in a book kept for that purpose in the College.

Examinations shall be held on the fourth Tuesday in January, April, July, and October, at which candidates shall be divided into two classes—junior and senior.

Curricula.

The Junior Class shall produce certificates of three courses of Lectures on Anatomy and Physiology, three courses on Practical Anatomy, with dissections ; two courses on Chemistry, one course on Materia Medica, one course on Botany, and one course on Forensic Medicine.

This class shall be examined in Anatomy, Physiology, and Materia Medica.

The Senior Class shall produce certificates of three courses on the Theory and Practice of Surgery, one course on the Practice of Medicine, and one course on Midwifery ; also of attendance at a recognized hospital for three Winter and three Summer Sessions.

This class shall be examined in Surgery, Operative Surgery, the Practice of Medicine, and form of prescription.

6th. The examinations in Operative Surgery are conducted by the four surgical examiners. The questions are written upon cards, deposited in a balloting-box, from which each candidate, as called up, draws his question, and performs the operations there indicated.

7th. Any candidate rejected in Operative Surgery is not permitted to present himself for the senior *viva voce* examination.

Both these examinations shall be partly written and partly oral.

The fee for this examination shall be fifteen guineas.

Fees to be paid by Candidates for Letters Testimonial.

1st. The candidate pays ten shillings for his preliminary examination.

2nd. Five guineas as registered pupil of the College.

3rd. Five guineas for the Junior Class examination, which is not returned in case of rejection, but is allowed in the fee for his second examination.

4th. Fifteen guineas for the Senior Class examination—total, £26 15s.

* ATTENDANCE ON PROVINCIAL HOSPITALS.—Candidates who shall have attended recognized hospitals during three Winters, shall be admitted, if they shall produce certificates of attendance during a like number of months at a County Infirmary, or Provincial Surgical Hospital, containing at least fifty beds, provided the surgeons shall make returns in the months of May and November of the number of students so attending.

5th. Every candidate rejected at the quarterly examinations shall be required to pay to the College the sum of two guineas on applying for re-examination.

6th. The Registrar receives £1 1s. on handing over the diploma.

See advertisement of school in connection with College.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

REGULATIONS RELATIVE TO THE LICENCE IN MEDICINE.

EXAMINATIONS are held on the second Wednesday in each month.

The name of every Candidate, together with his Schedule and the essential documents must first be submitted to the College on the first Friday in each month, and no name can be received later than the Monday previous.

REGULATIONS RESPECTING THE LICENCES IN MEDICINE AND MIDWIFERY.

Candidates who have not obtained some of the qualifications of preliminary examination must give proof of four years' study; and of having studied Anatomy and Physiology, Practical Anatomy, Chemistry, Practical Chemistry, Materia Medica, Botany, Medical Jurisprudence, Practice of Medicine, and Pathology, Surgery, Midwifery.

Of having attended a Medico-Chirurgical Hospital, with Clinical Lectures, for twenty-seven months.

Of six months' Practical Midwifery at a hospital, or other evidence of having attended Practical Midwifery.

Testimonials of character from two registered Physicians or Surgeons.

A Candidate who has already obtained a Medical or Surgical Qualification is required to fill up a Schedule; but he is only required to produce his Diploma or Certificate of Registration, and the Certificate of Practical Midwifery, and Testimonials as to character.

The examination is by written questions, and *Viva Voce*, and divided into two parts:—

First part.—Anatomy, Physiology, Botany, and Chemistry.

Second part.—Materia Medica, Practice of Medicine, Medical Jurisprudence, and Midwifery.

Candidates qualified as follows are required to undergo the second part only—viz., 1. Graduates in Medicine of a University. 2. Fellows, Members, or Licentiates, of the Colleges of Physicians of London or Edinburgh, admitted upon examination. 3. Graduates or Licentiates in Surgery. 4. Candidates who, having completed the curriculum, shall have passed the previous examination of any of the Licensing Corporations in the United Kingdom.

Under this last regulation gentlemen who have passed the first portion of the examination for the Licence of the Royal College of Surgeons of Ireland or the Royal College of Surgeons of England are exempted from the first part of the examination.

Candidates who have been five years in practice are not required to undergo the written portion of the examination.

REGULATIONS RELATIVE TO THE DIPLOMA IN MIDWIFERY.

Examinations for the Diploma in Midwifery are held on the day after the Licence in Medicine.

Candidates not being Licentiates will be admitted on the following qualifications:—The Degree or Licence in Medicine or Surgery, with a Certificate of six months' Lectures on Midwifery, with six months at a recognized lying-in Hospital, or of having attended Practical Midwifery for six months at a recognized lying-in Hospital, or other evidence of having attended Practical Midwifery.

FEES FOR LICENCE AND EXAMINATIONS.

The Fee for the Licence is £15 15s.

The Fee for the Midwifery Diploma is £3 3s.

The Fee for the Licence in Medicine and Diploma in Midwifery, if taken out within one month, £16.

Further information and blank schedules may be obtained by application personally, or by letter, to the Registrar, College of Physicians, Kildare street, Dublin.

THE APOTHECARIES' HALL OF IRELAND.

REGULATIONS REGARDING THE LICENCE.

EVERY candidate is required to undergo a preliminary and a professional examination.

THE PRELIMINARY EDUCATION AND EXAMINATION

Include—1. English; 2. Mathematics; 3. French; 4. Latin; 5. Greek; 6. Natural Philosophy; 7. Natural History.

A preliminary examination will be held at the Hall four times in the year—viz., on the third Friday in the months of January, April, July, and October, at two o'clock P.M. This examination will be conducted by printed papers and written answers, and conducted by graduates in Arts of the University of Dublin, with assessors from the Court of the Hall.

Unsuccessful candidates will not be re-admitted to examination until after six months.

Certificates in Arts granted by any of the bodies named in the Medical Act, or by any educational institution approved of by the Medical Council, will be recognized.

The Apothecaries Company of Ireland was incorporated as the Pharmaceutical Licensing Body of Ireland. It practically abrogated that function some years ago by converting its Licence into a Medical Diploma. As no more than twenty persons out of the whole number qualified last year in Ireland took the L. A. H., and as it is expected that the Pharmacy Act of England will be shortly extended to Ireland, and the Examination in Pharmacy placed in the hands of the Pharmaceutical Society, we do not consider it necessary to occupy our space at length with the official regulations of the Apothecaries' Hall.

Every candidate must produce certificates:—1. Of having passed an examination in Arts previous to professional study. 2. Of being twenty-one years of age, and of good moral character. 3. Of apprenticeship to a qualified apothecary, or of having been engaged at practical pharmacy with an apothecary for three years subsequent to having passed the examination in Arts. 4. Of having spent four years in professional study. 5. Of having attended the following courses—viz.:—Chemistry, one winter session; Anatomy and Physiology, two winter sessions; Demonstrations and Dissections, two winter sessions; Botany and Natural History, one summer session; Materia Medica and Therapeutics, one summer session; Practical Chemistry, three months; Principles and Practice of Medicine, one winter session; Practical Midwifery at a recognised hospital (attendance upon twenty cases); Surgery, one winter session; Medical Jurisprudence, one summer session; Instruction in the Practice of Vaccination. Of having attended at a recognised hospital the Practice of Medicine and Clinical Lectures during two winter and two summer sessions; also the Practice of Surgery and Clinical Lectures, one winter and one summer session. 7. Of having performed vaccination under a recognised vaccinator.

CERTIFICATE OF ASSISTANT.

The Licence Examination is divided into two parts:—First, Chemistry, Botany, Anatomy, Physiology, Materia Medica, and Pharmacy. Second—Medicine, Surgery, Pathology, Midwifery, Forensic Medicine, and Hygiene. The First Part may be undergone after the second Winter and after the Candidate has attended Courses on the subjects named for this Examination; and the Second after the completion of his studies.

A candidate for the certificate of assistant to an apothecary must have completed at least three years of his apprenticeship, or have a certificate from an apothecary of having been engaged at practical pharmacy for three years, together with a certificate of good moral character.

The examination of the intended assistant will be restricted to the British Pharmacopœia and to Pharmacy, scientific and practical, including the history and character of medicines, their preparations, combination, and doses, and the translation of Latin prescriptions.

THE PROFESSIONAL EXAMINATION.

The Professional Examinations will be held quarterly, and will commence on the first and second Mondays in the months of January, April, July, and October. They will be carried on as follows:—The First Part, for Junior Students, by papers, on the first Monday, at twelve o'clock, noon; and orally, on the Tuesday and Wednesday succeeding, at the same hour. The Second Part, or Pass Examination for Senior Students, by papers, on the second Monday, at twelve o'clock, noon; and orally, on the Tuesday and Wednesday succeeding, at the same hour.

Candidates who fail to pass the first part of the professional examination will be remitted to their studies for *three months*.

Numerical values will be assigned to the Answers both written and oral, in the several Examinations, and only candidates who possess a certain proficiency of Medical knowledge in *all* the subjects will obtain "*the licence to practice.*"

Unsuccessful candidates at the Pass Examination will not be re-admitted until after the expiration of *six months.*

Doctors of Medicine of any University, or Surgeons of any College of Surgeons, who have served an Apprenticeship, or the required term at *practical* Pharmacy, to a qualified Apothecary, may obtain the Licence by undergoing one day's Examination—the former in Pharmacy and the latter in Medicine and Pharmacy.

Candidates for the *Licence* must lodge their Testimonials and enrol their names and address with the Clerk at the Hall, in Dublin, a week prior to the examination.

See the advertisement in another part of our issue.

Irish Hospitals and Schools of Medicine.

SCHOOL OF PHYSIC, UNIVERSITY OF DUBLIN.

This School was established by Act of Parliament 40 George III., and is under the joint government of the Board of Trinity College and the King and Queen's College of Physicians.

Institutes of Medicine, Professor Law. Materia Medica and Pharmacy, Professor A. Smith. Surgery, Professor R. Smith. Anatomy and Chirurgery, Professor MacDowel.

Its Medical School is at Trinity College, where a spacious dissecting-room has recently been erected. Information as to the Medical Scholarships and Exhibitions in this School will be found amongst the regulations of the University of Dublin.

For further particulars see advertisement.

SCHOOL OF SURGERY, ROYAL COLLEGE OF SURGEONS.

This School is under the superintendence of the Council of the College, who appoint the professors. The Introductory Address will be given on the first Monday in November. The Professor of Physiology will commence his course with a series of twelve lectures on Comparative Anatomy—free to the public. The dissecting-rooms have been recently much enlarged. Arrangements have been made to give increased facilities for instruction in Operative Surgery and Chemical Analysis. Prizes in Anatomy and Physiology, and Surgery, will be awarded at the end of the Winter Session. The Junior Surgical Society meets fortnightly in the school, and several prizes have been offered for the best essays read during the Session.

For further particulars see advertisement.

THE LEDWICH SCHOOL OF MEDICINE, PETER STREET.

This School, claiming priority of foundation before any of its kindred unchartered institutions were projected, was established in 1810 by J. Kirby, and has, since then, under the energetic administration of the Messrs. Ledwich and Dr. Mason, maintained a very high prestige as an educational institution. It is situated next door to the Adelaide Hospital in Peter street, about five minutes' walk from the Meath Hospital, Royal College of Surgeons, and Mercers' Hospital, and the Coombe Lying-in Hospital, and ten minutes from the Catholic University School, the University and the City of Dublin Hospital. The hospital in most immediate connexion with it is Mercer's.

For further particulars see advertisement.

STEEVENS' HOSPITAL SCHOOL.

This hospital is conducted on the plan of the London Hospital Schools, combining, in one establishment, all the departments of medical education. Situated in the centre of a district occupied by some of the largest manufacturing concerns, its beds are constantly filled with accidents of a serious nature. Immediately adjoining is St. Patrick's (Swift's) Asylum for the Insane, Dr. Croker, consulting physician, being one of the medical attendants. All morbid specimens are most carefully examined and preserved by the curator, who is an officer regularly appointed and paid by the Board of Governors.

There is accommodation for residence of seven surgical and four medical residents; besides whom the Resident-Surgeon receives house pupils. The fees payable for the privilege of residence are 21 guineas, winter; 15 guineas, summer six months; including hospital ticket; students have apartments, coal, gas, and furniture.

Accommodation outside the hospital, in the neighbourhood, is arranged by the hospital authorities.

PRIZES.

3 Cusack Medical and Exhibition, of 8*l*, 5*l*, 3*l*; 2 Midwifery Assistants, 30*l* each; 1 Medical Clinical Prize, 10*l* 10s; 1 Surgical Prize, 10*l* 10s.

The session opens with the distribution of prizes in the first week in November.

For further particulars see advertisement.

THE CARMICHAEL SCHOOL OF MEDICINE.

The various lectures are now delivered, and the dissections carried on in the new building, which the munificence of the late Surgeon Carmichael has given to the proprietors. As the building was designed with special reference to the requirements of a large medical class, every convenience is afforded to the student in the prosecution of his studies.

The proximity of this School with the House of Industry Hospitals, and its connections with these institutions as well as with the Mater Misericordiæ, Meath, and Jervis street Hospitals, through its teachers, ensures equal opportunities to the pupils of becoming thoroughly acquainted with the more immediately practical part of their profession.

Arrangements have now been completed for rendering more available the Carmichael premium bequest, which will henceforth enable the proprietors to distribute prizes to the amount of 60*l*. yearly; and the Scholarship, value 15*l*. yearly, which the friends of the late Dr. Mayne have founded in his name, will be allotted at the termination of the Winter Session.

For further particulars see advertisement.

THE CITY OF DUBLIN HOSPITAL.

This hospital is situated in Upper Baggot street, about ten minutes' walk from the Royal College of Surgeons and the Medical School of Trinity College, and twelve from the Ledwich Schools and the School of the Catholic University. Physicians and surgeons are, with two exceptions, either Professors or Demonstrators in the School of the Royal College of Surgeons in Ireland. The hospital contains 104 beds, and accommodates about 800 intern patients annually. There are special wards for ophthalmic and aural diseases (on which subjects a special course of lectures is delivered by Dr. Loftie Stoney), and for diseases of children. A new wing has been lately opened for the reception of fever and other infectious diseases. The "Purser" Studentship of 20*l*. per annum (with apartments) is obtainable by competitive examinations by all students, and a special certificate is granted. The fees for hospital attendance are—nine months, 8*l*. 8s.; six months, 6*l*. 6s.; summer three months, 3*l*. 3s. Perpetual, 21*l*.

A special course of lectures on ophthalmic surgery is now required for the surgical qualifications of the University of Dublin.

For further particulars see advertisement.

THE MEATH HOSPITAL AND COUNTY DUBLIN INFIRMARY.

This hospital is situated about a quarter of an hour's walk from the University, and within a few minutes of the College of Surgeons and the Ledwich Schools of Medicine; affords every facility for the treatment and study of disease. Its salubrious position and long-established character call for constant admission to its accident, chronic, fever, surgical, and children's wards, which are thus constantly occupied with cases illustrative of medicine and surgery.

Four prizes will be given at the termination of the winter course to the best answerers in their respective classes.

The office of resident pupil is open to pupils as well as apprentices.

For further particulars see advertisement.

ST. VINCENT'S HOSPITAL.

This hospital was established in 1834 by the Sisters of Charity, some of whom had studied the system of the Parisian hospitals, after which it was modelled. The ward for "*Enfans Malades*" is an interesting feature. The hospital has over a hundred beds constantly full, and each sister has charge of about twelve patients. In connection with it a Convalescent Home was established two years since at Stillorgan, the greatest benefit in the way of rapid recoveries and convalescence after acute attack has followed. These institutions are wholly supported by voluntary contributions. The clinical instruction in medicine and surgery is given by Dr. Quinlan, Dr. Mapother, Mr. O'Leary, and Dr. Cryan. Prizes are awarded at the end of the winter session.

For further particulars see advertisement.

THE ADELAIDE HOSPITAL

Is in Peter-street, next door to the Ledwich School. From the 1st of October, the physicians and surgeons will visit the wards, and give instruction at the bed-side, at the advertised hours, and the course of clinical lectures will be commenced in the beginning of November.

For further particulars see advertisement.

SIR PATRICK DUN'S HOSPITAL,

Founded on the endowment of Sir P. Dun. and for many years receiving nothing but purely medical cases, has been lately reconstituted as a Medico-Chirurgical Hospital. It is in immediate connection with the School of Physic, and its physicians and surgeons are all professors in that School. The University requires nine months' attendance at this hospital from candidates for the M.B.

Hospital fee for twelve months, including nine months' clinical lectures, nine guineas.

For further particulars see advertisement.

MERCER'S HOSPITAL.

Is situated within a few minute's walk of the Royal College of Surgeons, Ledwich School, Trinity College, and Catholic University School.

Wards for the reception of fever and contagious diseases are now open, in addition to the previous accommodation of the hospital.

Terms of Attendance.—Six months, six guineas; nine months, eight guineas; perpetual pupils, 21*l.*

For further particulars see advertisement.

JERVIS-STREET HOSPITAL.

This hospital is situated in the neighbourhood of the Carmichael and Catholic University Schools, and in a part of the city not otherwise provided with hospital relief.

For further particulars see advertisement.

ROTUNDO LYING-IN HOSPITAL.

This well-known institution is the largest and oldest maternity hospital in the United Kingdom, and the repute in which it is held attracts students from all parts of the world. It accommodates an average of 1,700 intern patients, including those admitted to the chronic wards labouring under the various forms of uterine complaints, and is under the care of the Master, who is elected every seven years, and two assistants, who hold these appointments for three years. The mastership is at present held by Dr. Johnston, and the assistants are Dr. Thomas More Madden, and Dr. Alexander Taylor. There is, in addition, an external maternity department, where patients, procuring a ticket properly signed, can be attended at their own homes; also, a dispensary is held every morning for diseases of women and children. Clinical instruction is given each morning both in the labour as well as in the chronic wards, and two courses of lectures are delivered in the year, which are recognized by all the licensing bodies.

A student entering for the practice of the hospital pays a fee of 10*l.* 10s. for six months. During that time he is required to attend at least thirty cases, either within the walls of the hospital or at the residence of patients who may apply for assistance. For this course of study, on examination, a diploma is given, which is received as a qualification in midwifery in the public services.

A limited number of students is admitted to reside in the hospital, for which they pay a fee of 20 guineas for six months.

COOMBE LYING-IN HOSPITAL.

This hospital was founded in 1826, but it was not till 1867 that it was incorporated by Royal Charter, which enables its medical officers to issue diplomas qualifying the holders to practise midwifery. By a clause in the charter the diplomas issued antecedent to its date have been made of equal force and value with those issued subsequent thereto. This hospital divides with the Rotundo almost the entire of the obstetric hospital practice of Dublin. It is situated in the centre of a district densely populated by the lower orders, and thus affords the amplest opportunities for practice. It accommodates about 600 labour cases within its walls, while those attended as externs amount to nearly double that number. Moreover, the chronic ward for the reception of cases of the diseases of females, gives admission to about eighty patients annually. Its wards are in the charge of Dr. Ringland and Dr. Sawyer, as masters, and Dr. Roe, as assistant master, whilst the chronic ward for the diseases of females is under the charge of Dr. Kidd, the obstetric surgeon of the institution. The fee for attendance is 4*l.* 4s for six months as extern, and 10*l.* 10s as as intern pupil. During that period the student attends on a given night in each week, or oftener, if circumstances permit, and takes charge in his turn of any cases that may be admitted to the labour wards, or may call for his assistance outside. In difficult cases he has the superintendence of the resident medical officer, and of the masters when necessary. An annual examination is held in May and November, at which prizes of considerable amount are awarded, and certificates of good answering granted. Two paid resident pupil midwifery assistantships are obtainable annually by competitive examination, for which all pupils who have obtained their midwifery diploma are eligible.

For further particulars see advertisement.

Provincial Colleges of Ireland.

QUEEN'S COLLEGE, BELFAST.

The first Matriculation Examination will commence in October. There will be additional Matriculation Examinations on the 14th November for those who have not been able to present themselves at the first. Lectures will commence on 1st November. No student can be permitted to enter after the 14th November. Two junior scholarships, value £25 each, are awarded to matriculated students commencing the first year of their study. The examination for these will take place immediately after the first Matriculation Examination. Two of similar value to students of the second year, two to students of the third year, and two to students of the fourth year.

For subjects of examination and other information see Queen's College Calendar for 1865. At the termination of the session, prizes will be awarded for proficiency in the several classes.

The trustees of the "Charters' Educational Fund" grant annually, for ten years, a sum of £50, for the purpose of establishing an exhibition in connection with the Belfast School of Medicine. The competitive examination for this exhibition will be held at the end of the session, at which all medical students can compete.

Fees.—Practical chemistry, 3*l.* Anatomy and physiology, first coursy, 3*l.*; subsequent course, 2*l.* Anatomical demonstrations and practical anatomy, each course, 3*l.*; for subjects each session, 15s. Other medical lectures, first course, 2*l.*; each subsequent course, 1*l.*

BELFAST GENERAL DISPENSARY.

This institution is the only hospital for the reception of injuries and surgical diseases in Belfast, and contains 150 beds.

For further particulars see advertisement.

QUEEN'S COLLEGE, CORK.

MEDICAL SCHOLARSHIPS.

First year.—One to the candidate who shall have most distinguished himself at the examination for science scholarships of the first year in Arts, and one to the candidate who shall have most distinguished himself at the examination for literary scholarships of the first year in Arts. Candidates for these scholarships shall have previously declared themselves, and have matriculated as medical students.

Subjects for the second year—Anatomy and physiology, chemistry, general physics, zoology and botany, the French language.

Subjects for third year—Anatomy and physiology, practical anatomy, materia medica, practical chemistry.

Subjects for fourth year—Anatomy and physiology, practical anatomy, therapeutics, pathology and morbid anatomy, surgery, midwifery.

The fees, whether matriculated or non-matriculated for attendance on lectures, are 1*l.* for each course, when attended for the first time, and 1*l.* for each re-attendance on the same; except that the fee for anatomy and physiology shall be 3*l.* when attended for the first time, and 2*l.* for every subsequent attendance; and that for practical anatomy or practical chemistry shall be 3*l.* for each attendance.

For further particulars see advertisement.

QUEEN'S COLLEGE, GALWAY.

FACULTY OF MEDICINE.

The College Session.

The College Session is divided into three terms. The first term commences October 19th.

Matriculation.

The Matriculation Examination is held at the commencement of the first term; but additional examinations are held before the close of the term. The last Matriculation Examination is held on the 16th November. Each candidate before being admitted to examination must pay a fee of ten shillings, which will be returned to such as fail to pass.

Attendance on Lectures.

All students shall pay the College fee, and a moiety of their class fees, and enter their names with the Registrar, before they are admitted to the classes of the several Professors. No student shall have his name replaced on the rolls at the second term who has not paid the second moiety of his class fees. No student shall be regarded as having kept a course of lectures who has not attended two-thirds of the entire number.

Examinations.

A Sessional Examination is held at the close of each session in the subjects of lectures. There is also a Supplementary Examination on the same subjects at the commencement of the following session.

Scholarships.

Eight junior scholarships, of the value of 25*l.* each, are awarded to students pursuing the course for the degree of M.D. The examinations for junior scholarships are held at the commencement of the first term. Junior scholars are exempted from one moiety of the class fees. The College is empowered to award exhibitions, varying in value from 10*l.* to 18*l.*, at the same examinations as the scholarships, and to be held upon the same terms.

For further particulars see advertisement.

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS, NORTH BRUNSWICK STREET, DUBLIN.

These Hospitals contain 312 beds; 110 for Surgical, 82 for Medical, 120 for Fever and other epidemic Diseases. The Truss Establishment, for the distribution of trusses to the ruptured poor of Ireland, is connected with these Hospitals. There is an extensive Pathological Museum, containing above 4,000 drawings, casts, and preparations, with the history of each case recorded. There is also a well-selected Medical and Surgical Lending Library. Two Clinical Lectures are delivered in each week, in addition to the usual Bed-side Clinical Instruction which is given daily by the Physicians and Surgeons. There will be a distinct Course of Lectures and Clinical Instruction on Fevers. A course of Practical Instruction in Ophthalmic Surgery, as required by the Board of Trinity College for Surgical Degrees, will be given. Surgical Operations are performed on Wednesday mornings only, except in cases of emergency. Eight resident Clinical Clerks and the Dressers are selected each half-year from among the best qualified of the pupils, without the payment of any additional fee. Eight *Interns* will be appointed on the 1st of November, and provided with furnished apartments, fuel, &c., &c. At the termination of the Session, premiums will be awarded in Clinical Medicine and Surgery. The Richmond Institution for the Insane, containing 1,000 beds, adjoins these Hospitals, affording every facility for the study of mental diseases. The Carmichael School of Medicine, in which all the Courses of Lectures required by the different Colleges are delivered is in the immediate vicinity of these Hospitals; the student is thus furnished with every facility for completing his professional education.

RELATIVE COST OF MEDICAL EDUCATION IN IRELAND.

University of Dublin, M.B. and M.Ch.

	£	s.	d.
I. Lectures	49	12	0
II. Hospitals	33	12	0
III. Degrees	32	0	0
	115	4	0
Expense of Degree in Arts	83	4	0
Total	£198	8	0

Queen's University M.D. and M.Ch.

If two years' Lectures and Hospital be taken in Dublin, about	£67	0	0

Colleges of Surgeons and Physicians.

About	£140	0	0

On these terms a reduction may be made by cash payments to Hospital and College at the commencement of study.

Scottish Institutions.

We now turn to the various bodies in Scotland. First, as to the Universities.

University of Edinburgh.—This is a teaching as well as a qualifying body, and the other faculties are as complete as that of medicine. The University confers the degree of M.D., and M.B., as well as that of C.M., and so affords its graduates the opportunity of obtaining, at the same time, a Surgical, in addition to the Medical diploma. The C.M. is not conferred on any one who does not take at the same time the M.B. For the degrees of M.B. and C.M., four years of professional study must be completed after passing a preliminary examination recognized by the Medical Council. A degree in Arts in any British University exempts from the preliminary examination. Of these four years, one must be passed in the University of Edinburgh, and one other either in that or some other University entitled to confer the degree of M.D.

The University recognizes the courses of lectures of extra-academical teachers in Edinburgh, subject to certain regulations.

University of St. Andrew's.—This University confers the Degree of Master in Surgery (C.M.), as well as the Degrees of Bachelor and Doctor of Medicine. For many years the University did not require residence, and large numbers of medical men resorted to it in order to obtain the Doctorship by examination only. In this the University closely assimilated itself to the University of London, which is exclusively an examining body. The large number of practitioners who obtained the Degree after an examination extending over three or four days, attests the wisdom of a policy which was almost reversed by the University Commissioners. Only ten persons per annum can now obtain the St. Andrew's Degree without residence. There are not a few of the old graduates who look upon this policy as retrograde and illiberal. The University of London maintains its position without requiring academical residence, and no one can doubt that the University of St. Andrew's might have pursued the same course with great success, and by so doing conferred a benefit on the profession. Those who have not now fulfilled their course in a University must either go to the University of London or forego a degree. The London University compels matriculation before commencing Hospital study. Only a relaxation of this rule can secure to all who desire it the opportunity of being examined for a degree.

University of Aberdeen.—This is a large teaching body, as well as one entitled to confer degrees in all the faculties. The curriculum required for medical degrees is the same as that of the University of Edinburgh. Thus four years of professional study, after passing a preliminary examination, is essential. One year must be passed at Aberdeen. The lectures qualifying for this and other examining bodies are delivered by the Professors in the University.

University of Glasgow.—This is a large teaching as well as examining body. The same degrees are conferred as in the Universities of Edinburgh and St. Andrew's. The course of study and regulations to be served by candidates are the same as those of the University of Edinburgh, one year's compulsory residence at the University of Glasgow being required instead of at Edinburgh. The examinations are conducted by the Professors of Medicine, together with the three Assessors appointed by the University Court. The fees for degrees in all four of the Scottish Universities are uniform—viz.: M.B., 15*l.* 15s. (being 5*l.* 5s. at each of the three examinations); C.M., 5*l.* 2s. (in addition to the fees for M.B.); M.D, 5*l.* 5s. (in addition to the fees for M.B.); and 10*l.* 3s. for Government stamp. The lectures qualifying for the degrees are delivered by the Professors in the University, and the hospital practice is attended at the Glasgow Royal Infirmary.

Now as to the Corporations.

Royal College of Physicians of Edinburgh.—This, like its London sister, is exclusively a licensing body, though, since the arrangement for the double qualification has been carried out, it may possess some additional control over the teaching at Surgeons' Hall. By this arrangement students who have fulfilled the prescribed curriculum may pass the joint examination of this College and the Royal College of Surgeons, and obtain the two diplomas. They can thus at once register both a medical and surgical qualification.

THE FELLOWSHIP.

This is conferred only by election, and no one can be balloted for until he has been a member for one year.

THE MEMBERSHIP

Is conferred on licentiates of a College of Physicians, or graduates of a University, who are 24 years of age, and satisfy the College of their knowledge of medical and general science.

THE LICENCE.

The regulations are the same as those for the joint examination for the Scotch Double Qualification, with the following exceptions:—Anatomy, Practical Anatomy, and Surgery, six months; Clinical Surgery, three months.

Candidates for the Licence of the College who already possess a qualification from a recognised licensing body, or who have passed the first Professional Examination before a qualifying body, will not be required to be re-examined in Anatomy, Physiology, and Chemistry.

The following are the Fees, payable in all cases in advance:—

By a Licentiate, Ten Guineas. By a Member, Thirty Guineas.

When a Licentiate shall be raised to the rank of Member, Twenty Guineas.

Royal College of Surgeons of Edinburgh.—The Fellowship is conferred only on persons who have obtained a diploma from this or one of the Colleges of Surgeons of England or Ireland, or the Faculty of Physicians and Surgeons of Glasgow, and who are 25 years of age. At the election, three-fourths of the votes are required to be in the candidate's favour, and he has to maintain the privileges of the College and obey its laws. Fellows are forbidden to keep open shops, to be connected with secret remedies, or to suffer their names to be used in indelicate advertisements or publications.

THE LICENCE.

The regulations are the same as those for the Joint Examinations, conducted by the Colleges of Physicians and Surgeons, with the following exceptions:—Botany is not required. A second course of Medicine is not required.

The first Professional Examination embraces Anatomy, Physiology, and Chemistry. The second, Surgery and Surgical Anatomy, also Medicine, Midwifery, Materia Medica, Medical Jurisprudence, and Clinical Surgery.

Registered medical practitioners, whose degree or licence in Medicine dates prior to October 1st, 1861, are exempt from the first Professional Examination.

Fee for the diploma, £10.

Faculty of Physicians and Surgeons of Glasgow.—This body has similar powers to those of the Royal College of Surgeons of Edinburgh, and its regulations for Licence and Fellowship are similar. It has also the same arrangement with the Edinburgh College of Physicians for a double diploma.

The Scotch Double Qualification.—As already stated, the Royal College of Physicians of Edinburgh have made arrangements with the Royal College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, by which, after one series of examinations, the successful candidate receives two diplomas, and is thus able to register a medical and a surgical qualification under the Medical Act, thus:—

Lic. Roy. Coll. of Phys. Ed., and Lic. R. C. S. Edin., or Lic. R. Coll. of Phys. Ed., and L. Fac. Phys. and Surg. Glas., as the case may be.

The principle on which the joint examinations are conducted is a simple compromise by which the College of Physicians takes exclusive charge of the examination in medicine; the College of Surgeons or the Glasgow Faculty, as the case may be, of the examination in surgery; while the examination in subjects common to both medicine and surgery is conducted by a Board, in which each of the bodies is represented.

It is proper to state that such arrangements as those were contemplated by the Medical Act and authorised by Section XIX., while those under consideration were sanctioned by the Medical Council on the 7th August, 1859.

Candidates for the double qualification having fulfilled the prescribed curriculum are subjected to two profes-

sional examinations. The preliminary examination for future students must be passed before commencing professional study, and in other respects be in accordance with the recommendations of the Medical Council.

Anderson's University, Glasgow.—This is exclusively a teaching body. It offers excellent opportunities for acquiring a complete medical education, and the expenses are very much below those of any other institution. The fame of Glasgow as a place for clinical instruction has long been known, and this school affords the means of dissection, and the pursuit of other practical knowledge throughout the year. Hospital practice at the Glasgow Royal Infirmary. Every information will be given on application to Dr. McCall Anderson, 1 Woodside crescent, Glasgow, both as to the University, the Hospital, and Diploma.

THE GENERAL MEDICAL COUNCIL.

To this body is entrusted the supervision of medical education, and it has made a number of recommendations, the majority of which have been accepted by all the Examining Bodies, and are, consequently, found in their regulations. The student has, therefore, nothing to do with the Council, except that he must take care to be duly registered as a student of medicine, at the commencement of his career, at the office, Soho Square.

MEDICAL REGISTRATION.

All duly qualified Physicians, Surgeons, Medical Graduates, and Apothecaries, are required by the Medical Act 21 and 22 Vic. c. 90, to be registered before they can hold any public medical or surgical appointment, or issue valid medical certificates.

The Medical Registration of any Practitioner may be effected, on application, in writing (according to a form to be had at the Office, 35 Dawson street, Dublin) and producing, or transmitting with such requisition the *Diplomas* to be registered, and also paying or remitting the fee which is regulated by the Medical Council, viz., £5 for first registration, and 5s. for every qualification which may be subsequently added. Drafts on Banks, and Post-office orders, to be drawn in favour of W. E. Steele, M.D., Registrar, Dublin.

Medical Students who have passed a preliminary *Arts Examination* are required by the Medical Council to be registered. In order to effect this each student should apply according to a form (to be had on application as above), accompanied by a certificate of his having passed such examination, same to be lodged with the Registrar (W. E. Steele, M.D.) who will thereupon enter the name in the Students' Register, and issue a certificate to that effect. *No fee* is required from *Medical Students* for *their* registration.

Public Services.

ARMY MEDICAL SERVICE.

The appointment of assistant-surgeon in the Army is open to all who can prove their claim to it by superior answering. The competitive examinations are held at Chelsea, usually in the first weeks of February and August. The candidate is not required to produce any other qualification before presenting himself for examination than his licences to practise and certificate of registration.

Having received his diplomas in surgery and medicine, both of which are essential to his competition, the student is obliged to apply himself vigorously to the study of certain collateral subjects, which he does usually through the medium of a "grinder." He must perfect himself in chemistry, pathology, and comparative anatomy, and if he can throw a proficiency in botany and natural history into the scale, he will materially improve his position in the scale of merit, and establish for himself a character with the authorities for industry and scientific attainments.

The assistant-surgeon is subjected to three separate examinations within the first ten years of his service, each examination having a definite object—the first, to ascertain, previous to his admission into the service as a candidate, his scientific and professional education, and to test his acquirements in the various branches of professional knowledge; the second, after having passed through a course of special instruction in the Army Medical School, to test his knowledge of the special duties of an army medical officer; and the third, previous to his promotion, to ascertain that he has kept pace with the progress of medical science.

The candidate having sent in his papers, and followed them to London, meets his competitors at Chelsea.

For the first two days of his examination he is employed in penning answers to printed questions; for the third and fourth days he is examined *vivâ voce* on all subjects; and on the fifth and sixth days he is tested by the diagnosis of disease at the bedside in the hospital, by the application of surgical apparatus, and by operations on the dead subject. This trial finished, the successful candidates (varying in number from fifteen to thirty) are selected.

SERVICE ON THE WEST COAST OF AFRICA.

A certain number of candidates, whose answering has been satisfactory, but not sufficiently so to entitle them to a place, are offered appointments on the West Coast of Africa. These situations, while they are subject to strong objection on the score of the deleterious nature of the climate, possess some advantages for those whose health can resist its influence. The districts comprised under the West Coast districts are Sierra Leone, Gambia, and Cape Coast Castle. If the candidate accepts the appointment he is sent out at once, without the period of probation to which others are subjected at Netley Hospital. He is allowed to spend a year at home, on full pay, for every year spent in Africa, and the entire period at home and abroad counts as service for pension. The promotion is sometimes rapid, owing to the dangerous nature of the climate; and we have known the rank of full surgeon reached in five years from the date of appointment as assistant-surgeon.

PROBATION AT NETLEY HOSPITAL.

The competitor who has been so fortunate as to obtain a place in the ordinary service is not allowed to join a regiment at once. He is obliged to undergo a probation of four months at Netley Hospital, near Southampton, where he is compelled to attend the following lectures—viz.: Hygiene, by Dr. Parkes; Pathology, by Dr. Aitken; Military Surgery, by Dr. Longmore; and Tropical Diseases, by Dr. Maclean. The lectures on Military Surgery include gunshot and other wounds; arrangements for the transport of wounded; duties of Army Surgeons in the field, during sieges, on transport, &c.; and other special subjects. Those on Military Medicine refer to the tropical and other diseases of the British possessions and colonies, and to the losses by disease. The lectures on Hygiene relate to the examination of water, air, food, clothing, &c., of the soldier; his duties and exercise, and the circumstances affecting his health, meteorology, statistics, and prevention of disease. The lectures on Pathology have reference chiefly to the scientific examination of tropical diseases, and of the other complaints which the Army Surgeon is especially called on to investigate. The candidates also attend the wards of the hospital under the Professors of Medicine and Surgery, to make

themselves acquainted with the system of recruiting, and the modes of keeping the Army Medical Returns. They are also called on to make *post-mortem* examinations, to operate on the dead body, and pass through laboratory practice on the modes of recognizing the qualities and adulterations of food, and on microscopic examination of morbid tissues and adulterations of food, &c. During his preliminary training here the student is understood to be in Her Majesty's service; he wears uniform, is under military discipline, and receives pay at the rate of five shillings per day, and two shillings per day for lodging money, if he be not provided with lodgings in the hospital. A sum of money equal to the half-yearly interest on £1,200, the surplus from the "Herbert Memorial," is at the end of each session awarded to the candidate who has the highest number of marks; the fortunate young man who wins this "Blue Ribbon of Netley" being tolerably certain to be well provided for. At the termination of the four months he is again examined in the subjects in which he has been instructed during that period, his marks are added to those obtained by him at the Competitive Examination, and his position on the list of merit determined by the total. Successful candidates are now eligible to be gazetted to a regiment, or employed on the staff, and enjoy all the rank and honour, pay and privileges, of Assistant-Surgeons, as provided by the regulations.

Thus it will be observed that the first, or Chelsea examination, simply admits the candidate to the service, and the conjoined result of it and the Netley examination determines his order of merit.

THE PROMOTION EXAMINATION.

But there is still one other which *must* be passed before he is promoted to full Surgeoncy, and *may* be passed at any time after five years' service.

A series of printed questions will be sent by the Director-General to the principal medical officers of stations where Assistant-Surgeons may be serving, who will deliver these sealed questions to the Assistant-Surgeons, and to see that they are answered without the assistance of books, notes, or communication with any other person. The answers are to be signed, and delivered sealed to the principal medical officer, who is to send them, unopened, to the Director-General, together with a certificate from the Surgeon of the Regiment, or other superior medical Officer, that the Assistant-Surgeon has availed himself of every opportunity of practising surgical operations on the dead body.

The Assistant-Surgeon will also be required to transmit a Medico-Topographical account of the station where he may happen to be, or of some other station where he may have been resident, or else a Medico-Statistical report of his regiment for twelve months.

If the Examining Board and the Director-General are satisfied with the certificates and answers, and with the report, the Assistant-Surgeon will be held qualified for promotion.

NAVAL MEDICAL SERVICE.

In applying to be admitted as an assistant-surgeon in the Royal Navy it is merely required to address a letter to the Secretary of the Admiralty, stating that you are in possession of a diploma from such a College—naming it; that you are desirous of being admitted as a candidate; when, if there are any vacancies, you will be informed when you will be required to present yourself at Somerset House, London, for examination.

Having passed your examination, you will, in the course of the following day, receive your appointment as acting assistant-surgeon to one of Her Majesty's ships, either for service on board that ship, or for service on shore, at one of the naval hospitals—Haslar or Plymouth. You will at the same time be informed that you are granted two or three weeks, as you may require, leave of absence, to enable you to provide your uniform and appointments. These you can get at any of the naval outfitters.

The expense of an assistant-surgeon's uniform is about £47 5s. These are credit prices, but would, I presume, be considerably less for ready money, a thing, by-the-by, to which naval tailors are not much accustomed. You must also provide yourself with a set of surgical instruments, which will cost you from ten to fifteen guineas. All kinds of underclothing, towels, handkerchiefs, &c., may be purchased much more advantageously from a regular dealer in those things than from any naval outfitter.

ADVANCE OF PAY ON JOINING.

On joining your ship you will, if you wish it, be paid what is termed three months in advance, £30. Of course it is not all advance, as your pay will have been going on from the date of your appointment.

Every article of mess traps is now furnished by the Admiralty gratis. The same with your cabin furniture; every necessary article except bedding is supplied from the dockyards. An officer on joining his ship has, therefore, nothing more to pay than his mess subscription monthly. This varies in ships according to the station they are on, from £2 10s. to £3 10s. per month. This subscription does not include anything for wines or liquors of any kind. Whatever amount of these you may consume will be paid for by you separately, at the end of each month or quarter. But as all wines are permitted, by sanction of the Admiralty, to be shipped free of duty, you drink them so much cheaper on board than you could the same qualities of wine on shore. The monthly subscription, of say £3, with the Government allowance of £11 3s. 8d. per annum to each member in lieu of provisions, is generally found sufficient to meet all ordinary expenses of messing.

It is the custom in all wardroom messes to have an extra dinner on two days of the week—generally Monday and Thursday. The days so selected are styled "field-days." It is on these days that guests are invited to dine by the mess. The guests thus invited are called public guests, and such invitations entail no extra subscription from any one, except for the extra wine consumed. It is usual to invite the captain, and other superior officer that may be on board, once a week; the other public guests are so many of the junior officers of the ship; and, if in port, officers of the sister service, and other public functionaries. The captain, or admiral, if there be one on board, usually has two or three wardroom, and two or three gunroom officers, to dine with him on every other day of the week than that on which he dines in the wardroom. Any member of the wardroom mess inviting a private friend to dine with him on board, pays usually from 2s. 6d. to 3s. 6d. (according to the rule of the mess) for his friend's dinner, in addition to any extra expense for wine.

The foregoing are the whole of the ordinary and extraordinary expenses of messing in the wardrooms of Her Majesty's ships, and which should not, with drinking a reasonable quantity of wine, beer, &c., exceed fifty guineas per annum.

Officers in the Navy, wherever they may be serving, can remit, by the paymaster of the ship, without any expense, any portion, or the whole, of their pay that may be due to them on the last day of each quarter.

SERVANTS.

Assistant-surgeons are allowed only half a servant each; or, in other words, a servant between two of them.

These servants are entered on the ship's books with the rating of officer's servant. Their pay from the Admiralty is about £17 per annum and their provisions; and where they are well conducted, attentive lads, it is usual for each of their masters to give them 10s. a month, which makes their pay up to about £29 per annum.

The pay of naval medical officers has hitherto been the same as for their military brethren.

EXTRA PAY AND ALLOWANCES.

The following extra pay and allowances are paid to naval medical officers under the conditions stated below :—

	At Home.	Abroad.
Inspectors-General, in lieu of provisions for their servants, and of the ordinary allowance for provisions for themselves	£54	£130
Deputy Inspectors-Generals Staff-Surgeons and Surgeons, do. do. ..	£35	£112
Assistant-Surgeons, do. do. ..	£30	£108

Staff-surgeons, when serving in flag-ships on foreign stations, are allowed extra pay of five shillings per diem.

Staff-surgeons, surgeons, and assistant-surgeons, when serving in ships in which there is no accommodation for residing on board, as in drill ships for the Royal Naval Reserve, are allowed £50 per annum for lodgings, and one and sixpence per diem in addition in lieu of ship's rations.

Whenever medical officers are employed on extra duty, they are allowed such extra pay as it may appear to the Lords Commissioners of the Admiralty the nature of the service merits.

Medical officers, when travelling on the public service, are allowed on the home stations—in addition to all expenses of first class fare by rail or otherwise—for subsistence :—

	Special Service occupying 12 hours.	Ditto for every 24 hours.
Inspector-General and Deputy Inspectors-general	£0 12 0	£1 0 0
Staff-Surgeons and Surgeons ..	0 7 6	0 10 0
Assistant-Surgeons	0 6 0	0 7 6

PENSIONS OF MEDICAL OFFICERS.

Besides the half-pay awarded to medical officers, there are three good-service pensions of 10s. each per diem awarded to the three inspectors-general who have completed the longest and most meritorious services.

There is also one Greenwich Hospital pension of £80 per annum awarded to a deputy inspector-general.

There are fourteen other Greenwich Hospital pensions of £50 each per annum, awarded to those fourteen deputy inspectors-general, staff-surgeons, and surgeons who are considered by the Admiralty to be most deserving of them.

PROMOTIONS.

An assistant-surgeon having served three years may be examined as to his qualifications for promotion to the rank of surgeon. If he be serving abroad he may, if he wish it, be examined provisionally by an inspector or deputy inspector-general and three surgeons ; and as soon after his arrival in England as may be convenient for him to present himself at Somerset House, for his regular and final examination. To enable assistant-surgeons to pass this examination satisfactorily they are granted, on application, two months' leave of absence to prepare themselves for it. The use of passing the provisional examination abroad is, that the assitant-surgeon, having served five years, is then eligible for promotion into any vacancy that may occur, as acting surgeon.

If the vacancy occurring shall have been caused by the death of an officer of superior rank, this promotion as acting-surgeon will be confirmed as surgeon on passing the regular examination at Somerset House. If the vacancy has occurred from any other cause than that of death, the assistant-surgeon appointed to fill it, whether he may have passed only provisionally or finally, will be appointed only as acting-surgeon until the pleasure of the Admiralty be known, who may either confirm him in it, or supersede him by the appointment of a surgeon from half-pay.

Surgeons are promoted to the rank of staff-surgeons on twenty years' service, provided that ten years have been completed since passing for the rank of surgeon.

By an Admiralty regulation dated the 12th of July, 1867, promotion to staff-surgeon is to be open to officers for distinguished or special services, although they may not have completed twenty-years' service.

An officer may be promoted to the rank of inspector-general on the completion of thirteen years' service from the date of his entry into the Royal Navy.

PRIZE-MONEY.

Medical officers share in the proceeds of all prizes captured from the enemy, of captures and seizures under the several Acts of Parliament passed relating to the revenues of customs, and to trade and navigation, for the abolition of the slave trade, for the capture and destruction of pirates and piratical vessels; and of the rewards conferred for the same; as also in the awards of all salvage granted to the crews of Her Majesty's ships and vessels of war, with other officers of corresponding ranks.

POOR-LAW MEDICAL SERVICE.

A YOUNG qualified practitioner, indisposed to be an assistant, and desirous of commencing general practice without investing any money in purchasing a succession, may, perhaps, obtain a Poor-law appointment, though he should scarcely expect to obtain a livelihood from this inadequately remunerated employment.

ENGLISH POOR-LAW MEDICAL SERVICE.

Prior to the passing of the Metropolitan Poor Act of 1867, the English Poor-law Medical Service may be said to have been in the hands of the Guardians, supervised by the Poor-law Board. Each parish in England and Wales had its guardians of the poor, and these parishes were grouped together to form unions. The unions were divided into districts for medical relief. Union medical officers, therefore, have the care of a district, or sometimes the care of the workhouse of the union—sometimes of both. The officer was elected by the guardians, and the appointment approved by the Board. He was required to have both a medical and a surgical qualification. In some instances these were specified, but almost always the London College of Surgeons and Apothecaries' Hall were the two most favoured diplomas. For this reason London students will still continue to take these qualifications, whatever else they may add to them. But the L.R.C.P. Lond. is now recognised as a full qualification, both medical and surgical. These appointments are not lucrative. In most cases the salary is very low. They are, however, sought after by young men as a means of getting into practice, and are often almost obligatory in the country to prevent fresh opposition being introduced. The Metropolitan Poor-law Act, 1867, assimilates the Poor-law, so far as London is concerned, to that of Ireland, and it will probably shortly be extended to the country. It establishes in London asylums and dispensaries, and distributes the cost of supporting them over the metropolis. Unfortunately, the Act has not even yet come into full operation. The appointment of the medical officer will be made by the Dispensary Committee, but the Poor-law Board has power to modify many of the arrangements. The Poor-law Board is now a permanent body with increased powers, but since the Act so few improvements have been effected that the medical officers are very dissatisfied. A Superannuation Act, similar to that of Ireland, has been passed.

THE IRISH POOR-LAW SERVICE.

THE newly-qualified Medical Practitioner, who may elect to try his luck in the Irish provinces, sets his hopes, in the great majority of instances, upon obtaining one or more Poor-law Medical appointments in some district where there is hope of private practice. There are 163 workhouses and 793 Dispensary Medical Officers, besides apothecaries. The number of vacancies that occur annually average 100. The average salary in this service is £90 ; and when it is taken into consideration that, in the vast majority of rural districts, it is necessary to keep a horse, and in some a boat as well, the average area being from forty to sixty square miles, it is plain that there will not be a very large margin left from the public

emoluments. The Medical Officer will also have the refusal of the Registrarship of Births, Marriages, and Deaths, which office in country districts seldom yields more than £10 a year, and often not half that amount. Despite the miserable salary and the very many discomforts of a dispensary life, these appointments are generally eagerly sought for—firstly, because they afford the new comer a certain though hardly-earned salary to supplement his private earnings; and, secondly, because, if not secured by the new comer, they would of necessity bring a competitor for practice into the field, and inasmuch as private income is of far greater import than public earnings, country Medical practitioners are obliged to undertake the public duty in order to save to themselves the monopoly of their private emoluments.

APPOINTMENT.

The qualifications required by the Poor-law Commissioners are a licence in Surgery or a diploma in Medicine, and a diploma in Midwifery; the candidate must also be twenty-three years of age.

The appointment lies with the Dispensary Committee, who elect by vote. As politics and religious feeling run high in Ireland, these elements enter into the election of Poor-law Medical Officers. Family interest also possesses great weight.

The candidate will do well to bear these facts in mind, as his personal attendance on the day of election will be required. And whatever other qualification he may have, he will then find that his compatibility in these respects with the majority of the committee is essential. And, accordingly, he had better first make himself acquainted with the local peculiarity, whatever it may be, before he enters on his candidature, otherwise, in all probability, any expenditure that he may make in the matter will be simply thrown away. We may here observe, also, that in very many instances the appointment is virtually made before the advertisement appears for a Medical Officer, in which case also candidates are put to unnecessary trouble and expense under false pretences.

CONTROL.

Each district is under the direct control of a committee composed of the neighbouring landholders, the appointment of medical and other officers are made by this committee, and the entire management of the district is under their control. Their acts are, however, subject to the approval of the Poor-law Commissioners, who have the power either of interposing their veto on any appointment, or even of expelling an officer by a "sealed order," without trial or accusation, and without the resource of appeal or investigation. This salary is paid by the Board of Guardians, and no increase or decrease can be made in the amount without their assent and that of the Commissioners. Under the late Sanitary Act the committee may recompense the Medical Officer for special services, such as those during an epidemic of cholera, or for sanitary reports. The number of unions in Ireland is 163, to each of which is attached a Medical Officer, who is appointed and controlled by the Board of Guardians in the same manner as the Dispensary Surgeon is by his committee. The salary is usually better than that of the Dispensary Doctor, and the duties of a more easy and satisfactory description, inasmuch as the duty is confined to daily attendance at the Workhouse Hospital, and no night visits out of doors or any long journeys across the country are involved.

DUTIES.

The duty of the Dispensary Doctor is twofold. He is to attend his Dispensary on a given day or days in the week. Frequently there are two dispensaries in the district, separated from each other by several miles, and he will have, perhaps, to attend two days at each. He has also to visit at any hour of the day or night a sick person, for whose relief a visiting ticket has been issued by a member of the committee or by the relieving officer, and to continue his attendance as often as may be necessary until a termination of the case. Moreover, he has a great many registry books to keep, and a multitude of returns to make, and in the majority of districts he has to make up all the medicines for the poor.

The pressure of these duties is in the greatest duty dependent on the goodwill of the members of his committee. If the medical man be a favourite with his masters they will give him very little trouble with "scarlet runners," as the visiting tickets are humorously called, and will be unwilling to trouble him even with cases deserving of personal attendance.

If, on the other hand, it is his misfortune to come in contact with some of the half-bred committee-men, who know nothing of the treatment fit for an educated gentleman, or cherish a personal spite, the discharge of his duties may become simply unbearable. He may be peremptorily summoned, in any weather, at any hour, and to any distance, to a case which he may probably find to be altogether trivial, or to a person whom he may know to be perfectly well, able to pay—Aye! even the committeeman's own brother or daughter. The law unfortunately leaves the Poor-law Medical Officer no protection, and no alternative is open to him but to resign or endure insults and annoyances of the most galling description.

By a recent Act of Parliament Poor-law Medical Officers may now now receive a pension of *one-sixtieth of their salary for each year of service* on being incapacitated from illness or old age. This grant is strictly at the discretion of the guardians, nevertheless it has been given in about eighteen cases in the course of the first year of the operation of the Act.

THE MEDICAL ASSISTANT.

ALMOST every provincial general medical practitioner in England has his qualified or unqualified assistant, and the probationary service of the private practitioner himself is thus very frequently in this capacity. As may be presumed, the duties of the office are very various, and the relations between principal and assistant very complex, so much so as to demand a special volume for themselves, which, from the experienced pen of Mr. Langley, has, under the title of *Via Medica*, passed through several editions.

NOTICES TO CORRESPONDENTS.

Those Gentlemen who have so kindly forwarded us information and corrections, will please receive our best thanks.

RE-OPENING OF THE ARMY MEDICAL DEPARTMENT.—We learn on authority on which we have reliance, that the Competitive Examinations for Assistant-Surgeoncies in the Army, which have ceased for nearly two years, will be recommenced in November next. This will open another field for medical students.

A CONSTANT READER.—You will find a full description of the uses of hydrate of chloral in the letter of our Paris Correspondent, that appeared in the MEDICAL PRESS on the 9th of March last. Several original communications respecting chloral have also appeared in our Journal during the last few months. The manufacture is difficult, and for a practitioner impracticable.

APPOINTMENT OF QUEEN'S PHYSICIAN.—Dr. James Salmon, Inspector-General of Hospitals and Fleets, and the Chief of the Medical Department of Haslar Hospital, has been appointed to the vacant office of Physician to Her Majesty.

MR. BALFOUR BROWNE on "Feigned Insanity."—At an early date.

WE have in type—

Dr Waring-Curran on "Ischuria."

Dr. Bleloch on "Correlation of Forces."

Dr. Waring-Curran on "Fracture of the Pelvic Bones—Recovery."

H. M. Jones, M.D., on "Case of Melanotic Disease of Eye—Removal."

J. A. Waldenstrom on "Alteration in the Urine from the Use of Carbolic Acid."

John A. Bolton. M.D., of Leicester, on "Rheumatism and Gout."

Our Special Correspondents' Letters from Paris and other places.

Accepted articles by Drs. Thorowgood, Martin, Bains, and others, will appear as soon as possible.

DR. MOORE.—Your interesting translation has been received, and will be placed in the printer's hands at once.

THE SEWAGE QUESTION.—Our "Special Reports" will be continued in our next issue, and then from week to week.

Marriage.

MAPOTHER—TOBIN,—On September 7, at St. Mary's Cathedral, Halifax, Nova Scotia, by his Grace the Archbishop, Edward Dillon Mapother, M.D., Dublin, to Ellen, youngest daughter of the late John Tobin, Esq., M.P. for the city.

THE NATIONAL SOCIETY FOR AID TO THE SICK AND WOUNDED IN WAR.

President—H.R.H. the Prince of Wales, K.G., &c.

Chairman of Central Committee—Lieutenant-Colonel Loyd-Lindsay, V.C., M.P.

The Central Committee request that Local Committees will remit each Wednesday, to Messrs. Coutts and Co., the amount collected during the preceding week, advertising the names of Subscribers in the local Newspapers, and sending a copy of the same to the Secretary. It is also urgently requested, that they will have all Material of the same sort packed together, a list of contents written on each bale, and an invoice of the same sent to the Secretary every Saturday. The Stores to be retained by Local Committees until orders are given about them.

In future Subscriptions of less than £5 will not be advertised separately.

The Committee cannot receive contributions sent for the wounded of one billigerent army, but will expend everything as impartially as possible.

C. J. BURGESS, Secretary.

2 St. Martin's place, Trafalgar square, 7th September, 1870.

The Professional Calendar;

OR, WEEKLY REGISTER FOR GENTLEMEN REQUIRING ASSISTANTS, AND FOR ASSISTANTS SEEKING APPOINTMENTS.

EACH Announcement of Three Lines—about thirty words—will be charged at the nominal rate of ONE SHILLING *per insertion* (6d. *each additional line*).

As this Calendar *will be for the use of the Readers of this Journal, and from which no pecuniary advantage will accrue to the Proprietor, each Advertisement* MUST *be accompanied by Postage Stamps* (*Penny*) *in pre-payment.*

A University Graduate, M.B., and L.M., of energy and ability, and good experience, desires an Engagement as Assistant with an elderly Practitioner with a view to Partnership.—Address, Dr. C. P., at Dr Waring Curran's, Osman House, Sutton-in-Ashfield, Notts, for a month.

A duly qualified and registered Surgeon Wanted in an extensive manufacturing and Colliery Practice. Must not fear work.—Address, Chirurgeon, Alfreton, Derbyshire, to be called for.

A Gentleman who has served his apprenticeship to an apothecary, Wants a Situation in an English town where there is a Medical School, to dispense and keep books. Salary expected, £30 per annum, with board and residence.—Address, R. T. L., General Post-office, Belfast, Ireland.

Wanted, an unqualified Irish Assistant, to dispense and keep books. One who has attended a Dublin School of Medicine and could prescribe in absence of principal preferred. Terms £40 per annum in-door.—Address, M. D., Newchurch, near Manchester.

Wanted, a Locum Tenens, who must be qualified for the end of September and October.—Medicus, New Radford, Nottingham.

Wanted immediately, an In-door Dispensing Assistant in a Branch Practice in the Country, to visit (on foot), and attend ordinary midwifery occasionally. Situation light. Salary £30 per annum.—Address, stating age, to R. S. Surgeon, Post-office, Epperstone, near Southwell.

Wanted, by an M.B., C.M., registered, of considerable experience, an In- or Out-door appointment. Can ride or drive.—Address, M.D., 51 Preston place, Bradford, York.

Wanted, for a country practice, an experienced, steady, qualified, and active Assistant.—Address, by letter, Medicus, care of J. S. Moon, Esq., 75 Old Broad street, E.C., London.

Wanted, an Assistant, to dispense, and visit occasionally. Salary £40.—Address, T. T., General Apothecaries' Company, Berners street, Dublin.

Assistant Wanted, sine diploma, to visit, dispense, attend Midwifery, and keep books. Welsh indispensable. None need apply who cannot produce testimonials and good references from last employer.—Address, stating age, height, weight, and with carte, to Jas. R. Walker, Surgeon, Corwen, N. Wales.

To Medical Students.—Wanted, during the Winter Session, a Gentleman competent to prescribe and visit one day weekly—mornings, 9 to 1; evenings, 6 to 10.—Address, by letter only, stating terms, with any other information, to S. Durrant, Esq., 116 Green street, Victoria park, N.E.

Dispenser.—Situation Wanted by the Advertiser, as dispenser and book-keeper, in the early part of October. In- or Out-door. Can be well recommended by present employers.—Address, M., care of Messrs. Oldman and Holderness, Surgeons, Huntingdon.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, SEPTEMBER 21, 1870.

CONTENTS.

NOTES ON CURRENT TOPICS.

SCOTLAND.

SPECIAL CORRESPONDENCE.

CORRESPONDENCE.

MEDICAL NEWS.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

PROFESSOR HUXLEY, the President, delivered his address on Wednesday evening, 14th inst., at the Philharmonic Hall. This Hall is one of the largest and handsomest in the kingdom, and it was filled to suffocation. About half the audience were ladies. Professor Stokes, the Rajah of Kallipore, Earl of Derby, Sir Roderick Murchison, Professor Williamson, and many other savants too numerous to mention were present. Professor Huxley was received with great applause. He commenced by saying he would not attempt to give a panoramic survey of the world of science, but would endeavour to put before his audience the history of the rise and progress of a single biological doctrine.

THE ORIGIN OF LIFE.—The philosophers of antiquity, interrogated as to the cause of these phenomena, were provided with a ready and plausible answer. It did not enter their minds even to doubt that these low forms of life were generated in the matters in which they made their appearance. Lucretius, who had drunk deeper of the scientific spirit than any poet of ancient or modern times except Goethe, intends to speak as a philosopher, rather than as a poet, when he writes that "with good reason the earth has gotten the name mother, since all things are produced out of the earth. And many living creatues, even now, spring out of the earth, taking form by the rains and heat of the sun." The axiom of ancient science, "that the corruption of one thing is the birth of another," had its popular embodiment in the notion that a seed dies before the young plant springs from it; a belief so widespread and so fixed, that Saint Paul appeals to it in one of the most splendid outbursts of his fervid eloquence :—

"Thou fool, that which thou sowest is not quickened, except it die."

The proposition that life may, and does, proceed from that which has no life, then, was held alike by the philosophers, the poets, and the people, of the most enlightened nations, eighteen hundred years ago; and it remained the accepted doctrine of learned and unlearned Europe through the middle ages down even to the seventeenth century.

It is commonly counted among the many merits of our great countryman, Harvey, that he was the first to declare the opposition of fact to venerable authority in this, as in other matters; but I can discover no justification for this widespread notion. After careful search through the "Exercitations de Generatione," the most that appears clear to me is, that Harvey believed all animals and plants to spring from what he terms a "*primordium vegetale*," a phrase which may nowadays be rendered "a vegetative germ;" and this, he says, is "*oviforme*," or "egg-like;" not, he is careful to add, that it necessarily has the shape of an egg, but because it has the constitution and nature of one. That this "*primordium oviforme*" must needs, in all cases, proceed from a living parent is nowhere expressly maintained by Harvey, though such an opinion may be thought to be implied in one or two passages; while, on the other hand, he does, more than once, use language which is consistent only with a full belief in spontaneous or equivocal generation. In fact, the main concern of Harvey's wonderful little treatise is not with generation, in the physiological sense, at all, but with development; and his great object is the establishment of the doctrine of epigenesis.

The first distinct enunciation of the hypothesis that all living matter has sprung from preexisting living matter came from a contemporary, though a junior, of Harvey, a native of that country, fertile in men great in all departments of human activity, which was to intellectual Europe, in the sixteenth and seventeenth centuries, what Germany is in the nineteenth. It was in Italy, and from Italian teachers, that Harvey received the most important part of his scientific education. And it was a student trained in the same schools, Francesco Redi—a man of the widest knowledge and most versatile abilities, distinguished alike as scholar, poet, physician, and naturalist—who, just two hundred and two years ago, published his "Esperienze intorno alla Generazione degl' Insetti," and gave to the world the idea, the growth of which it is my purpose to trace. Redi's book went through five editions in twenty years; and the extreme simplicity of his experiments, and the clearness of his arguments, gained for his views, and for their consequences, almost universal acceptance.

SPONTANEOUS GENERATION.—Redi did not trouble himself much with speculative considerations, but attacked particular cases of what was supposed to be "spontaneous generation" experimentally. Here are dead animals, or pieces of meat,

says he; I expose them to the air in hot weather, and in a few days they swarm with maggots. You tell me that these are generated in the dead flesh; but if I put similar bodies, while quite fresh, into a jar, and tie some fine gauze over the top of the jar, not a maggot makes its appearance, while the dead substances, nevertheless, putrefy just in the same way as before. It is obvious, therefore, that the maggots are not generated by the corruption of the meat; and that the cause of their formation must be a something which is kept away by gauze. But gauze will not keep away aëriform bodies, or fluids. This something must, therefore, exist in the form of solid particles too big to get through the gauze. Nor is one long left in doubt what these solid particles are; for the blowflies, attracted by the odour of the meat, swarm round the vessel and, urged by a powerful, but, in this case, misleading instinct, lay eggs, out of which maggots are immediately hatched upon the gauze. The conclusion, therefore, is unavoidable; the maggots are not generated by the meat, but the eggs which give rise to them are brought through the air by flies.

These experiments seem almost childishly simple, and one wonders how it was that no one never thought of them before. Simple as they are, however, they are worthy of the most careful study, for every piece of experimental work since done, in regard to this subject, has been shaped upon the model furnished by the Italian philosopher. As the results of his experiments were the same, however varied the nature of the materials he used, it is not wonderful that there arose in Redi's mind a presumption, that in all such cases of the seeming production of life from dead matter, the real explanation was the introduction of living germs from without into that dead matter. And thus the hypothesis that living matter always arises by the agency of pre-existing living matter, took definite shape; and had, henceforward, a right to be considered aud a claim to be refuted, in each particular case, before the production of living matter in any other way could be admitted by careful reasoners. It will be necessary for me to refer to this hypothesis so frequently, that, to save circumlocution, I shall call it the hypothesis of *Biogenesis;* and I shall term the contrary doctrine—that living matter may be produced by not living matter—the hypothesis of *Abiogenesis.*

Professor Huxley then refers to Biogenesis, Revelations of the Microscope, and proceeds to review the lessons of Modern Chemistry as follows:—

The Lessons of Modern Chemistry.—Modern chemistry, the birth of the latter half of the eighteenth century, grew apace, and soon found herself face to face with the great problems which biology had vainly tried to attack without her help. The discovery of oxygen led to the laying of the foundations of a scientific theory of respiration, and to an examination of the marvellous interactions of organic substances with oxygen. The presence of free oxygen appeared to be one of the conditions of the existence of life, and of those singular changes in organic matters which are known as fermentation and putrefaction. The question of the generation of the infusory animalcules thus passed into a new phase. For what might not have happened to the organic matter of the infusions, or to the oxygen of the air, in Spallanzani's experiments? What security was there that the development of life which ought to have taken place had not been checked or prevented by these changes?

The battle had to be fought again. It was needful to repeat the experiments under conditions which would make sure that neither the oxygen of the air, nor the composition of the organic matter, was altered, in such a manner as to interfere with the existence of life.

Schulze and Schwann took up the question from this point of view in 1836 and 1837. The passage of air through red-hot glass tubes, or through strong sulphuric acid, does not alter the proportion of its oxygen, while it must needs arrest, or destroy, any organic matter which may be contained in the air. These experimenters, therefore, contrived arrangements by which the only air which should come into contact with a boiled infusion should be such as had either passed through red-hot tubes, or through strong sulphuric acid. The result which they obtained was that an infusion so treated developed no living things, while if the same infusion was afterwards exposed to the air such things appeared rapidly and abundantly. The accuracy of these experiments has been alternately denied and affirmed. Supposing them to be accepted, however, all that they really proved was, that the treatment to which the air was subjected destroyed *something* that was essential to the development of life in the infusion. This "something" might be gaseous, fluid, or solid; that it consisted of germs remained only an hypothesis of greater or less probability.

After touching upon the subject of fermentation and putrefaction, and life germs in the air, he epitomises the arguments as follows:—

The Arguments Epitomised.—To sum up the effect of this long chain of evidence:—

It is demonstrable that a fluid eminently fit for the development of the lowest forms of life, but which contains neither germs nor any protein compound, gives rise to living things in great abundance, if it is exposed to ordinary air; while no such development takes place if the air with which it is in contact is mechanically freed from the solid particles which ordinarily float in it, and which may be made visible by appropriate means.

It is demonstrable, that the great majority of these particles are destructible by heat, and that some of them are germs, or living particles, capable of giving rise to the same forms of life as those which appear when the fluid is exposed to unpurified air.

It is demonstrable, that inoculation of the experimental fluid, with a drop of liquid known to contain living particles, gives rise to the same phenomena as exposure to unpurified air.

And it is further certain that these living particles are so minute that the assumption of their suspension in ordinary air presents not the slightest difficulty. On the contrary, considering their lightness, and the wide diffusion of the organisms which produce them, it is impossible to conceive that they should not be suspended in the atmosphere in myriads.

Thus, the evidence, direct and indirect, in favour of *Biogenesis* for all known forms of life must, I think, be admitted to be of great weight.

On the other side, the sole assertions worthy of attention are, that hermetically sealed fluids, which have been exposed to great and long-continued heat, have sometimes exhibited living forms of low organisation when they have been opened.

The first reply that suggests itself is the probability that there must be some error about these experiments, because they are performed on an enormous scale every day with quite contrary results. Meat, fruit, vegetables, the very materials of the most fermentable and putrescible infusions are preserved to the extent, I suppose I may say, of thousands of tons every year, by a method which is a mere application of Spallanzani's experiment. The matters to be preserved are well boiled in a tin case provided with a small hole, and this hole is soldered up when all the air in the case has been replaced by steam. By this method they may be kept for years without putrefying, fermenting, or getting mouldy. Now this is not because oxygen is excluded, inasmuch as it is now proved that free oxygen is not necessary for either fermentation or putrefaction. It is not because the tins are exhausted of air, for *Vibriones* and *Bacteria* live, as Pasteur has shown, without air or free oxygen. It is not because the boiled meats or vegetables are not putrescible or fermentable, as those who have had the misfortune to be in a ship supplied with unskilfully closed tins well know. What is it, therefore, but the exclusion of germs? I think that Abiogenists are bound to answer this question before they ask us to consider new experiments of precisely the same order.

And, in the next place, if the results of the experiments I refer to are really trustworthy, it by no mean follows that Abiogenesis has taken place. The resistance of living matter to heat is known to vary within considerable limits, and to depend, to some extent, upon the chemical and physical qualities of the surrounding medium. But if, in the present state of science, the alternative is offered us, either germs can stand a greater heat than has been supposed, or the molecules of dead matter, for no valid or intelligible reason that is assigned, are able to re-arrange themselves into living bodies, exactly such as can be demonstrated to be frequently produced in another way, I cannot understand how choice can be, even for a moment, doubtful.

The Origin of Life.—But though I cannot express this conviction of mine too strongly, I must carefully guard myself against the supposition that I intend to suggest that no such thing as Abiogenesis ever has taken place in the past, or ever will take place in the future. With organic chemistry, molecular physics, and physiology yet in their infancy, and every day

making prodigious strides, I think it would be the height of presumption for any man to say that the conditions under which matter assumes the properties we call "vital" may not, some day, be artificially brought together. All I feel justified in affirming is, that I see no reason for believing that the feat has been performed yet.

And, looking back through the prodigious vista of the past, I find no record of the commencement of life, and therefore I am devoid of any means of forming a definite conclusion as to the conditions of its appearance. Belief, in the scientific sense of the word, is a serious matter, and needs strong foundations. To say, therefore, in the admitted absence of evidence, that I have any belief as to the mode in which the existing forms of life have originated, would be using words in a wrong sense. But expectation is permissible where belief is not; and if it were given me to look beyond the abyss of geologically-recorded time to the still more remote period when the earth was passing through physical and chemical conditions, which it can no more see again than a man can recall his infancy, I should expect to be a witness of the evolution of living protoplasm from not living matter. I should expect to see it appear under forms of great simplicity, endowed like existing Fungi, with the power of determining the formation of new protoplasm from such matters as ammonium carbonates, oxalates, and tartrates, alkaline and earthy phosphates, and water, without the aid of light. That is the expectation to which analogical reasoning leads me; but I beg you once more to recollect that I have no right to call my opinion anything but an act of philosophical faith.

So much for the history of the progress of Redi's great doctrine of Biogenesis, which appears to me, with the limitations I have expressed, to be victorious along the whole line at the present day.

Development of Species.—As regards the second problem offered to us by Redi, whether Xenogenesis obtains side by side with Homogenesis, whether, that is, there exist not only the ordinary living things, giving rise to offspring which run through the same cycle as themselves, but also others, producing offspring which are of a totally different character from themselves,—the researches of two centuries have led to a different result. That the grubs found in galls are no product of the plants on which the galls grow, but are the result of the introduction of the eggs of insects into the substance of these plants, was made out by Vallisnieri, Reaumur, and others, before the end of the first half of the eighteenth century. The tapeworms, bladderworms, and flukes continued to be a stronghold of the advocates of Xenogenesis for a much longer period. Indeed, it is only within the last thirty years that the splendid patience of Von Siebold, Van Beneden, Leuckart, Küchenmeister, and other helminthologists, has succeeded in tracing every such parasite, often through the strangest wanderings and metamorphoses, to an egg derived from a parent, actually or potentially like itself; and the tendency of inquiries elsewhere has all been in the same direction. A plant may throw off bulbs, but these, sooner or later, give rise to seeds or spores, which develope into the original form. A polype may give rise to Medusæ, or a pluteus to an Echinoderm; but the Medusæ and the Echinoderm give rise to eggs which produce polypes or plutei, and they are therefore only stages in the cycle of life of the species.

But if we turn to pathology it offers us some remarkable approximations to true Xenogenesis.

As I have already mentioned, it has been known since the time of Vallisnieri and of Reaumur that galls in plants and tumours in cattle are caused by insects, which lay their eggs in those parts of the animal or vegetable frame of which these morbid structures are outgrowths. Again, it is a matter of familiar experience to everybody that mere pressure on the skin will give rise to a corn. Now, the gall, the tumour, and the corn are parts of the living body, which have become, to a certain degree, independent and distinct organisms. Under the influence of certain external conditions, elements of the body, which should have developed in due subordination to its general plan, set up for themselves, and apply the nourishment which they receive to their own purposes.

From such innocent productions as corns and warts there are all gradations, to the serious tumours which, by their mere size and the mechanical obstruction they cause, destroy the organism out of which they are developed; while, finally, in those terrible structures known as cancers, the abnormal growth has acquired powers of reproduction and multiplication, and is only morphologically distinguishable from the parasitic worm, the life of which is, neither more nor less, closely bound up with that of the infested organism.

If there were a kind of diseased structure the histological elements of which were capable of maintaining a separate and independent existence out of the body, it seems to me that the shadowy boundary between morbid growth and Xenogenesis would be effaced. And I am inclined to think that the progress of discovery has almost brought us to this point already. I have been favoured by Mr. Simon with an early copy of the last published of the valuable "Reports on the Public Health," which, in his capacity of their medical officer, he annually presents to the Lords of the Privy Council. The appendix to this report contains an introductory essay "On the Intimate Pathology of Contagion," by Dr. Burdon Sanderson, which is one of the clearest, most comprehensive, and well-reasoned discussions of a great question which has come under my notice for a long time. I refer you to it for details and for the authorities for the statements I am about to make.

Vaccination.—You are familiar with what happens in vaccination. A minute cut is made in the skin, and an infinitesimal quantity of vaccine matter is inserted into the wound. Within a certain time a vesicle appears in the place of the wound, and the fluid which distends this vesicle is vaccine matter, in quantity a hundred or a thousandfold that which was originally inserted. Now what has taken place in the course of this operation? Has the vaccine matter by its irritative property produced a mere blister, the fluid of which has the same irritative property? Or does the vaccine matter contain living particles, which have grown and multiplied where they have been planted? The observations of M. Chauveau, extended and confirmed by Dr. Sanderson himself, appear to leave no doubt upon this head. Experiments, similar in principle to those of Helmholtz on fermentation and putrefaction, have proved that the active element in the vaccine lymph is non-diffusible, and consists of minute particles not exceeding 1-20,000th of an inch in diameter, which are made visible in the lymph by the microscope. Similar experiments have proved that two of the most destructive of epizootic diseases, sheep-pox and glanders, are also dependent for their existence and their propagation upon extremely small living solid particles, to which the title of *microzymes* is applied. An animal suffering under either of these terrible diseases is a source of infection and contagion to others, for precisely the same reason as a tub of fermenting beer is capable of propagating its fermentation by "infection" or "contagion," to fresh wort. In both cases it is the solid living particles which are efficient; the liquid in which they float, and at the expense of which they live, being altogether passive.

Now arises the question, are these microzymes the results of *Homogenesis*, or of *Xenogenesis;* are they capable, like the *Torulæ* of yeast, of arising only by the development of pre-existing germs; or may they be, like the constituents of a nut-gall, the results of a modification and individualization of the tissues of the body in which they are found, resulting from the operation of certain conditions? Are they parasites in the zoological sense, or are they merely what Virchow has called "heterologous growths?" It is obvious that this question has the most profound importance, whether we look at it from a practical or from a theoretical point of view. A parasite may be stamped out by destroying its germs, but a pathological product can only be annihilated by removing the conditions which give rise to it.

It appears to me that this great problem will have to be solved for each zymotic disease separately, for analogy cuts two ways. I have dwelt upon the analogy of pathological modification, which is in favour of the xenogenetic origin of microzymes; but I must now speak of the equally strong analogies in favour of the origin of such pestiferous particles by the ordinary process of the generation of like from like.

It is, at present, a well-established fact that certain diseases, both of plants and of animals, which have all the characters of contagious and infectious epidemics, are caused by minute organisms. The smut of wheat is a well-known instance of such a disease, and it cannot be doubted that the grape disease and the potato disease fall under the same category. Among animals, insects are wonderfully liable to the ravages of contagious and infectious diseases caused by microscopic *Fungi*.

Fly Plagues.—In autumn it is not uncommon to see flies motionless upon a window-pane, with a sort of magic circle, in white, drawn round them. On microscopic examination the

magic circle is found to consist of innumerable spores, which have been thrown off in all directions by a minute fungus called *Empusa muscæ*, the spore-forming filaments of which stand out like a pile of velvet from the body of the fly. These spore-forming filaments are connected with others, which fill the interior of the fly's body like so much fine wool, having eaten away and destroyed the creature's viscera. This is the full-grown condition of the *Empusa*. If traced back to its earlier stages, in flies which are still active, and to all appearance healthy, it is found to exist in the form of minute corpuscles which float in the blood of the fly. These multiply and lengthen into filaments, at the expense of the fly's substance; and when they have at last killed the patient, they grow out of its body and give off spores. Healthy flies shut up with diseased ones catch this mortal disease and perish like the others. A most competent observer, M. Cohn, who studied the development of the *Empusa* in the fly very carefully, was utterly unable to discover in what manner the smallest germs of the *Empusa* got into the fly. The spores could not be made to give rise to such germs by cultivation; nor were such germs discoverable in the air, or in the food of the fly. It looked exceedingly like a case of Abiogenesis, or, at any rate, of Xenogenesis; and it is only quite recently that the real course of events has been made out. It has been ascertained that when one of the spores falls upon the body of a fly it begins to germinate and sends out a process which bores its way through the fly's skin; this, having reached the interior cavities of its body, gives off the minute floating corpuscles which are the earliest stage of the *Empusa*. The disease is "contagious," because a healthy fly coming in contact with a diseased one, from which the spore-bearing filaments protrude, is pretty sure to carry off a spore or two. It is "infectious," because the spores become scattered about all sorts of matter in the neighbourhood of the slain flies.

Diseases of the Silkworm.—The silkworm has long been known to be subject to a very fatal contagious and infectious disease called the *Muscardine*. Audouin transmitted it by inoculation. This disease is entirely due to the development of a fungus, *Botrytis Bassiana*, in the body of the caterpillar; and its contagiousness and infectiousness are accounted for in the same way as those of the fly-disease. But of late years a still more serious epizootic has appeared among the silkworms; and I may mention a few facts which will give you some conception of the gravity of the injury which it has inflicted on France alone.

The production of silk has been, for centuries, an important branch of industry in Southern France, and in the year 1853 it had attained such a magnitude that the annual produce of the French sericulture was estimated to amount to a tenth of that of the whole world, and represented a money value of 117,000,000 of francs, or nearly five millions sterling. What may be the sum which would represent the money value of all the industries connected with the working-up of the raw silk thus produced is more than I can pretend to estimate. Suffice it to say, that the city of Lyons is built upon French silk, as much as Manchester was upon American cotton before the civil war.

Silkworms are liable to many diseases; and, even before 1853, a peculiar epizootic, frequently accompanied by the appearance of dark spots upon the skin (whence the name of "Pebrine" which it has received), had been noted for its mortality. But in the years following 1853 this malady broke out with such extreme violence that in 1856 the silk crop was reduced to a third of the amount which it had reached in 1853; and, up till within the last year or two, it has never attained half the yield of 1853. This means not only that the great number of people engaged in silk-growing are some thirty millions sterling poorer than they might have been; it means not only that high prices have had to be paid for imported silkworm eggs, and that, after investing his money in them, in paying for mulberry-leaves and for attendance, the cultivator has constantly seen his silkworms perish and himself plunged in ruin—but it means that the looms of Lyons have lacked employment, and that, for years, enforced idleness and misery have been the portion of a vast population which, in former days, was industrious and well to do.

In 1858 the gravity of the situation caused the French Academy of Sciences to appoint commissioners, of whom a distinguished naturalist, M. de Quatrefages, was one, to inquire into the nature of this disease, and, if possible, to devise some means of staying the plague. In reading the report made by M. de Quatrefages, in 1859, it is exceedingly interesting to observe that his elaborate study of the Pébrine forced the conviction upon his mind that, in its mode of occurrence and propagation, the disease of the silkworm is, in every respect, comparable to the cholera among mankind. But it differs from the cholera, and, so far, is a more formidable disease, in being hereditary, and in being, under some circumstances, contagious, as well as infectious.

The Italian naturalist, Filippi, discovered in the blood of the silkworms affected by this strange disease a multitude of cylindrical corpuscles, each about 1-6000 of an inch long. These have been carefully studied by Lebert, and named by him *Panhistophyton*; for the reason that, in subjects in which the disease is strongly developed, the corpuscles swarm in every tissue and organ of the body, and even pass into the undeveloped eggs of the female moth. But are these corpuscles causes, or mere concomitants, of the disease? Some naturalists took one view and some another; and it was not until the French Government alarmed by the continued ravages of the malady, and the inefficiency of the remedies which had been suggested, dispatched M. Pasteur to study it, that the question received its final settlement; at a great sacrifice, not only of the time and peace of mind of that eminent philosopher but, I regret, to have to add, of his health.

But the sacrifice has not been in vain. It is now certain that this devastating, cholera-like, Pebrine is the effect of the growth and multiplication of the *Panhistophyton* in the silkworm. It is contagious and infectious because the corpuscles of the *Panhistophyton* pass away from the bodies of the diseased caterpillars, directly or indirectly, to the alimentary canal of healthy silkworms in their neighbourhood; it is hereditary, because the corpuscles enter into the eggs while they are being formed, and consequently are carried within them when they are laid; and for this reason, also, it presents the very singular peculiarity of being inherited only on the mother's side. There is not a single one of all the apparently capricious and unaccountable phenomena presented by the Pébrine but has received its explanation from the fact that the disease is the result of the presence of microscopic organism, *Panhistophyton*.

Such being the facts with respect to the Pébrine, what are the indications as to the method of preventing it? It is obvious that this depends upon the way in which the *Panhistophyton* is generated. If it may be generated by Abiogenesis, or by Zenogenesis, within the silkworm or its moth, the extirpation of the disease must depend upon the prevention of the occurrence of the conditions under which this generation takes place. But if, on the other hand, the *Panhistophyton* is an independent organism, which is no more generated by the silkworm than the misletoe is generated by the oak, or the apple-tree, on which it grows, though it may need the silkworm for its development in the same way as the misletoe needs the tree, then the indications are totally different. The sole thing to be done is to get rid of, and keep away the germs of the *Panistophyton*. As might be imagined, from the course of his previous investigations, M. Pasteur was led to believe that the latter was the right theory; and guided by that theory, he has devised a method of extirpating the disease, which has proved to be completely successful wherever it has been properly carried out.

There can be no reason, then, for doubting that, among insects, contagious and infectious diseases, of great malignity, are caused by minute organisms which are produced from pre-existing germs, or by Homogenesis; and there is no reason, that I know of, for believing that what happens in insects may not take place in the highest animals. Indeed, there is already strong evidence that some diseases of an extremely malignant and fatal character to which man is subject, are as much the work of minute organisms as is the Pébrine. I refer for this evidence to the very striking facts adduced by Professor Lister in his various well-known publications on the antiseptic method of treatment. It seems to me impossible to rise from the perusal of those publications without a strong conviction that the lamentable mortality which so frequently dogs the footsteps of the most skilful operator, and those deadly consequences of wounds and injuries which seem to haunt the very walls of great hospitals, and are, even now, destroying more men than die of bullet, or bayonet, are due to the importation of minute organisms into wounds, and their increase and multiplication; and that the surgeon who saves most lives will be he who best works out the practical consequences of the hypothesis of Redi.

Conclusions.—I commenced this address by asking you to follow me in an attempt to trace the path which has been

followed by a scientific idea, in its long and slow progress from the position of a probable hypothesis to that of an established law of nature. Our survey has not taken us into very attractive regions; it has lain, chiefly, in a land flowing with the abominable, and peopled with mere grubs and mouldiness. And it may be imagined with what smiles and shrugs practical and serious contemporaries of Redi and of Spallanzani may have commented on the waste of their high abilities in toiling at the solution of problems which, though curious enough in themselves, could be of no conceivable utility to mankind.

Nevertheless, you will have observed that before we had travelled very far upon our road there appeared on the right hand and on the left fields laden with a harvest of golden grain, immediately convertible into those things which the most sordidly practical of men will admit to have value—namely, money and life.

The direct loss to France caused by the Pébrine in seventeen years cannot be estimated at less than fifty million sterling; and if we add to this what Redi's idea, in Pasteur's hands, has done for the wine-grower and for the vinegar maker, and try to capitalise its value, we shall find that it will go a long way towards repairing the money losses caused by the frightful and calamitous war of this autumn.

And as to the equivalent of Redi's thought in life, how can we over-estimate the value of that knowledge of the nature of epidemic and epizootic diseases, and consequently of the means of checking or eradicating them, the dawn of which has assuredly commenced.

Looking back no further than ten years, it is possible to select three (1863, 1864, and 1869) in which the total number of deaths from scarlet fever alone amounted to ninety thousand. That is the return of killed, the maimed and disabled being left out of sight. Why, it is to be hoped that the list of killed in the present bloodiest or all wars will not amount to more than this! But the facts which I have placed before you must leave the least sanguine without a doubt that the nature and the causes of this scourge will, one day, be as well understood as those of the Pébrine are now; and that the long suffered massacre of our innocents will come to an end.

And thus mankind will have one more admonition that "the people perish for lack of knowledge;" and that the alleviation of the miseries and the promotion of the welfare of men must be sought by those who will not lose their pains in that diligent, patient, loving study of all the multitudinous aspects of nature, the results of which constitute exact knowledge or science.

It is the justification and the glory of this great meeting that it is gathered together for no other object than the advancement of the moiety of science which deals with those phenomena of nature which we call physical. May its endeavours be crowned with a full measure of success!

BRITISH PHARMACEUTICAL CONFERENCE, 1870.

The President of this, the seventh meeting, was Mr. J. Stoddart, F.C.S., of Bristol.

His Inaugural Address was delivered at the Royal Institution, Liverpool, and recalled some of the most prominent observations and discoveries of the previous year.

The fundamental idea of the Conference was the furtherance of pharmacy proper, by directing attention to the proper means of scientific education or judicious training, and the advancement of the pharmaceutists' status as a profession. He could not endorse Adam Smith's observation, that a philosopher was a person "whose trade is to do nothing and speculate in everything." Where would be our telegraph if Faraday and Œrstadt had not studied the properties of an electrified wire; or the wonderful calculations of astronomy if Newton had let the fall of an apple pass by unheeded? To the student nothing was too trifling or unimportant. We lived in complete subjection to Nature's laws, and how foolish not to learn what those laws required, so that we might have them with us and not against us! Pharmacy, of all pursuits, was the one most dependent on the proper use of these laws, and the pharmaceutist must make the most he could of the animal, vegetable, and mineral substances with which he had to do, with the view of producing the best results. The Pharmacy Act obtained two years ago had worked well, but its expected benefits were more decidedly in the future. Let them, however, beware of infusing a mercenary spirit into the conduct of their society. Its main object ever must be the upraising of their pharmaceutical education, and not the lowering it into a trades union, a spirit which would prove its ruin. Chemistry, botany, and physics were to them only secondary in importance to a well-grounded general education, and the study of botany was peculiarly a necessity.

After describing most of the important discoveries of the year in chemistry, he went on to say:—

The vegetable alkaloids, it was true, had not yet been artificially produced, but so great an advance was being made in the formation of organic compounds by artificial means, that it was too chimerical an idea to expect a pharmaceutical solution of the philosopher's stone problem, and to manufacture quinia and morphia on a large scale, so as to be entirely independent of the cinchonaceæ and puparaceæ, on which we now entirely rely for these invaluable medicines. The President illustrated the advantage of a knowledge of natural physics, because many of the most beautiful phenomena pass under the dispenser's eye every day. By means of the spectroscope many elements had been detected in articles of the materia medica which, a few years ago, were considered great rarities. On the table he exhibited the ashes of many pharmacopœial substances containing the metals rubidium, lithium, and strontium. In a case of cattle poisoning at Wells assizes the animals were proved to have been killed by eating plants containing lead derived from the soil on which they grew. Analysis showed that the grass, weeds, fungi, thistles, and shrubs contained a ponderous quantity of lead, although totally unaffected in their growth. The past year had been prolific in so many new and important discoveries that it became difficult to point out one or two only for consideration. At the last meeting chloral-hydrate was an expensive curiosity; now it was manufactured in enormous quantities, and he regretted that already another preparation had been introduced, containing only 70 instead of 90 per cent. of chloral, and was declared by Dr. Liebreicht to be devoid of therapeutic power. Sulpho-carbolic acid was another preparation that had recently been brought into use. It was made by combining sulphuric and carbolic acids in their molecular weights (49 to 94), at a temperature of 290 Fahr. Many physicians affirmed that it was a more powerful disinfectant than plain carbolic acid. The madder plant was employed as a medicinal agent in the manufacturing districts, principally for tincturial purposes, and £1,000,000 was annually paid by us for foreign madder. Two Germans had recently succeeded in artificially making aligarine, the colouring matter of madder. Since the Exeter meeting, an international congress of pharmacentists had been held at Vienna. He trusted that the opportunity would occur for reciprocating the friendly feeling exercised on that occasion by a cordial invitation to our own shores. In conclusion, he impressed on the Conference the importance of sinking petty differences of opinion, and advancing the promotion of pharmacy. Government showed a disposition to help them in every way, and would give a decided preference to those who passed the examinations. For instance, they would admit no candidate for the office of naval dispenser until he had a satisfactory diploma from the Pharmaceutical Society. In return, the members of the Society were in duty bound to see that they fulfilled their trust, and discharged the moral obligation that they had entrusted to their care. As the general tendency of the medical profession was to leave the dispensing of prescriptions to pharmacists, it was therefore their duty to lose no time in rendering themselves competent to undertake the office in the best manner.

The address was much applauded, and on the motion of Mr. Mackie (Edinburgh), seconded by Mr. Williams (London), thanks were voted to the President for his very able address.

The report of the Executive Committee stated that during the year they had been engaged in organising the production of such a year-book for 1870 as the Exeter Conference decided should be issued; in the completion of a system of canvassing for members among the pharmacentists of England, with the object of advancing the general aims of the Conference, and securing sufficient for the uninterrupted production of a year-book; and in the appropriate disposal of the Bell and Hills' Library Fund, a sum of 50 guineas, generously given by Mr. Thos. Hyde Hills for stimulating pharmaceutical education. The services of Mr. John Cargill Brough had been obtained

as editor of the year-book, and the volume was to be issued not later than December 1st. The number of members had been increased from 600 to about 1,500, and a still further increase was anticipated upon the distribution of the year-book and a recognition of its value. The scheme connected with the Bell and Hills' Library Fund is the presentation of ten guineas' worth of books to the pharmaceutical chymists—the chymists and druggists of the cities and towns in which the Conference meets—as an addition to, or the nucleus for, the formation of a library where assistants or apprentices may study and improve themselves; and this had already been done at Exeter.

On the two following days communications were read by Dr. Attfield "On Bitter Cassava Juice, and its supposed Antiseptic Properties," Mr. Rimmington "On Citrate of Magnesia," Mr. J. Watts, B.Sc., "On the Chemical Constitution of Sulphurated Potash," Mr. C. Tichborne, F.C.S., "On Sulphite of Zinc," and others from Messrs. J. Ince, W. Tilden, Morson, &c.

Original Communications.

CORRELATION OF THE PHYSICAL AND VITAL FORCES.

By Archibald Bleloch, A.M., Glasg., D.Sc., M.B. and C.M. Ed.

In physical science, electricity, magnetism, galvanism, mechanical force, heat, light, motion, are various terms expressing the same thing under different conditions, and in varying relations. The terms are convertible because the things signified are all of one nature. Motion is the *ultima reductio*; each is convertible into the other without any residuum. In natural science we have terms of corresponding import, and the things signified are also of one nature. The terms *vis nervosa*, muscular contraction, animal caloric, growth, and nutrition, are expressive of the same thing under different conditions and in varying relations. Each is convertible into the other without any residuum. Motion is the *ultima reductio*.

In physical science we have inorganic substrata necessary to the phenomena of physical force. In natural science we have organic substrata necessary to the phenomena of vital force. The difference resides in the substrata, and not in the forces. The words vital and physical are wholly concerned with the substrata, and hence, when the substrata are changed, vital force passes into physical force and *vice versâ*. The different phases of vital force are allotropic of the different phases of physical force, and the same correlation is observable in both the one and the other. When we speak of *vis nervosa* being eliminated and transmitted, we understand by these terms the origination and propagation of motion in the tissues which make up the nerve centres and nerve tubes. This particular kind of motion is originated in the cells and granules of the nerve centres, and is propagated from particle to particle of the fluid in the nerve tubes until it reaches the muscle, when it is immediately converted into contractile force. The *vis nervosa*, allotropic of electricity or galvanism, passes from the axis cylinder of the nerve tube to the fibrinogen and fibrino-plastic of the muscular structure, and contraction is the result. What takes place here, in natural science is exactly analogous to what happens when the physicist converts electricity or galvanism into mechanical force. The difference in the substrata modifies the quality of the force, but the correlation remains the same. Heat, light, electricity assumed the character of vital forces when they operate in an organized structure fitted to the particular kind of motion which they severally represent; and as heat becomes electricity by passing through a certain combination of metals, so *vis nervosa* becomes animal caloric in certain conditions of organised tissue. A change in the substrata coincides with a conversion of the force into some one or other of its allotropic forms whether that force operates, for the time being, in organised living tissue, or in inorganic matter as such. It is well known that a current of electricity passes into muscular contractile force, without the mediation of *vis nervosa*, when conducted to living muscular structure, and it has also been abundantly proved that electricity is equally productive of muscular contractile force through this mediation, The explanation is simple: electricity, *vis nervosa*, and muscular contractile force are different forms of one and the same thing. The substrata change, and, therefore, the phenomena. The experiment instituted to prove that electricity is not *vis nervosa*, by dividing the nerve tube and substituting a piece of metallic wire, is not scientific. It confounds the organic with the inorganic world. It forgets that while an organism lives, all the physical forces are modified to its acquirements. It is not meant by this that a living organised being is exempt from the operation of the physical forces as such. The physical forces embrace all matter, organic and inorganic in their operations. What is meant is, that the functions of the living being are carried on by allotropic forms of the physical forces, and that these forms are determined by the substrata. Life is the sum of the allotropic forms which the physical forces assume in the substrata of the living organism. Death takes place when these substrata are no longer able to modify the physical forces so as to carry on the functions of life. To prove this we have only to place a seed in circumstances where the physical forces, and the elements essential to growth and nutrition are present. The seed forms the substrata altogether apart from the forces which effect the growth of the tree. A seed does not live until the substrata of which it is composed are subjected to the influence of the physical forces, heat, light, electricity, &c. These enter the substrata and regulate, under allotropic forms, the growth and nutrition of the plant. In fact, they constitute its life, continuing to operate so long as nutrient materials are supplied, and the substrata do not become effete—when this takes place the plant dies. If it be asked whence came the substrata? We reply that the physical forces through their allotropic forms perpetuate the substrata of the different species of plants and animals, but they cannot originate organic substrata, because this would imply that they can assume the characteristics of vital forces in purely inorganic substrata which is impossible. There is, therefore, no need of experiment to determine the question of spontaneous generation. It is an absurdity. It is contrary to the laws of physical science. This, however, does not alter the fact of the correlations of the physical and vital forces. A sound is propagated through unorganised matter by the rapid oscillation of the inorganic molecules, and in the same manner it strikes the tympanum, and thence through the ossicles of the internal ear, until it reaches the wonderful apparatus in which the auditory nerve terminates, when it is immediately converted into *vis nervosa*, and the phenomenon of sound is conveyed to the intelligence. The latter half of the process is effected in the same manner as the former. The one is effected through the oscillation of inorganic particles, the other is effected through the oscillation of organic nerve cells, granules, and the particles of nervous fluid. It is now held that the phenomenon of light is the result of a certain form of motion in what is termed a luminiferous ether pervading space, and which exists between the molecules of transparent bodies. Undulations are propagated through this medium, and, so long as the particles moved are inorganic, they maintain the characteristics of a purely physical force, and as such they pass through the lenses of the eye, but when they reach the retina, their allotropic form light is propagated by that apparatus through the optic nerve to the intelligence. In the case of the sense of touch, we have an instance of simple mechanical force converted into *vis nervosa*. The terminations of the sensory nerves in the dermal surface

are said to receive an impression, but the truth is, that the mechanical impact or force applied to the tactile bodies in which the sensory nerves terminate, passes into a successive oscillation of the particles of fluid in the sensory nerve tubes. The sensation of touch is the consciousness of the oscillation of these particles, carried up to the sensorium. So also with the other senses, taste and smell. They are closely allied to the sense of touch. They have special nerves, but communicate with the intelligence in a similar manner.

When *vis nervosa* passes along the nutrient nerve tubes it assumes the character of an allotropic form of magnetism. It is animal magnetism. It operates in the organized structure and attracts the nutrient materials appropriate to the growth and nutrition of the different parts. Again, when the *vis nervosa* passes along the nerve tubes that supply the various secreting cells, as for instance, those of the kidneys, those of the liver, or those of the intestinal glands, it assumes the form of a vital chemical affinity. It passes into the various elaborations, and in these remains stored up for further service, or for elimination. When the *vis nervosa* in the nerves is deranged through some disease of the nerve centre, the *physio-chemical* result becomes vitiated. We have then diabetes, oxaluria, excess of uric acid, and such like. All this becomes intelligible on the supposition that the physical and vital forces are correlated, and that the one passes into the other when the substrata necessary to their different phenomena are presented.

FRACTURE OF THE PELVIC BONES—RECOVERY.

By J. Waring-Curran, L.K. & Q.C.P., L.R.C.S.I., &c.

Two or three years ago I recorded in the columns of The Press and Circular the particulars of a case of fractured pelvis, which terminated fatally. The paper was copied into the American and Australian medical journals, and attracted some attention at the time. The history of the following case is interesting considering the important nature of the injuries sustained, and the fact of the patient recovering, or making as good a recovery as the nature of the case would, under the most favourable circumstances, permit.

B. B., a collier, aged two-and-thirty years, whilst at work in the pit was severely crushed by the fall of at least five tons of coal upon him. When extricated by his fellow workmen, it was discovered the greater part of the coal had fallen upon the lower part of the body. When I visited him he was in a state of collapse, and, upon removing his garments, discovered that he had passed urine, that the horizontal rami of ischiun and pubis were depressed; and having satisfied myself that there was no fracture or dislocation of the extremities to be reduced, I had him placed in a warm bed, with hot water bottles, and resorted to the other usual means for bringing about reaction. Upon visiting him two hours afterwards, I found him rational. He told me he was in a stooping position when the fall of "bind" and coal took him in the lower part of the back, which pressed out his water. He complained of excruciating pain, deep seated, in the pelvic region. He was unable to lie on his back or side, but was being supported by two men, one on either side, around whose neck he placed his arms and kept the pelvis off the bed. I administered an opiate, and, as it was dark, delayed any further examination until the morning; but, in the course of a few hours, I was hastily summoned, as he required to pass water and was unable to do so. I found urine in the bladder, and tried to introduce a catheter, but failed, as the point of the instrument reached about the base of the triangular ligament, it was met by a firm resistance, in trying to manœuvre my instrument past the obstruction, I conceived that it grated against a piece of jagged bone, but past it the catheter would not go.

Another surgeon, at my request, came to my assistance, and he also failed to pass the instrument. The symptoms were not sufficiently urgent to demand tapping, so that we delayed further interference until the next day, when I was met by, what is called in colliery districts, "The Field Doctor." He also tried to pass the instrument, and without success. Now, urine was evidently infiltrated into the perineum and scrotal tissue. A water cushion was provided, and, curious to say, the man in the evening passed a quantity of bloody urine with a strong ammoniacal odour through the natural channel; he had no control over the stream. We were able to detect crepitus over the horizontal rami of ischiun and pubis, and had no doubt of the existence of a fracture of the descending rami of the left side, the end of either fragment being directed inwards upon the urethra; I tried to pass a catheter, but without success; the obstruction, and that bony, was still readily felt; no doubt a false passage existed. The patient was well sustained, and every little symptom attended to with zeal and assiduous care by "The Field Doctor." In nine weeks he was able to leave his bed; in twelve, he could place the right foot to the ground, but the left he was unable to straighten without excruciating pain. Supplied with crutches, and accommodated with a hollow seated padded chair, with an eminence on either side to support the tuberosities of the ischia, he was got into another room each day. The passage of the water again stopped, when an instrument was passed in through a tortuous urethra as the obstruction still existed.

It is now nine months since the date of the accident; the man is able to walk, but still unfit to follow his usual occupation. There is great weakness of the left side, and occasionally the water has to be drawn off through an instrument. He suffers from spasmodic pains at times, which a warm bath generally relieves, otherwise the man appears well. He thinks in a couple of weeks of resuming his employment, but he is unable to bend the body, or stoop as in the act of lifting an object from the ground.

The case is interesting, considering the very grave nature of the accident, and the result is most satisfactory; whilst it teaches the lesson that we should not be too officious, but wait Nature's efforts. I am free to confess, we might have forced a passage at once, or tapped the bladder, were it not from the existence of different fractures that we considered the case hopeless, and that it would only be unnecessary cruelty punishing the patient more.

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the Medical Press.)

No. IV.

RUGBY SEWAGE FARM.

The population of Rugby is about 9,000, and the sewage amounts to from 220,000 to 250,000 gallons a day. It flows by gravitation partly to the old works, which distribute the sewage to the low level fields, and partly to the new works, at a higher level. At both places, however, the operations are the same—the sewage being strained through perforated boards, with holes about one and quarter inch diameter, and six inches apart; and then it flows by open carriers over the ground.

At the low level works the sewage (amounting to about one-third of the whole supply) is distributed over about sixteen acres of land, of the nature of a loose gravelly clay, upon a subsoil of clay which rests upon stone.

The high level sewage (amounting to two-thirds of the supply) is distributed upon forty-nine acres of land, of the

same nature of soil, and which is entirely laid out with Italian rye grass.

The farm is about a mile west of Rugby, and at the time of our visit it was, in places, quite saturated with sewage, and had an offensive odour, and it was not until it had flowed successively over three or four portions of land that it was sufficiently purified to be admissible into a running stream.

We took samples of sewage at its entrance upon the farm, and at its exit at two places into the river Avon, and the following are the results of the analysis of them :—

Constituents per gallon.	Raw sewage.	Effluent water.	Effluent water.
	Grains.	Grains.	Grains.
Solid matter in solution -	36·67	37·87	38·60
Chloride of sodium -	8·41	7·44	8·39
Organic matter - -	12·36	9·69	11·51
Ammonia - - -	4·43	1·28	1·28
Ditto organic - -	0·16	0·08	0·08
Nitrogen as nitrates, &c.	0·00	0·21	0·13
Oxygen required to oxydise - -	0·92	0·42	0·63
Matter in suspension -	1·28	0·32	1·15
Organic matter - -	0·64	0·13	0·58
Mineral ditto - -	0·64	0·19	0·57

On another occasion, when samples were taken, they yielded the following results :—

Constituents per gallon.	Raw sewage.	Effluent water.
	Grains.	Grains.
Solid matter in solution . .	43·30	36·11
Chloride of sodium . .	—	—
Organic matter . . .	6·10	2·49
Ammonia	3·841	0·480
Do. organic . .	0·120	0·080
Nitrogen as nitrates, &c. .	0·220	0·231
Oxygen required to oxydise	0.953	0·302
Matters in suspension . .	9·52	0·00
Organic matter . . .	4·48	0·00
Mineral ditto . . .	5·34	0·00

The farm, which has been worked for many years by enthusiastic irrigators, has been in several hands, who have invariably abandoned it at last, on account of the unprofitable results, and for the last two years it has been worked as a matter of necessity by the local Board of Health, who have spent about £5,000 upon it, and who pay a rental of £4 an acre for the land, which, with rates and taxes, amounts to £4 10s. an acre.

Last year the receipts were from £70 to £80 over the working expenses ; but this does not include the interest of the money borrowed, or the cost of superintendence.

Foot and Mouth Disease.—Three fresh outbreaks of this malady in the Dorchester division were reported on Saturday ; in that division alone it prevails on nineteen farms. Thirty fresh cases are also reported from Yeovil. In other districts of Dorset the disease continues to spread.

Registered for Transmission Abroad.

THE
MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
,, If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of A. A. Tindall, 20, King William-street, Strand, London.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, SEPTEMBER 21, 1870.

THE BRITISH ASSOCIATION.

The address of the President of the British Association for the Advancement of Science—our Academy of Sciences—is always looked forward to with interest, and this year expectation has been on tip-toe as to the utterances of Professor Huxley. He has spoken, and his address will be everywhere read with intense interest—in many places with intense relief. He has admitted in set terms the doctrine that life, so far as we can trace, proceeds only from life. *Ex nihilo nihil fit* is a very old proverb, and after centuries of controversy science is coming round to recognise the truth of the adage. Not that Dr. Huxley altogether resigns the rather heterodox notion many expected him to advocate, for, after showing that science points clearly to the fact that life is the product of previously living organisms, he expressly stated that if he could look beyond the abyss of geological periods, he would anticipate seeing the evolution of living protoplasm from *not living* matter. We cannot dignify such an anticipation as a "philosophical faith." He does not deny that it is not a conclusion from the data before us. His own address throughout leads up to the very opposite conclusion, and the introduction of such a speculation jars upon us, as we calmly read his elaborate essay, like a loud discordant note amidst the murmur of soft melody. In fact, while Professor Huxley reasons carefully enough up to this point, and displays the docility of the philosopher to the teaching of science, here he appears to abandon himself suddenly to wild conjecture. Impatient of the limits imposed on human reason, he hazards a mere guess at the mystery which ever meets us. Of course, he is as free to guess as inferior minds ; but when it comes to guessing, it may well be that a child is as wise as a philosopher. Having said thus much, we need not follow Professor Huxley through his address. All our readers will find much in it to interest them, and we are glad to be able to present them in our present issue with a full *résumé* prepared for us by one of our own staff who attended the great scientific

congress at Liverpool, and who will further furnish us with a careful abstract of all the proceedings that especially interest our profession. This will exact a large portion of our space, but after all, the medical profession is unquestionably the most scientific, and a medical journal must of necessity have the largest number of scientific readers. Moreover, it is more important to have good reports of the British Scientific Association than of its feeble imitator, that confines itself to medicine only.

Notes on Current Topics.

About the War and Wounded.

The National Society has sent out sixty-two surgeons and sixteen lady nurses. It has forwarded 1,000 bales of material for their use, averaging some three tons per diem. The payments have been £20,000, and credit for abroad for £30,000 more.

In accordance with a resolution adopted by the Society of Medicine, of Marseilles, the medical men who have been called into military service, have been invited to place a list of their private patients in the hands of one or more of their brethren chosen by themselves, and the medical men who remain at home have undertaken charge of the patients for the benefit of their absent brethren.

The Prussian surgeons, it is said, have discontinued the use of charpie, and have replaced it by cotton wool, which is boiled with certain agents, and then dried in hot air.

The reduction in temperature on the Continent has caused the epidemics of typhus and of hospital gangrene to disappear.

The *Gazette Medicale de Paris* announces in its last issue that, in consequence of the impending siege, it ceases to be published for the present. The *Union Medicale*, on the other hand, announces that it will continue to be published and distributed to its Metropolitan subscribers until the bombardment (*Dii avertant*) shall render *communication* impossible.

Too good to be True.

The newspapers say that the Government intend to greatly increase the number of medical officers who are employed for the purpose of sanitary supervision under the Privy Council; in fact, the whole of the kingdom will be divided into sanitary districts, each under a medical officer with a salary of not less than £600 per annum. No doubt it would be true economy to prevent disease; but can we really hope for such a bold measure?

Winter Climates and the War.

We are assured by those who are personally acquainted with many inhabitants of Nice, that the disturbances there might have been anticipated, and that throughout the whole district annexed by Napoleon there is a dangerous excitement. It will be attempted to be shown by hotel and lodging-house keepers, and possibly by interested doctors, that only a few roughs have broken out and that they will be kept down. Prudent people will, however, refuse to locate themselves on the smouldering volcano, to say nothing of the difficulty of the journey. Mentone and Monaco are even more dangerous than Nice—in fact, a small rebellion broke out there last year. It is said by interested people that English persons and property are sure to be safe, but who can answer for such a mob of Socialists as that which a few days ago broke open the prisons at Nice and set the convicts free. We advise our bretheren to be careful how they recommend their patients to winter in any of the places named, and our advice is based on authentic statements by the last post that has reached London, and the representations of those who have had every opportunity of acquiring personal knowledge of the condition of affairs. Even Italy is safer than France. There are thousands of cases that would do very well on our own coast, and really this seems like a time when preference should be given to the many sheltered nooks of Old Albion.

Warm Clothing.

It behoves those of our brethren who have much night work, or long country journeys to make, to see after some additional clothing now that the season is altered and cold sharp winds invade us. How many of our hard-working practitioners fall victims at this season to diseases engendered through neglect, which a little foresight might have guarded against; when the miasma arising in fenny districts is most virulent, and the vicissitudes of the atmosphere from heat to cold most appreciable. Last winter the Messrs. McGee and Co., of High street, Belfast, introduced an admirable overcoat of their manufacture, which proved a great boon to the much exposed country practitioner. The nature of the material and the artistic workmanship revealed in its clever make and becoming shape, rendered it a general favourite as a most useful and comfortable garment. We hope to see Mr. McGee's coat reproduced this approaching winter, and worn by all threatened with chest affections.

Therapeutical Action of Cold Affusions in Typhoid Fever.

M. de Lambert, who has lately written at length on this subject, has arrived at the following conclusions:—

1.—Cold affusions are especially advantageous in typhoid, and the eruptive fevers.

2.—They act on the principal, and most constant phenomenon in these diseases, namely, the elevation of the temperature by diminishing it. They are, consequently, in the highest degree, anti-pyretic. They bring down the temperature from 0·5° to 3·0° (centigrade).

3.—They favour the restoration of a full, deep, and regular respiration.

4.—They stimulate the peripheral circulation by strong and rhythmical contractions of the capillary vessels, contractions caused by reflex action.

5.—They stimulate all the physiological secretions.

6.—They restore to the skin its suppleness, its moisture, and its healthy colour.

7.—They, in general, favour the appearance of the eruption, and recall it when it has disappeared.

8.—They calm cerebral agitation in awaking activity of the cerebral circulation; they suppress delirium, coma, and lessen prostration.

9.—They cause a general feeling of comfort, which allows the patient to sleep quietly.

10.—They diminish the frequency of the pulse by 8 to 20 or 30 beats.

11.—They relieve headache.

12.—Their anti-pyretic action lasts for two to six or eight hours.

13.—They should, as a rule, be repeated from two to four times in twenty-four hours.

14.—They are specially indicated in the severe cases of typhoid fever, or of one of the malignant eruptive fevers.

15.—They do not influence the duration of these diseases, but render them lighter, or lessen their severity.

16.—They are not indicated in all cases of these diseases without exception, they do not, therefore, constitute a general method of treatment to the exclusion of all other concomitant therapeutical means.

17.—They may be advantageously associated with application of cold bandages, or with the employment of cold lotion.

17.—Their application is easy, and is not attended by untoward results to the patient.

19.—Their methodical and rational employment is based on the principles of clinical physiology.

The Bone-Setter.

Our recent editorial annotation depicting the bone-setter, and showing the dangerous nature of practice followed by this worthy, together with the communication of Dr. Clarke, published recently in these columns, has been the means of eliciting much valuable information on the subject from various sources. Our attention has been directed to the following paragraph, demonstrating the ignorance of the bone-setting class, and published in the columns of an admirable contemporary, *The Lincolnshire Chronicle*:—

A Professional Opinion.—The following is a transcript, *verbatum et literatim*, of a certificate recently given by a gentleman of the profession known as that of a bone-setter. The original document may be seen at the office of this paper:—

Billinghay

1879 Augest 20

Mr William Flartes A Plyed to Mee Been Lame of is Left knee A Strange Inflemastne in the gainte the coveren of the knee Muived this Man Must Rest A time of it

Mr H Mastin

Bane Scetter

The Milk of Diseased Cows.

We are informed by a well known physician, resident in a Midland county, in whose district the cattle have been infected with the *foot and mouth disease*, that he has traced cases of apthous ulceration of tongue and fauces, with a general disordered condition of system to the use directly, in many instances, of milk from diseased cows, and in others who consumed milk from a suspicious source. Upon enquiring further into the subject we find the milk given by cows suffering from foot and mouth disease is altered in character, as it is diminished in quantity. We are told the milkers notice its being ropy, and tenacious to the fingers, owing to the large quantity of mucus it contains. It is remarked to possess somewhat the appearance and taste of milk given by cows within a few weeks of calving. There can be no question of doubt respecting the alteration in character of the milk, and we believe we can implicitly rely upon the authority of our correspondent who assures us that the milk given by cows diseased is, if extensively used as an article of diet, sure to manifest its deleterious influence upon the system, and that delicate women and weakly children are more generally affected. In one farmer's house every member of the family suffered from *parasitic thrush*; they were consuming milk from diseased cattle, and the medical attendant ascribed the existence of *oidium albicans* to some *materies morbi* existing in the milk, for when the use of it was discontinued the mucous surfaces affected speedily recovered their normal state. So it has been noticed by others that when suspected milk was used and *aphthæ* were produced, that a discontinuance of the milk soon permitted the disease to yield to simple treatment. To direct the separation of infected cows, or to order that the milk which must be taken away from their udder, be given to pigs, is advice not likely to be followed since milk is so valuable a commodity, carrying with it so high a price in the market. We think, then, in every district the authorities should direct their attention to the subject, that they should enforce some stringent measure whereby the sale of diseased milk might be prevented, as we fear most persons are in happy ignorance of a disagreeable fact, and that when cows are infected the occurrence should be reported, and some understanding given or arrangement entered upon between the parties, whereby the sale to others, or the use by any of diseased milk may be prohibited and prevented. This is a subject of much importance, which we hope to find attended to by those whose province it is to regulate the sale and consumption of improper food.

Colour-Blindness and Railway Officials.

To Dalton and Herschel belong the credit of first directing attention to persons suffering from colour-blindness, who may even themselves be in happy ignorance of the fact, because of this peculiar condition of vision not necessarily defecting the eye or interfering with the ordinary requirements of sight. We understand that those practitioners who examine men for employment upon railways and who take the trouble of testing whether the person before him suffers from colour-blindness or not, discover it no unusual fact to find them erroneous in recognizing certain colour rays, and that the shades wherein most err are red, yellow, green and blue, the red being mistaken for yellow by some, the yellow for green, the pale green for cloudy white, and the blue for black, the very shades which all persons working upon, or connected with railways or holding situations wherein coloured lights are employed, as in vessels at sea, or light-houses should be perfect in, as a mistake might prove disastrous to many. Indeed, very few persons are perfect in their colour vision. Dr. Wilson, who is an authority on the subject, states that one person in every eighteen is colour-blind in some marked degree, and that one in every fifty-five confounds red with green. Any one of this fifty-five must needs be a dangerous person if entrusted with the working of coloured signals, accordingly it behoves railway companies to test periodically, through their medical officer, the condition of vision in detecting colours of their operatives, for if colour-blindness exists we know education of the eye or treatment will not improve it. We know a gentleman who always recognized light red as violet, and when light-

ning existed in the atmosphere the flash always assumed a violet hue to him. Men, then, who pace the deck of a steamer on watch, signal-workers and railway-guards should be even above suspicion of being colour-blind; for an obvious reason, and to avoid danger, their efficiency should be properly tested.

A Journalistic Nondescript.

If anything could render the position of the Council of the British Medical Association in relation to the journal, whose officials they are, more anomalous or less dignified than it is, the publications of that periodical for the last fortnight could not fail to do so.

The journal of the proceedings of the British Medical Association for the 11th instant contains, in an immense bulk of thoroughly unreadable matter, just one-third of a column of any matter relating to the Association. The remainder of the publication consisted almost solely of closely printed official regulations, and the issue of the 17th is largely occupied with similar matter.

We venture to inquire what may be the concern of the British Medical Association with such matter, and what is become of the proceedings of the Associations, Metropolitan and Provincial, which the journal is supposed to chronicle? and, lastly, what has become of the Council which permits the Association to be temporarily extinguished while the journal refreshes itself with a little trading?

The *Journal of the Society of Arts*, or the *Pharmaceutical Journal* are not permitted thus to set aside their duty, and, that the *British Medical Journal* should do so, conclusively proves that, in the Association, neither the Country Branches nor the Central Council are anything or anybody so long as the printer stops the way.

Over Crowding of the Irish Population.

By those who attach great importance to the influences, for good or for evil, of everyday domestic life on the uneducated classes, the condition of the Irish poor in respect of their dwellings may be quoted as accounting for the low degree of civilisation attributed to them. It is, indeed, hard to suppose that undisciplined minds, subjected at every moment to contact with squalor, irregularity, and slovenliness, shall be very deeply ingrained with respect for law, order and discipline. While we are quite of opinion that model dwellings cannot exist without model females to live in them, and that an improvident, lazy, or dirty household will infallibly convert the most charming of dwellings into a filthy grovelling cabin, yet it seems to be common sense that people who are really and willing to bring up their families in that cleanliness which is next to Godliness, ought to be afforded the chance of doing so, and not driven to herd in a filthy stye at an exorbitant rent.

The Irish Registrar General, in his last Agricultural report, says—

It is scarcely possible, both on social and sanitary grounds, to exaggerate the importance of improving the labouring classes; the Legislature has enabled the Treasury to grant loans for this most desirable object through the medium of the Board of Public Works. According to the census of 1861, the number of *fourth-class houses* in Ireland, each of which had but *one room for the entire family of* EVERY AGE AND SEX, was 89,374—and in these were living nearly *half a million* of persons.

It is evidently useless for the Treasury to put the means of providing improved dwellings at the disposal of money-grubbing tenement landlords, or lazy-minded tenants. Permissory powers are as useless, to such persons as Town Councils and Boards of Guardins. Why, then, should not a model lodging-house be provided at Government expense in every place where they are wanted, under Poor-law administration, and careful, but not officious, police control? The scheme at first blush looks feasible, and the objects are certainly worth the attempt.

Bristol and Clifton.

It is but fair to give prominence to the fact lately brought forward, that the worst slums of Bristol are in the Union of Clifton. This goes far to explain the disproportion observed in the health of the two places. Dr. Budd's attention is invited to the influence this fact would exercise on his statistics, which were supposed to show that there had been much less scarlet fever in Bristol than Clifton.

Our Navy.

The world has seen lately how much depends on the medical department of an Army. The Navy needs a medical service just as efficient. Yet it is a fact that men cannot be found to fill up the complement of navy surgeons. The public should be told why again and again. It is only because the authorities will not treat the medical staff as gentlemen, and will not keep the promises that have been made. England might have the finest naval medical service in the world by merely doing justice. Let the country know that on the slightest strain that service will surely break down through the refusal of the Admiralty to make the Navy, what it might be, the most attractive national service.

Life Assurance.

By the new Act, a company must not start without some paid-up capital, and must not cover bankruptcy by amalgamation. Thus two modes of swindling are guarded against. A more important provision is the regular publication of certified accounts. To publish incorrect accounts will be an indictable offence. Every policy holder will do well to satisfy his own mind by investigating the accounts of his office as soon as they shall appear, or, if he cannot comprehend the figures, submitting them to some friend who can. Intending assurers will have themselves to blame if they do not look into this matter before taking a policy.

The Bengal Medical Retiring Fund.

This is a fund which, when it started into existence many years ago, 1836, promised to medical officers of the Honourable East India Company's Service an annuity of £300 a year in rotation after seventeen years' service, provided that the applicant had paid the half value of the annuity. At first it was regarded as a great boon, but afterwards it was viewed with chagrin and vexation; now, by most of the subscribing members, most certainly by the juniors, it is looked upon as the curse of the service, as a dead loss, in fact, of £2,000 or £3,000. There are many juniors who will never obtain an annuity; unless, which

is not likely, they live far beyond the average age of man. And every sixpence they are now subscribing is passing away into a sinking fund, not one farthing's value of which can they or will they ever realize. The best placed members on the list of the fund cannot expect an annuity under twenty-six or twenty-eight years' service; the juniors may whistle for their's till doomsday.

The Delhi Gazette understands that the Governor-General in Council has been *memorialized* by a large number of subscribing members, who earnestly pray to be relieved of this penal incubus which must inevitably rob them of a large sum of money—the larger the sum the longer they continue to serve H. M. in India. There are many who would give up all claim to the fund, and to the money they have under compulsion subscribed to it, if they were only permitted to withdraw from it altogether and to cease to subscribe.

Tenure of English Poor-law Medical Appointments.

The Poor-law Board transmitted last week to the St. Pancras Guardians the following important communication in reference to out-door medical relief, and the construction to be put upon their recent order with regard to the permanency of appointment of medical officers. "Poor-law Board, Whitehall, September 8th, 1870. Sir,—I am directed by the Poor-law Board to acknowledge the receipt of your letter of the 1st inst., with regard to arrangements for affording medical relief in the parish of St. Pancras. The Board directs me to state that the provisions of the order referred to by the guardians only apply to medical officers who are appointed after the 29th instant, and that if the guardians prior to that date appoint the medical officers for a period of three months as suggested, their terms of office will cease at the expiration of that time. The Board, on the representation of the guardians, with reference to the temporary arrangements recommended by them, are prepared to assent to their proposal. The Board also direct me to state that they have been anxious to issue their order as to the regulation of dispensaries with the least possible delay, but that before doing so they considered it desirable that a certain number of dispensaries should be established and set in operation, so that the regulations might be framed with reference to the actual necessities of the case.—I am, sir, your obedient servant, Fras. Fletcher, Assistant Secretary.—To Mr. D. Fildew, Clerk to the Guardians, St. Pancras." Mr. Salter considered this communication satisfactory. He moved that it be received and entered upon the minutes, and that the out-door medical officers be re-appointed for a further period of three months, from the 29th of September to 25th December, 1870. The motion was carried, and the clerk ordered to write to the medical officers to know if they agreed to the arrangement.

The Velocipedist's Disease.

A correspondent enjoying an extensive field for observing professional velocipedists, directs our attention to the variety of diseases to which they are specially liable. Although our authority is pleased to designate the complaint *Velocipedist's Disease*, we find it nothing more or less than varicocele and a varicose condition of the veins of the leg. However, it is interesting to note that the working of a velocipede tends to produce so disagreeable a disease. We allow that a long continued obstruction of, or an undue amount of pressure upon the veins of the extremities will cause *varix;* still, we are inclined to believe that there must be some inherent weakness of structure as well existing. This opinion we find corroborated by a remark from your correspondent who states that the temporary pressure upon the veins through working the velocipede must be the cause, *per se*, for he observes when the pressure is removed and velocipeding dispensed with, that the tortuous condition of the veins of the scrotum and extremity recover their normal condition and all tenderness and swelling soon subsides. We recommend all who suffer from varix, or evince any sign or symptom of it appearing to lay aside their velocipede that further enlargement of the veins may be prevented, and if already distended that the contraction of their coats may be induced.

The Sanitary State of Lincoln.

We understand the sanitary state of Lincoln is in a very backward and deplorable condition. The appearance of the town built on a hill is apt to deceive, but a writer in the *Lincolnshire Chronicle* accounts for the bad health of the town to the houses being drained into cesspools, which store up the poison year after year. In only very few instances have these cesspools become filled, and consequently emptied because the sewage escapes through the porous layers of stone upon which Lincoln is built. Last week we learn enteric fever and scarlet fever broke out on the waterside. The medical officer states they are both of malignant character, and are probably occasioned by the putrid emanations from the river. Surely, with this testimony before them it is high time the local Board took action in the matter, and endeavoured to remedy an existing evil which is liable at any moment to break out virulently and affect the health of the whole community. It is not when disease presents itself, and poor people are infected that sewage wants attending to. We understand the Local Board are very obstinate in this matter. We recommend, then, as deaths occur from diseases traceable to wilful neglect of the gentlemen who sit upon the Board, that inquests should be held, and the thoughtless stupid members of it censured as they deserve. Some people require to be driven to do that which is proper. Let us hope the Board of Health of Lincoln will be quietly led by their medical advisers into doing that which is right, and has for its immediate object the welfare of the people in preserving the health of the town.

The Sewing-Machine and its effect on Health.

Communications from various sources reach us in corroboration of our remarks made recently on the Sewing-machine and its effect on health. The unfounded and absurd announcement promulgated by a contemporary that sewing-machines induced ovarian excitement of an undesirable character turn out as foolish as they prove groundless statements—the ephemeral supposition of some fertile imagination. The essence of our correspondent's letters is that frame-work-knitters—women who work stocking-frames—weavers in cotton-mills, and females who follow the occupation of machinists are, as a rule, very frequently the subjects as the case may be of menorrhagias, leucorrhœa, ovarian or uterine neuralgias, miscarriages, and unnatural labours; but we learn those who work the sewing-

machine, involve by their occupation, no more danger to health nor have any particular train of phenomena unnaturally increased than those who follow a sedentary occupation, and they account for this fact by the mild, agreeable, and less fatiguing nature of the employment compared with frame-work-knitting or calico-weaving. These conclusions arrived at by, and gathered from, men of large experience and great observation endorse, what may be termed, the pith of M. Decaisnes's communication laid before the Paris Academy in June last, who founded the tenor of his remarks after observing 661 workwomen.

Now that several medical men who have observed thousands of females so employed coincide with our Parisian authority, and bear us out in our observations, we cannot refrain charging our contemporary with heartless cruelty, and illogical sensation, in trying to injure a valuable form of employment. When the fox gets among the geese who will believe it after so much chimerical nonsense of the lowest order?

New Questions.

It is with great pleasure that we see that one of our respected contemporaries has devoted some leading articles to the subject of the *Functional Diseases of the Male Sex*. It has always been one of the marks of a want of supremacy in the medical art, that our profession has allowed its views on such questions to be over-shadowed by the miserable "purism" of the Judaiacal philosophy. There has been too, a sort of dominant priesthood among some of our fraternity, which has hitherto done the "dignity" for the rest, and kept us, of course, in wholesome ignorance and subjection thereby. Medicine must become henceforth a more positive science. It will not do for us any longer to try to make human nature square with the systems of manners framed long ago by ignorant priests. We are the true priests of the human body, and our duty is to find out, irrespective of all dogmas, what injures health, and how the *sound mind in a sound body* of the ancient philosophers is to be maintained. At present, the questions of male functional disease are treated by one or two members of our body, and, for the most part, left to the uninstructed or designing advice of "goody" tutors or traders. We must have no more of this; and hence, we congratulate our readers that there seems to be a day coming when nothing in medical art shall be considered "common or unclean." We shall endeavour soon to criticise the advice given in the articles referred to, and hope that some of our readers may join in the debate.

The English Poor-law Medical Officers' Superannuation Act.

At the request of a correspondent we publish the Superannuation Act which has just received the Royal assent, and also an Abstract of the clauses of the Act under which the rate of superannuation is regulated.

An Act to provide for Superannuation Allowances to Medical Officers of Unions, Districts, and Parishes in England and Wales, A.D. 1870.

WHEREAS it is expedient that provision should be made to enable superannuation allowances to be granted to medical officers of unions, districts, and parishes in England and Wales, who become disabled, either by infirmity or age, to discharge the duties of their offices:

Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. The board of guardians of any union or parish, and the board of management of any district, may, at their discretion, with the consent of the Poor-law Board, grant to any medical officer of such union, district, or parish, an annual allowance, under and subject to the provisions of the Act to provide for superannuation allowances to officers of the unions, passed in the twenty-seventh and twenty-eighth year of the reign of Her Majesty, chapter forty-two,* notwithstanding such medical officer shall not have devoted his entire time to the services of the union, district, or parish, and such allowance shall be paid out of the common fund of the union or district, or out of the poor rate of the parish, as the case may require, exclusively, and no contribution shall be made thereto out of any moneys voted by Parliament.

2. No allowance shall be obtained by any officer under this Act on the ground of permanent infirmity of mind or body unless a Poor-law inspector, or some person in that behalf authorised by the Poor-law Board, shall have first certified that in his opinion such officer has by reason of such infirmity become incapable of performing the duties of his office with efficiency.

Drugging the Drink.

Recent revelations disclose the fact that it is no uncommon practice for designing prostitutes who contemplate robbing some unfortunate wight entangled in their meshes, to drug the beer or porter being drunk in order to render their victim insensible that they may complete the object in view. With such a heartless and dangerous intention, we understand a certain class of prostitutes actually carries snuff regularly for the purpose of drugging as suitable cases offer and an opportunity is allowed them. The usual practice is to have the ale or stout "mulled," some ginger sprinkled over it and to this a piece of tobacco, or a tolerable dose of snuff is secretly introduced. We were told by an hospital patient who had the misfortune to be dosed, or in other words, poisoned, that after he drank a few mouthfuls of the liquor drugged, that he endured a rapid feeling of great depression, with the most intolerable nausea unaccompanied by vomiting, that he knew everything going on around, and while the cold perspiration trickled down his face, he had not the power left of moving

* Abstract of Clauses of the Act.—1. The Guardians of any Union or Parish, and the Trustees or Overseers of any parish incorporated under a Local Act, may, at their discretion with the consent of the Poor-law Board, grant to any officer who shall become incapable of discharging the duties of his office with efficiency by reason of a permanent infirmity of mind or body or old age, upon his resigning or otherwise ceasing to hold his office, an annual allowance not exceeding in any case two-thirds of his then salary, whether computed according to a fixed sum or to a poundage.

2. This allowance shall be payable to, or in trust for, such officer only, and shall not be chargeable with his debts or other liabilities.

3. No officer shall be entitled to such allowance on the ground of age who shall not have completed the full age of sixty years, and shall not have served as an officer of some union or parish for twenty years at least.

4. No grant shall be made without one month's notice in writing to every Guardian.

hand or foot. When being deprived of his purse and watch, he had an inward consciousness of the act being perpetrated, but did not possess the power to resist or call for assistance, and that it was only after being removed from the parlour of the public-house as drunk and incapable, that the intense sickness began to abate, and the great depression about the heart and chest to pass off. We have known it stated that when a number of young men meet together and they design the intoxication of a member of their party, that a pinch of snuff achieves their cruel object. In both cases that of the prostitute for gain, and that of the student for vulgar frolic; the practice is alike dangerous and criminal. The action of tobacco, its powerful sedative effect upon the heart, and the great depression it thereby induces, is only too well known, as it is too easily obtained for the practical purpose above described. However, we hope the police, and above all, public-house keepers, will be alive to the subject, and that magistrates will punish severely where the case is established.

We are enabled to announce that the next meeting of the British Association for the Advancement of Science will take place at Edinburgh.

We regret to hear that cholera is rapidly spreading at Havana.

The Baby-farming case is to be tried about the time our readers receive this number.

The Brentford magistrates have fined a farmer for not giving notice of the outbreak of foot and mouth disease among his cattle.

We underatand that the ex-Empress of the French, who is at present staying at one of our most healthy and fashionable watering places on the South coast, has almost recovered from the fatigue which had so materially affected her health, and, but for the annoyance she experiences from the obtrusiveness of the visitors who have flocked there since her arrival, would have made a much more lengthy stay. As it is, Hastings will shortly lose the presence of her ex-Imperial Majesty; and we sincerely trust that, profiting by the lesson this town has received, Torquay will pay that deference to the health and comfort of its illustrious visitor, as her unfortunate position and delicate state of health absolutely requires.

SCOTLAND.

Edinburgh.—It has been definitively arranged that the foundation stone of the New Royal Infirmary is to be laid on the 13th October by H.R.H. the Prince of Wales.

Glasgow.—Sir W. Stirling Maxwell, Bart., has given the munificent sum of £1,000 in aid of the University Building Fund.

Practical Method of disguising the Taste of Bitter Substances.—In the *Bulletin de Thérapeutique*, July 30th, 1870 M. Bouilhon suggests the chewing of a portion of liquorice root after taking sulphate of quinia, colocynth, aloes, quassia, and other bitters. The active principle of the liquorice, glycyrrhizine, seems to possess the property of nullifying and replacing tastes dissimilar to its own.

SPECIAL CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENT.

[THIRD LETTER.]

Paris, August 1870.

In a former letter I gave an account of the lectures of M. Charcot, at the Hospice de la Salpetrière, on the subject of disturbance of nutrition, caused by lesions of the spinal cord. In his next lecture the learned Professor spoke of certain cutaneous eruptions, arising sometimes in the course of progressive locomotive ataxy. M. Charcot observed that papular eruptions sometimes appeared with urticaria, h. zoster, and, more rarely, pustules. All of these eruptions had this in common, that they appear simultaneously, with certain exceptionally intense exacerbations of pain, "douleurs fulgurantes." The eruptions generally are seated on the course of the nerves, which are the seat of pain. The pains which are so marked in cases of sclerosis of the posterior columns of the cord, in all probability, he thinks, depend on the irritation they undergo in their passage through the interosseous foramina by some of the prolongations of the posterior roots. Another cutaneous affection, witnessed in like cases, is seen in the form of erythematous patches, on which soon are developed vesicular eruptions or bullæ, which soon turn to eschars. This secondary affection generally is seen on the nates; but may arise on all the parts of the trunk or limbs, which are for a long time submitted, whilst the patient is lying down, to a prolonged pressure. It is very different from all the very various eruptions observed on the nates in patients attacked with different diseases, all of which necessitate a long stay in bed. These eruptions, at one time like lichen, erythematous, pustular, or ulcerous, sometimes very like mucous plates, are most commonly occasioned by the frequent contact of irritating matters, such, for example, as urine. Just like erythematous and vesicular or bullous eruptions, these eruptions may become the starting point of veritable eschars. Their commencement, shortly after that of the primitive disease, and their rapid evolution, are two characters which only belong to the first.

On account of the interest attached to it, this affection would deserve certainly to be called by a proper name. The name "acute decubitus" has been proposed. Here are the first phenomena which occur in this affection in cases of apoplexy from hæmorrhage or softening:—1. At the outset there is simple erythema, sometimes of dusky hue, which yields to the pressure of the finger. It makes a striking contrast to the side opposite to the paralysed one, which remains free in cases of apoplexy from cerebral hæmorrhage. In rare cases we observe phlegmonous and very painful swellings, if the part has retained its sensibility. Next day, or shortly after that, the central part of the erythematous plate becomes the seat of one or more bullæ or vesicles, containing a liquid sometimes very abundant. These may appear on the heel, on the nates, the malleoli, the inner aspect of the knee, or the sacral region. The liquid is sometimes clear, sometimes reddish. The bulla bursts; the epidermis, raised up, is detached; and we then have before us a damp surface of lively red hue, or, in addition to this, strewed with bluish points or plates of a violet hue, which are caused by an infiltration of blood into the derma. The cellular tissue in such cases, and sometimes even the subjacent muscles, are invaded by infiltration of blood. These violet plates and the detachment of the epidermis extend rapidly in breadth, and soon at the points they occupy is produced a mortification, which, at first, is superficial, and then extends in depth. The eschar is formed, and the period of reaction and elimination commences, followed, in fortunate cases, by a period of reparation too often arrested in its development. Dr. Bright has figured in wax—and this figure is probably to be seen in Guy's Hospital Museum—the bullæ of this description observed in a case of paraplegia occurring from traumatic causes.

These eschars form a focus of infection, which occasions various accidents:—1. Putrid infection, whose capital symptom is a remittent fever, due to the septic intoxication which terminates so many spinal affections. 2. Purulent infection, with production of metastatic abscess. 3. Gangrenous embolia. In this last variety, thrombi, impregnated with gangrenous ichor, are transported to a distance, and give rise, when deposited in the lungs especially, to gangrenous metastasis, as described by Ball and Charcot in 1857. It must be remembered, however, that M. Foville has expressed the opinion, before these gentlemen, that a pretty considerable number of pulmonary gangrene cases observed among the insane were caused by the transporting into the lung of a part of the fluid which bathes the eschars. The mortification and ulcerative process goes on and attacks the deep tissues. Then the serous bursæ of the trochanters are sometimes opened, and the trochanters stripped of their periosteum, or the sacrum and coccyx are denuded. In this last case, the most grave complications may arise. In the first place, the pus and the ichor of the gangrene penetrate through the foramina, and, if the dura mater is intact, the fatty cellular tissue around it is alone bathed by the pus; or, again, if the dura mater is opened, we may observe the following accidents:—There may be simple ascending purulent meniugitis, or ichorous ascending meningitis. In the last case, a greyish fetid pus surrounds the meninges, and the cord itself, in its whole length; we find it at the base of the brain, in the fourth ventricle, the fissure of sylvius, and the lateral ventricles. The brain substance is tinged at its surface and sometimes in its depth with a clay colour, which has, on several occasions, been mentioned and described under the name of gangrene of the brain. But, in reality, this is merely a phenomenon of imbibition. This is so true, that in cases of cancroid of the face, which extend to the dura mater, this same clay colour has been remarked limited to the anterior lobes of the cerebrum at the point corresponding with the bottom of the ulcer. We observe, especially, cases of this kind in the apoplexy which follows on hæmorrhage into or softening of the brain; but they may occur also in meningeal hæmorrhage, in thickening of the meninges, and in cases where cerebral tumours give rise to apoplectiform attacks. It has its seat generally, or, at any rate, predominates, in these different circumstances on the nates of the paralysed side. It frequently comes on from the second to the fourth day, sometimes further on. On account of the conditions in which it arises, it rarely goes so far as to confirmed eschar. We, perhaps, never see it in cases which should terminate in a favourable manner, and, consequently, it constitutes a sign of the most distressing augury. This sign is scarcely ever fallacious; and as it is possible to remark its appearance from the very first day, it, on this account, is of great value in prognosis in difficult cases. A considerable diminution of the central temperature, remarked at the onset by means of the thermometer, is, as far as is known, the sole sign which, in cases of hemiplegia coming on suddenly, can rival, as far as prognosis is concerned, in importance with this.

Pressure cannot be looked on as an important element in the causation of such lesions, since this is equal for both nates; and frequently, although the patient is carefully turned on the non-paralysed side during the great part of the day, this precaution in no way modifies the production of the eschar. Besides, what, in such a case as this, can be the influence of a pressure which has only been exercised during two or three days? We cannot, again, invoke as a cause the contact of the urine, &c.; even when carefully prevented from soiling the patient, the eschar will arise. According to M. Charcot, the cause of this disturbance in nutrition will be found to reside in an irritation of certain regions of the cord, produced at a distance as a kind of echo, under the influence of the brain lesion. In cases where there is affection of the spinal cord, the position of this affection is variable, Sometimes, and most frequently, it is median or bilateral; and it is at the sacral region or at the region of the trochanters that eschars are formed. Sometimes it is unilateral—for instance, in the somewhat rare case of spinal hemiplegia—and then the eschar generally occupies the side opposite to the spinal lesion. And, lastly, all the parts which suffer the slightest pressure—the heels, the bodies of the limbs, or the internal aspects of the knee—may have lesions of the kind. As a general rule, it may be said that the spinal lesions which produce eschars such as these are the same as those which give rise to acute muscular atrophy and other troubles of nutrition of like kind. It is important to remark that all these consecutive affections appear often simultaneously, as if they arose from a common cause. We may mention, firstly, the traumatic lesions of the spinal cord. A rebel, whose case is mentioned by M. Vignès, received, between the ninth and tenth dorsal vertebra, a sword-cut, which wounded, especially, the left side of the cord. Soon after this, paraplegia ensued, chiefly on the left side. The twelfth day after the accident, there appeared on the left side an arthropathy, characterised by a painful swelling of the knee with hydrarthosis; and on the thirteenth day an eschar on the left nates. In the third place, fractures of the vertebral column may be referred to. In numerous cases cited by Brodie, &c., we see eschars appear on the first, third, seventh, or twelfth day, whether or not there was anæsthesia of the parts whose motion was paralysed. The formation of eschars is, in such cases, sometimes accompanied by symptoms of irritation of the cord, such as spinal epilepsy, passing convulsions, or acute pains. In all these cases just enumerated there is attrition, red softening of the spinal cord, and, in particular, of the grey matter to a certain extent; and it is to this circumstance that we must doubtless attach the production of the eschars as that of the acute muscular atrophy.

(To be continued.)

Correspondence.

DR. DRYSDALE'S PARISIAN LETTERS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I think Dr. Drysdale will agree with me that we have both digressed from the original subject of Prostitution and the Contagious Diseases Acts, and taken unfair advantage of that universally-recognised and admired liberty and independence of principle which characterises the method upon which the MEDICAL PRESS is conducted, when we find ourselves at issue upon a religious question, which should not be argued in the columns of a scientific journal for very obvious reasons.

As far as that portion of Dr. Drysdale's first Parisian communication refers to me, I trust I may, in conclusion of the subject, be permitted space to reply, and in doing so, I cannot refrain expressing surprise at the ungenerous and inaccurate conclusions arrived at by my friend. I would not take the trouble of answering them were I not thoroughly impressed with the fact that there is no truer friend of Ireland than Dr. Drysdale himself. In the past he has proved it without doubt, and I can only account for his inaccuracies by the fact that he wrote confusedly and thoughtlessly in Paris amidst the din of the war drum and the revolutionary cry of red republicans.

1stly. I never attempted defending chivalrously the clergy of the Irish Church,—they are only too able to defend themselves when the occasion requires it,—but I did ascribe the spirit of true religion infused into the breasts of the people keeping down profligacy, and doing such successful battle against prostitution in Ireland. I might have gone further, and compared England, with its wholesale murderers, poisoners, and abortion-mongers, with much-maligned Ireland, where the worst crime is "*tumbling*" the tyrannical landlord in the hour of cruel oppression; but the galling chain of serfdom explains, whilst it excuses much that is done by him who is robbed of hearth and home, and driven from the soil of his fathers to take refuge on a foreign shore.

2ndly. The physiological error committed by Dr. Drysdale is of so delicate a nature that I dislike alluding to it; but there is no alternative left me. *It is the spiteful remark of a man who knows better;* accordingly there is no excuse for blunder. Because the Irish Church refuses to annul the holy tie of matrimony to suit those who advocate facility of divorce in preference to Him who taught that those whom God joins together let no man put asunder, Dr. Drysdale fires a single shot home to the hearts of the clergy as cruel and illogical as it will be pleasing to the enemies of true religion; but every physiologist knows the fallacy of the argument. Dr. Drysdale leaves no alternative between matrimony or sexual intercourse of some kind and the disgusting practice of masturbation. To the libidinous-minded, granted; but surely allusion to the dirty subject suffices, without further explanation of the absurdity and ridiculous nature of the unclean belief advanced. Dr. Drysdale might as well preach that the mammary gland of one of his fashionable lady patients in the West-End should be constantly secreting milk, as tell us that the testes should be ever in action, or that the *vesiculæ seminales* should be ever distended. Dr. Drysdale knows better. MacMahon's troops smashed their *chassepots* sooner than the invading Prussians at Sedan should possess them. Dr. Drysdale tries the same plan: catches at illusory straws when he finds his facility of divorce sentiments passing down so gracefully to Avernus.

I hope Dr. Drysdale will not consider me over severe. I could not deal with the subject otherwise than in a tone of hard dissent. I retain my high opinion of him as a physician of good ability, as a man who has done much to benefit his brethren and exalt his calling, and, above all, notwithstanding his ungenerous sneer across the straits of Dover, a true friend at heart of the Irish Celt, whom he has ever placed on the same footing as the Anglo-Saxon.

One word, and I have done. Dr. Drysdale will join with me in offering our thanks to the Editors of the Medical Press, who are ever ready to allow their valuable journal to be the medium of doing that which is impartial and just, regardless of sect or person.

It is the only journal our profession possesses as such: accordingly we should value it the more, and not take undue advantage of its independent workings. That we have both wandered from our original subject there is no disputing, whilst the accidental introduction of the religious element is to be deplored; but "out of evil springeth good."

I am, &c.,

J. Waring-Curran.

Osman House, Sutton, Notts., Sept. 14, 1870.

THE POSSIBILITY OF CELIBACY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—You, with your usual impartiality, will please give insertion to the following in your deservedly-popular and truly independent journal.

I don't undertake to answer for, nor have I the slightest intention of taking the pen from Dr. Curran's hand, who is able to use it in a masterly, well-tempered, unprejudiced, and gentleman-like manner; but, as an humble member of the profession, I feel impelled, by a sense of right and spirit of fair play, to pass a few remarks on the correspondence (which has been published in the Medical Press and Circular) between Drs. Waring-Curran and Drysdale.

I am inclined to think that Dr. Drysdale has dealt rather unfairly with Dr. Curran in making the broad assertion that Dr. Curran has chivalrously defended the clergy of his native country. Dr. Curran states that there must be *something* remarkable in that religion, which so characteristically fosters *virtue* (or chastity), and suppresses such an amount of crime. That is evidently, and without an approach to sophistry, the simple meaning of the sentence referred to.

Dr. Drysdale must have paid very little attention to the study of metaphysics, when he puts the celibacy of the soldier and priest on an equality (or in the same category). We all must admit that mind, education, circumstances, and the various contingents connected with our existence have a vast deal to do with, and exert almost a mesmeric influence, in the regulation of temperament and formation of habits.

It appears the greatest conceivable stretch of a biassed mind to institute a comparison between both classes, even admitting the truth of the line of the Roman poet, "Si naturam furca repellas, tamen recurrit."

The soldier, in most instances, is one who is reared up in an immoral atmosphere, so to speak, his unchecked nature and surrounding circumstances tending inevitably to develop the coarsest passions.

The Catholic clergy, on the other hand, are, from their boyhood, imbued with a love of chastity, and are selected by their parents from amongst their families as manifesting the keenest appreciation of *virtue;* and from the time they handle the Latin grammar until they finish their course of studies, they are removed away from all circumstances and associations which would cast a stain on a pure mind.

The course of studies they have to pursue comprises all the requisites for the development of the most refined and noblest attributes of the *thinking principle*, and make mind to dust superior, and, consequently, must impress them with a detestation of vice, and a disgust of that degrading habit which Dr. Drysdale would insinuate. In fact, the whole *preparation* for the *arduous* profession of their adoption consists of a *training* for warfare with depravity of the intellect, and they enter the arena of public life with the sole determination of suppressing sensuality in all its shapes and forms. I state these facts as being one who studied with a great number of the clergymen (of that Church which Dr. Curran has complimented), and sharply observed their propensities; and I am confident that they have as great an abhorrence of indulgence of the sensual proclivities as Dr. Drysdale has of *holy water*.

Introducing what may not be considered appropriate in a medical journal in this advanced age of ours, but which is always refreshing to a believer's mind, and which cheers him on his rugged path, viz., a text of Scripture, which production Dr. Drysdale may smile at as being a structure too complex for his way of thinking, complex as is his way of thinking on social questions:—

Matthew, xix chapter, 12 v.—"For there are eunuchs who were born so from their mother's womb, and there are eunuchs who were made so by men, and there are eunuchs who made themselves eunuchs for the kingdom of Heaven's sake. He that can receive it, let him receive it."

The profession would feel very thankful to Dr. Drysdale for an explanation of the foregoing, as he is such an adept in theological codes.

In reference to Dr. Drysdale's opinion of the theological dogma, "un peché mortel," to restrain the numbers of a family by any means save that of *abstinence*, although being a junior member of that profession which Dr. Drysdale so pre-eminently ornaments, I would consider any other means of restraining the numbers of a family as most deteriorating in the moral sense, and subversive of all the innate sense of delicacy and rectitude which actuates the human breast. As for this doctrine of the Catholic Church alienating most men and women from the confessional, I, for the life of me, cannot understand. I suppose he (Dr. Drysdale), being outside the pale of the Catholic Church, and being completely opposed to her tenets, cannot possibly be looked on as a high authority as to what may attract to, or alienate from, the confessional.

I maintain that, when medical men enunciate principles which are supposed to ameliorate the condition of, and raise their fellow men in, the social scale, they ought not to be of that class which, instead of tending to make the "honest man" the man of noble mien, would make him of acne-ornamented visage, with *nature frustrated* stamped on his brow.

I would respectfully suggest that Dr. Drysdale would leave theological problems and the weighing of sins, "un peché mortel," &c., to properly-accredited ministers of religion, and let them amuse themselves in doing so,—even if Dr. Drysdale does not believe in their office—and leave the improvement of his kind (although he intends well) to others until he may be inspired with other means to attain the object, besides those means that would upset the very principles which bind society together.

Yours faithfully,

W. F. Fenton,

L.R.C.P.E., L.R.C.S.I., &c.

Clogheen, September 3, 1870.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In your issue of August 31st, there appears a letter from Dr. C. R. Drysdale, a portion of which cannot fail to be extremely offensive to many Irish practitioners. I allude to that part in which he speaks of the Catholic clergy.

It will make but little difference to those gentlemen whom Dr. Drysdale condescendingly designates "our Catholic

brethren of the Church" as to whether or not he agrees with them on the two points to which he refers; but there is, at least, one member of the laity who considers it a deliberate insult to his religion to have any of its tenets spoken of as a "silly doctrine," and marriage, which is, in the eyes of Catholics, a most holy sacrament, treated of in such slighting terms.

With excellent taste and gentlemanly feeling, Dr. Drysdale classes together soldiers, who are, as a rule, the refuse of society, and priests, who are, as a rule, educated gentlemen, and just as incapable of the vice to which he alludes as are, I should hope, the unmarried clergy of any other denomination.

Dr. Drysdale states that Dr. W. Curran chivalrously defends the clergy of his native country and their dogmas. All honour to that accomplished gentleman for so doing. He has, at least, the hearty good wishes of an

IRISH DISPENSARY DOCTOR.

P.S.—I enclose my card, but not for publication.

*** We insert these letters as a set-off to the obnoxious statements of Dr. Drysdale's which our correspondents have unfortunately thought fit *more Hibernico* to convert into a religious controversy. The "Irish Dispensary Doctor," who is so good as to afford us the results of his valuable experience as to our editorial duties, and to demand an apology from us for giving space to Dr. Drysdale, appears to be quite ignorant that, while the responsibility of unsigned letters is ours (and we have, therefore, availed ourselves of our right to strip his own communication of unnecessary and irrelevant matter), we have no authority to refuse to an author who attaches his name to his communication perfect freedom of speech so long as his use of the privilege is neither immoral, libellous, nor nonsensical. We close the correspondence now in obedience to the recollection that we are, to a considerable extent, catering for the profession of an unfortunate country, where the very wind blows either Protestant or Ultramontane, and the air of Heaven is equally compounded of the bigotry of Orange and Green. If our correspondents will only let us alone, we do not desire to know that such a word as "religion"—that ill-used watchery of every sort of unchristian rancour—exists at all.—ED. M. P. & C.

THE WAR AND THE WOUNDED.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

DEAR SIR,—I send you an extract from a letter I received to-day from my son, who went out to Gelsenkerchen, a town near Dusseldorf, to assist in the care of the wounded sent to the hospital of that town.

Yours truly,

J. W. MARTIN, M.D.

Portlaw, September 6, 1870.

"I went, the morning after my arrival, to the hospital, when I saw more gun-shot wounds than may ever fall to my lot to see again in the course of my life.

"There were several curious wounds: one man received the ball under the right clavicle; it came out between the posterior edge of the scapula and the vertebræ, and from the position, must, I think, have passed through the apex of the right lung. He is, however, convalescent, and will soon be off to duty again. In another case, the ball entered the back of the hand below the wrist joint, and came out on the palmar aspect of the fore-arm near the elbow. Strange to say, there was no fracture or wound of large vessels, and he is recovering rapidly. A third received the bullet just above the axilla, it escaped at the elbow, passing very close to the axillary and brachial arteries, and it looks strange, when dressing him, to see the water syringed into the wound above escape below. Dr. Wheitz is very civil to me. I go to the hospital every morning, and dress any amount of wounds. There is one very bad case, where the bullet entered the knee-joint; but we can neither resect or amputate until the fever subsides, when I fear the leg must come off.

"The treatment is simple: all the wounds are syringed with decoction of camomile. Charpie is then applied, and covered with simple ointment and moderately tight bandage, and in this way the wounds recover very rapidly. Very few new cases have come since I arrived here, but we expect them every day. They have got up a small hospital of ten beds, of which I shall have sole charge.

"Your affectionate son,

"ALFRED H. MARTIN."

Gelsenkerchen, Sept. 2, 1870.

Use of Carbolic Acid.

THE medical journals of Germany are largely occupied with reports and discussions on Lister's method of treating abscesses and compound fracture, the balance of opinion being strongly in favour of it. A case is mentioned by Dr. J. Steinitz (*Inaug. Dissert. Breslau*), of poisonous symptoms being caused by the application of the acid to a large abscess of the thigh. After two days, severe vomiting came on; the urine was almost black, and showed distinct traces of the acid. After being omitted for four days, the same treatment was again resorted to with a good result.

In the report of the General Hospital in Vienna, for 1868, Prof. Hebra gives his experience of the use of carbolic acid internally in various skin diseases. He found the remedy generally well borne, even in large doses. In cases of psoriasis a cure is often attained in as short a time as three weeks. In prurigo the tormenting itching is mitigated in an astonishingly short time.

Medical News.

Apothecaries' Society of England.—At a Court of Examiners, held on the 15th instant, Mr. B. S. Ringer, of the Metropolitan Free Hospital, was admitted a licentiate. Messrs. A. R. Lee and Francis W. H. Popham, of University College Hospital, Joseph Shaw, of St. Bartholomew's Hospital, and Frank Wacher, of Guy's Hospital, passed the primary professional examination.

Metropolitan Poor-law Association.—It was moved by Dr. Dixon, seconded by Dr. Pinder, and carried unanimously, "That Dr. Dudfield's resignation be accepted with great regret, and that the best thanks of the Council be tendered to him for the able and willing services which he has at all times rendered to the Association, and also for the invariable courtesy and kindness which characterised the discharge of his duties as Honorary Secretary for the past four years."

Hambro' Wine.—Under the title of "Good News for the Faculty," Ridley's Circular of Sept. 10th says: "On the 1st inst. no less than 11,214, and on the 6th inst., 11,075 gallons of Hambro' "Sherry" were paid duty on at the London Custom House, upwards of 10,000 gallons on each day being cleared by one firm, Messrs. W. and A. Gilbey.

"Died from the Effects of Improper Food."—This somewhat remarkable verdict was recently recorded in the Brighton newspapers, and is worthy of notice, because it states the facts of the case under investigation upon the occasion of an inquest referring to the sudden death of an infant. Under similar circumstances the verdict is generally "Death from natural causes," the truth being that the "causes" are very *unnatural*, when death arises from ignorance or neglect of the grossest kind. In the case alluded to, the medical witness did his duty, and the verdict as above stated was the result. It would be well for humanity's sake if the members of the medical profession, when called upon to give an opinion, would, in every case of the kind, state the facts as they find them, and, when death occurs from intentional starvation, or the use of improper food, let us not have verdicts of "Natural death," or "Convulsions from teething," or any of the numerous apologies for verdicts of "Manslaughter," which in many cases would be the just and proper result of such inquiries.

Lady Doctors.—Lady Amberley has offered to women desirous of studying medicine a scholarship of £50 a year, tenable for three years, to be awarded next month at Edinburgh by competitive examination.

Lithotomy Forceps.—The last forceps constructed under the advice of the celebrated Surgeon M. Amussat, are so arranged that the branches when in the bladder, may be brought to a right angle with the handles, so as to seize hold of the stone in the fundus. The mechanism consists mainly in a rack worked at the junction of the branches.

NOTICES TO CORRESPONDENTS.

NOTICE.—We are compelled to hold over several interesting letters, amongst which is one from our Special Correspondent in Paris.

POOR-LAW MEDICAL REFORM.

To the Editor of "The Medical Press and Circular."

SIR,—Will you permit me, through your columns, to remind my professional brethren interested in this important question, that Dr. Brady has resolved, aided by a distinguished Member of the House of Lords, to introduce a Bill in the next Session of Parliament, having for its object a very considerable reform in the administration of medical relief to the poor, and largely affecting the status of Poor-law Medical Officers.

In order to strengthen his hands in every possible way, I would appeal to all my brethren who are in a position so to do, to forward me a statement of any facts which they may consider useful, in demonstration of the inefficiency of the present system, whereby vast sums of money are yearly squandered in dealing with the consequences of sickness, which applied to its prevention, would result in an enormous saving to the ratepayers. In using any such information, the names of the contributors will be in every case withheld, unless distinct permission to publish them be given.

As it is most desirable to collect any such information without delay, I would urge such gentlemen as are willing to assist, to communicate with me as early as possible.

I am, Sir, yours obediently,

33 Dean street, Sept. 10th, 1870. JOSEPH ROGERS.

CHAIR OF NATURAL HISTORY IN THE UNIVERSITY OF EDINBURGH.—In consequence of continued indisposition, Professor Allman has decided to resign the Chair of Natural History, which he has held since 1855. Dr. Allman suffers from a bronchial affection, and has been recommended a residence in the South of France. This resignation will be officially intimated to the Senators immediately, to allow the winter arrangements to be made. The names of several eminent men are mentioned as likely to seek the appointment. The Crown has the patronage of this Chair.

ROYAL INFIRMARY.—There has not been a case of typhus fever admitted since July 21st. The few cases of fever admitted since then have been principally relapsing, but some enteric.

GEOGRAPHY OF DISEASE.—We are glad to learn that the Lord Commissioners of Her Majesty's Treasury have intimated to Mr. Haviland, through the Registrar-General, their approval of a grant of money being paid to him for the expenses incurred by him in correcting the registration maps of England and Wales. By our advertising columns it will be seen that Mr. Haviland will give a course of lectures on the "Geographical Distribution of Disease," at St. Thomas's Hospital, during the approaching Winter Session.

A NEW CHAIR IN GEOLOGY AND MINERALOGY.—We hear that it is the intention of Sir Roderick Murchison to found and endow a Chair for the cultivation of these sciences at the Edinburgh University. Six thousand pounds is the sum named as likely to be given by Sir Roderick for this purpose.

CUI BONO?

To the Editor of "The Medical Press and Circular."

SIR,—"There is always some man of whom the human viscera stands in greater need than of any other person, who is supposed, for the time being, to be the only person who can dart his pill into their inmost recesses, and bind them over, in medical recognisances, to assimilate and digest." Granted; but what futile imagination ever could have conceived the ex-Emperor of unhappy France sending for one of the staff of St. George's Hospital, other than the editor of the "Roasted-Apple Association Journal." It is humiliating, but true, the lesson taught by our admirable contemporary, the *Graphic*, who very plainly tells us of certain persons not only circulating untruthful reports, but revealing, for the sake of vulgar applause, professional information which should be confidential. I commenced with Sydney Smith, and I terminated by reproducing his Mr. Brown, who, be it remembered, danced with such alacrity and vigour, that he threw the Queen of Naples into convulsions of laughter, which terminated in a miscarriage, and thereby changed the dynasty of the Neapolitan throne. I hope a similar fate is not impending the Roasted-Apple Association.

I am, Sir, CANTHARIDES.

Member of a *Vox et Prætera Nihil* Association.

PODALIRIUS.—You are quite correct. The author of the letter to which you refer labours under a delusion, and the editor of the Journal appears ignorant of the fact that a fractured collar-bone does not come within the extra system, and that the Poor-law Board do not sanction a fee for such an injury.

J. M. D., Halifax.—The "Midwifery Notes" are interesting, and will appear as soon as space permits. Shall be happy to receive the case of "Aortic Aneurism," of which you gave a slight outline, and sent us a photograph.

DR. ANDOTTS SMITH.—Your communication is accepted, and will appear as soon as space permits.

DR. MARTIN.—Thanks; proofs will be sent you in due course.

F.R.C.S. "On the Celibacy of Priests."—We are sorry to refuse insertion to your letter, but this is not a religious journal, and our space is already too much occupied with matters professional, for theological disquisitions. Our columns are open impartially to you, as to every member of the Profession, upon subjects pertaining to it. We having nothing whatever to do with the profession of your faith, and the fact of your belonging to *this* or *that* creed, would not influence us, or cause a departure from our firm rule of independence and impartiality. We commend to the attention of our correspondent the admirably temperate letter of Dr. Fenton in another column, and whilst we, perforce, allow reference to religion when it is affected by the question under discussion, we at the same time cannot permit a theological controversy.

CAUTION.—The Terras Tin Mining Company, Limited.—We think it right, in the interests of our readers, to caution them against persons calling themselves Messrs. Mackenzie and Co., Share Brokers, of Winchester Buildings, London, and advertising extensively in the country papers to sell shares in the above-named company "at £2 10s., which will be worth £10 within a month." An order for the insertion of their long advertisement in our columns was sent to one of our branch offices; but before allowing such of our friends as have money to invest to part with it in reply to so alluring an advertistment, we instituted enquiries, and find that the individuals who so pompously describe themselves as of Nos. 1, 2, and 3 Winchester Buildings, have—with the permission of a second party, who occupies an office about the size of a cupboard at the top of one of these houses—the privilege of receiving letters addressed as above, which, unfortunately for the poor victims, were not a few by Monday's post, they thus fleece the credulous, and by being *not known* when sought after, evade the law. We have, therefore, no hesitation in characterising the whole affair as "a gross swindle," and feel thankful that we are able in time to protect our subscribers from what has doubtless proved to many through the insertion of the advertisement in other journals, a *Tin Mining Company* of a very objectionable sort.

THE LADIES AND THE WAR.—Mrs. Josephine E. Butler, a clergyman's wife and a distinguished *lecturess* on syphilis and cognate sexual matters, has undertaken to *protest* the Prussian forces out of the field by her infallible *panacea* female votes, and has favoured us with a copy of the document to which she solicits signatures. We do not advise sensible Englishwomen to submit themselves to a similar snub to that administered by an Irish judge to a flippant lawyer who commenced a remonstrance, "My Lord, I protest." "Well, sir, protest, and go about your business.

VACANCIES.

University of Aberden—Three examiners for graduation in medicine.
St. George's Dispensary, London, W.—Hon. Physician-Accoucheur.
Leeds Public Dispensary—Physician.
Kirkaldy Union, Fife—Medical Officer.
Sherbourne Union, Dorset—Medical Officer.
Kells Union, Nobber District—Medical Officer. Salary, £100. (See advt).
Applecross Union, Ross—Medical Officer.
Tredegar Ironworks—Assistant Surgeon. Salary, Indoor, £100.
Westminster Hospital—Resident House-Physician. Board and lodging, but without salary.
Kidderminster Infirmary—House-Surgeon. Salary, £150, with residence.
Liverpool Dispensaries—Resident House-Surgeon. Salary, £140.
Kingsbridge Union—Medical Officer. Salary, £25, *to include medicines, attendances, surgical appliances, &c.*
Narbeith Union—Medical Officer. Salary, £35, with extras.
Leicester Dispensary—Two additional medical officers. Salaries dependant upon receipts from free members of the Association.
Surrey Dispensary—House-Surgeon. Election 26th inst.
Bolton Infirmary—House-Surgeon. Salary, £120; with residence and partial board.

APPOINTMENTS.

BAKER, O., L.R.C.P., House-Surgeon to the York County Hospital.
BUSBY, Mr. A. R., Resident Medical Officer to the Royal Hospital, Bath.
EVANS, O., M.R.C.S., Medical Officer for the Pentrefoelas District of the Llanrwst Union, Denbighshire.
FREEMAN, D., M.R.C.S. Surgeon to the St. George Dispensary.
FURLONG, Dr., Demonstrator of Anatomy at the Catholic University, Dublin.
HAYES, P. J., L.R.C.P.Ed., Senior Demonstrator of Anatomy at the Catholic University, Dublin, has been appointed Medical Registrar.
HOGG, A. J., L.R.C.P., House-Physician to St. Bartholomew's Hospital.
HORSFALL, J., F.R.C.S., Surgeon to the Leeds Public Dispensary.
HOYLE, R. C., L.R.C.P., Medical Officer to the Barnstaple Union.
MANNING, F. N., M.D., Inspector of the Insane of New South Wales, and Superintendent of the Hospital near Sidney.
SECCOMBE, E. H., M.B., Assistant Medical Superintendent of the Royal India Lunatic Asylum, Ealing.
TAYLOR, F., M.B., Demonstrator of Anatomy at Guy's Hospital.
THOMAS, Mr. A., a Junior Resident Medical Officer to the Royal Free Hospital.
WALKER, T. A., M.R.C.S., Resident Medical Officer Dudley Dispensary
WALL, Mr. A. J., a House-Surgeon to St. Mary's Hospital.
WHITTLE, A., M.D., Physician to the Stanley Hospital, Liverpool.

Marriages.

SARGENT—PEARCE.—On the 6th inst., at Holsworthy, Devon, Henry E. Sargent, M.D., of Poliphant, Launceston, to Anna Maria Clara, only daughter of Thomas Pearce, Surgeon, of Holsworthy.
STEPHENS—BENNETT.—On the 14th inst., at Falmouth, R. F. Stephens, Surgeon, of St. Austell, Cornwall, to Bessie, daughter of the late John Bennett, Esq., of Redruth.

Deaths.

FEARN.—On the 8th inst., at Samaden, Switzerland, S. W. Fearn, F.R.C.S.E., a Consulting-Surgeon to the Derbyshire General Infirmary, Derby.
HALL.—On the 4th inst., at Teignmouth, Mary, widow of the late Richard Hall, M.D., Surgeon to the 7th Dragoon Guards.
LEARED.—On the 7th inst., at 10 Old Burlington street, London, the wife of Arthur Leared, Esq., M.D.
MACAULAY.—On the 1st inst., at Liverpool, Dr. Duncan Macaulay, aged 78.
OWEN.—On the 8th inst., at Brixton, Lydia, wife of J. Owen, M.D.
STURGES.—On the 6th inst., Charles Sturges, M.R.C.S., L.S.A., aged 62,

The Irish Medical Journal
BEING THE JOURNAL OF THE
Irish Medical Association
No. 133. PUBLISHED EVERY WEDNESDAY New Series

DOWNPATRICK BOARD OF GUARDIANS.

PARLIAMENTARY GRANT FOR MEDICAL AND EDUCATIONAL PURPOSES.

THE Clerk read the following letter :—

Poor Law Commission Office, Dublin,
26th August, 1870.

SIR,—The Commissioners for Administering the Laws for the Relief of the Poor in Ireland transmit to you herewith a draft on the Bank of Ireland for the sum of £288 3s. 4d., being the balance of the amount payable to Downpatrick Union of the Parliamentary grant for medicinel and educational purposes in Unions in Ireland in the year ending 31st March, 1870, as shown in the accompanying statement, together with the amount of the deficiency in previous remittances on account of the grant for the year ended 31st March, 1869. The Commissioners observe that the statement for the year shows that the claim for medical purposes exceeds the estimate by £74 14s. 9d., which is mainly caused by the large expenditure for medicine in the workhouse, amounting for the year ended 25th March, 1870, to £215 16s. 10d., while the average expenditure for the three years ending 29th September, 1868, was only £109.

It also appears that in the Downpatrick Dispensary District the expenditure for medicine for the year ended the 25th March, 1870, was £71 4s. 10d., or 1s. 4d. per head on the number relieved for the year ended 29th September last, the average for all Ireland being only sevenpence.

It further appears that the cost of medicines for the Strangford Dispensary District has also been large, being £58 2s. for the year ended 29th September last, or nearly 2s. per head on the number relieved, viz., 592 ; and the Commissioners request that the Medical Officers of the Workhouse and of the Dispensary Districts referred to may be called upon for their observations on the subject. —By order of the Commissioners,

B. BANKS, Chief Clerk.

THE MEDICAL OFFICER AND THE BOARD.

The Clerk read the following letter addressed by the Commissioners to the Medical Officer of the Workhouse, and forwarded by them for the information of the Board.

Poor Law Commission Office, Dublin,
August 26th, 1870.

SIR,—The Commissioners for Administering the Laws for the Relief of the Poor in Ireland acknowledge the receipt of your letter of the 12th inst, enclosing an extract from the *Downpatrick Recorder* relative to the proceedings at the Downpatrick Board of Guardians on the Saturdry previous, and requesting the intervention of the Commissioners in a matter that may compromise, in your opinion, the lives of the persons under your care, as the proposal put forward by the Chairman, you state, will render you powerless to deal with your hospital cases as you think their exigencies may require.

In reply, the Commissioners desire to inform you that they infer from your letter that you consider yourself entitled, as Medical Officer of the Workhouse, to take a position independent of the Board of Guardians as to the indulgence of the inmltes in the case of stimulants, such as wine and whiskey, and other luxuries, such as tobacco and snuff.

The quantity of such stimulants consumed in Downpatrick Workhouse under your direction would appear to imply that their use is not entirely limited to the inmates of the sick and lunatic wards, as provided in Artice 19 of the Workhouse rules, and the Commissioners presume that the same remark applies to the use of tobacco and snuff by the inmates generally under your direction.

Thus you appear to have assumed authority to give orders to the Master for supplies of the two articles last mentioned, which authority you do not in fact possess ; and you will probably be held liable by the Auditor for the expense so incurred·

You will find from a careful perusal of the General Regulations for the government of Worknouses, that the Medical Officer is invested with adequate power to provide for the necessary treatment of the sick and lunatic classes, and with the privilege, also, of recommending changes in the diet of the othes inmates, or particular classes thereof, but that the Guardians alone have authority to give effect to such recommendations.

The Medical Officers of Workhouses gênerally have not found it difficult, under these rules, to ensure sufficient liberality at the hands of Boards of Guardians in these matters ; but the very worst way in which a Medical Officer can attempt to secure that object is to assume an authority independent of the Guardians which he does not legally possess. Neither is it right towards the ratepayers and their representatives that such liberality as may properly be conceded in regard to dietaries and stimulants should appear to be the result of the generosity of the Medical Officer in opposition to the views of tho Board of Guardians.

The Commissioners recommend you hereafter to govern your conduct in this respect by a careful compliance with the regulations in force for the government of Workhouses.—By order of the Commissioners,

B. BANKS, Chief Clerk.

LIMERICK UNION—WEDNESDAY.

DR. O'SULLIVAN said he would give the Board an opportunity of discussing the question again, and handed in the following notice of motion :—"I will move, on this day fortnight, that our County and City members be requested to lay the case of Dr. F. T. Porter (late Medical Officer of the Castleconnell Dispensary District) before Parliament, with a view of ascertaining whether "the Commissioners for administering the laws for the relief of

the poor in Ireland," exceed the power vested in them by summarily dismissing by sealed order Dr. Porter from his office without a sworn investigation, or affording him the necessary information to enable him to disprove the authorship of a certain anonymous letter, or letters (the alleged cause of dismissal), and if such arbitrary power had been given to the aforesaid Commissioners by law, that said law may be so altered as to afford the Poor-law Medical Officers of Ireland the same amount of justice granted to the most contemptible criminal, namely, a fair and impartial trial.

THE REGISTER.

The Chairman called the attention of the Board to two children who had been admitted to the hospital on a ticket of Dr. Kavanagh's, but who were deemed unfit cases for such a class of relief, by Dr. Phayer, and were sent into the body of the house. There father was alive but was sick, and he (the Chairman) thought the case one which should be dealt with by the Board as one of the class referred to in late discussions. A resolution had been passed on last board day stating that all cases which could be effectually dealt with at the dispensary should not be sent into the house.

The Master said they were two children who had been in and out of the house for the last two years. They were also occasionally in hospital and only recently discharged.

Mr. Delmege agreed with the chairman. The case was one which should be inquired into—it was one of that class which very much swelled the numbers in the house, and which were much complained of. He proposed the attention of the commissioners be called to the matter.

Dr. O'Sullivan said it appeared according to the Master's statement that the boys were constantly in and out of hospital, and the medical gentleman might have good reason for sending them back to hospital. He believed it would be right to hear what he had to say on the matter.

Mr. Cronin—I think we should have Dr. Kavanagh's explanation. He is one of our ablest and most experienced physicians, and would do nothing, professionally or legally, which he deemed to be incorrect. (Hear, hear). The least courtesy we could show him would be to postpone this matter until he has an opportuity of replying to a communication from us. I therefore propose the matter be communicated to him with that view. (Hear, hear).

Dr. O'Sullivan—And I second it.

Mr. Delmege said the case ought to be inquired futo, but it was right that Dr. Kavanagh's explanation should be heard. However, it appeared to be wrong that the boys were admitted into hospital.

Dr. O'Sullivan—That remains to be seen.

Mr. Browne said that the question for admitting such cases into the house at all would have to be discussed. There was no reason why the sick father should be retained outside and the children sent into the house.

Dr. O'Sullivan asked what evidence had they that the father was in such a state that he could be removed at all.

Mr. Cronin's resolution was then agreed to.

TIPPERARY UNION.

PAYMENT OF LAW COSTS OF VACCINATION PROSECUTIONS.

Mr. DWYER said, as regarded the summonses in vaccination cases, a case came before the Bansha Petty Sessions on the previous day, when Captain Dawson presided, and the professional gentleman engaged for the prosecution applied for 30s. costs

The bench had, however, reduced the amount to 7s. 6d., and 2s. 6d. for the fine and costs of court. It was said at the board that a small fine inflicted in a few cases would be a caution to persons not to infringe the law, in the case to which he referred the child had been vaccinated, but he was not brought for inspection at the end of eight days. The man swore that when the doctor told him to bring the child, after thirteen or fourteen days, he at once did so.

Colonel Purefoy observed that they were only losing time in discussing this matter, for they could not control the magistrates. In future they would not need a solicitor, as Captain Hamilton had said it was not necessary to have one. He thought it was perfectly right that persons who did not comply with the Vaccination Act should be summoned. In consequence of the attention paid to it in some districts there was no small-pox to be found, and if it were properly carried out the disease would be gone entirely.

Captain Dawson was sorry that the poor man at the Bansha sessions had been fined so much, but the magistrates could not act otherwise than they did. He had been sent to several times to bring in his child, but did not do so. Then when he was summoned he engaged an attorney to defend him, and the board had another to meet him.

At the request of Mr. Quillinan, the clerk read the commissioners' letter, stating that the prosecutions could be brought by the clerk or relieving officers, and not by the board as a corporate body.

CLONMEL UNION.

On the question of the Resignation of Dr. Prossor.—A discussion then arose as to whether the board had power to accept the resignation at all, and whether it should not first have been forwarded to the dispensary committee.

Mr. Shee said he thought it would be their duty to advertise, and proceed to elect a successor.

Mr. Davis read from the regulations that the power lay in the hands of the committee, and

Mr. Riall read from the Act of Parliament, showing that the guardians could elect.

Alderman Hackett suggested they should notify the resignation to the commissioners, and its acceptance by the board, and then wait directions from them as to the course to be followed.

Mr. Cantwell thought they could not accept the resignation before the committee.

The Chairman said it had been accepted, and signed by him.

It was finally agreed to direct the clerk to inform the secretary of the committee of the resignation, in order that he might take such measures as are necessary for the election of a successor to Dr. Prossor.

Mr. Thomas Cantwell then gave notice of motion that, in consequence of the resignation of Dr. Prossor, through ill-health, he would move that he get the usual superannuation allowance in accordance with the provisions of the Act.

Correspondence.

TO THE MEMBERS OF THE IRISH MEDICAL ASSOCIATION.

GENTLEMEN,—It has been long felt by myself and many of the profession, who have given their attention to the subject, that, instead of coming before the country as it were "in forma pauperis," when seeking by Act of Parliament for Superannuation Allowance, we should, in the first instance, have endeavoured to prove to the world that we were able and willing to make an independent effort for ourselves. The ancient's inculcated a wise principle of self-reliance in the adage, "The Gods help those who help themselves," and I am convinced, that, had we in the *Strength of Union* given evidence of that self-reliance, we should have carried the opinion of the country with us, and with it, a substantial recognition of our services, instead of being, as we were the long baffled and disappointed suers for the sparing and hard-handed bounty at length *wrung* from unwilling rate-payers; I ought not to use the word *wrung*, for by the careful omission of the compulsory clause, they have secured for themselves the power of denying the *pittance* authorized by law to those, who, however strong and just their claims may be, are not fortunate enough to possess sufficient local influence for commanding a majority among guardians, who, apart from such influence, will assuredly

weigh well the value of an additional farthing in the poundage-rate as against the just claims of their worn out officer.

They have the further power of ignoring any length of service, as a claim for Superannuation, if such service has been in *any Union* save the one where the claim is preferred, thus a man may have spent his professional life in the Poor-law Medical Service, and yet have been only just long enough in any one union to be looked upon as "*Nobody's Child.*" I endeavoured at a meeting of the Association last year to convince my medical brethren, that the Superannuation likely to be obtained by *the Act* then sought for, would be paltry and insufficient, even if we were able to carry a Compulsory Clause, but as a mere Permissive Bill it could prove nothing but a delusion and a snare ; I then suggested that the better course would be, to seek for the legalised establishment of a *Poor-law Medical Officer's Retiring Fund*, on the basis, and as far as possible on the plan of the Constabulary Fund : endeavouring at the same time to obtain, if possible, an Annual Parliamentary Grant, as an auxiliary aid to our self created Fund, equal to one third ? of the sum annually stopped from our salaries as contribution to the Fund. I was met by the objections, that the Bill was then too far advanced to be changed or withdrawn, that it was better to get in (through the Bill) the fine end of the wedge in the hope of driving it further at a future time, and that the taking of such a course in no wise prevented us from establishing such a Fund, which they, the objectors, thought highly desireable. Such were the opinions expressed by those gentlemen who had been exerting themselves for the passing of the Bill, and notably, of our worthy and esteemed President, Dr. M'Namara. Under those circumstances, and in the face of such an opposition I had to *subside* for the time, though unconvinced, but I think now, when it has been proved how *very fine* and *very weak* the point of our wedge is, how unlikely to be driven for any reasonable depth into the block opposed to us, how very inadequate the retiring allowance, even on the full legalized scale of the act, would be, either as a reward for long service, or as a means for maintaining an educated man through the years of his declining life, even if it were to be obtained as a certainty, through length of service or loss of health, how much less so, when the obtaining of it, being but permissive, is most uncertain.

The time has come when the Poor-law Medical Officers, should, as a united body, make an effort, if they would secure for themselves and those dependant on them, the means of a decent existence when the time for the active exercise of their profession has passed by. I select this time for bringing the subject prominently before the profession, knowing that the establishment of a Co-operative Fund for the benefit of Poor-law Medical Officer's Widows, is in contemplation, and will soon be brought under consideration. Now, nothing can be more laudable than the establishment of such a fund, but, as many of us are not married, and some of us never will be, such a scheme must of necessity be limited in its appeal for support, to those who will join it voluntarily, as Benedicts, actual or prospective, or such as sympathize strongly with those who are in that happy state. Feeling therefore, that a Superannuation Fund established on the Constabulary Fund basis, and to which all *must* contribute, would be a positive success ; and believing, that a Widow's Fund, by itself, and unconnected with the Superannuation Fund, would be much less likely to succeed, and *possibly* result in failure, I would strongly recommend, that both should go hand in hand, that the whole body of the Poor-law Medical Service be incorporated under the Benevolent Society's Act, having the style and title of the Poor-law Medical Officers' "Retiring Superannuation Fund and Widows Annuity Society," that the accounts of the Superannuation Fund, and those of the Widows' Fund be kept separately, that the contribution to the first shall embrace all Poor-law Medical Officers ; shall be compulsory, and by deduction from pay, as in the constabulary, while membership in the "Widows' Fund Branch," shall be voluntary, but that the contributions thereto shall be paid by members in a similar way as that to the Retiring Fund, that is. by deduction from pay as in the present Constabulary Offices Widows' Fund." I am not aware whether there be any legal difficulty in the way of conjoining the two Funds, under one and the same Co-operative Society, inasmuch as the working of them would be dissimilar : if there be, and that the difficulty be insurmountable, let us still have both, though separate, but I consider the subject of such paramount importance to the profession, as to be well worthy of our most serious consideration, and as well worthy any preliminary expenses for having the advice of counsel, the services of an actuary, and for the advising on, and consideration of, the subject, between a well selected committee of our profession, and those gentlemen who have had experience in, and are conservant with, the working of the constabulary and other similar Funds ? to such preliminary expenses I as an humble individual, will be most happy to contribute. I annex a crude sketch of rules for both branches of the Society, based upon the Constabulary system, but necessarily differing in some respects. I only mean them for an outline to be altered and filled up by the working committee, who may (should our plans prosper), have the organizing of the scheme. With every apology for this long and, in many respects imperfect, letter, and in the hope that it will draw the attention of abler heads and abler pens to a subject of such importance.

I have the honour to be gentlemen, your obedient servant,

R. M. TAGERT.

Carrickmacross, August 25th, 1870.

Sketch draft of Rules for "The Poor-law Medical Officers Retiring Superannuation Fund and Widows' Annuity Society."

No. 1.

Rules specially applicable to the Superannuation Fund.

1. That the Society be incorporated under the style and title of the Poor-law Medical Officers' Retiring Superannuation Fund and Widows' Annuity Society.
2. That its place of meeting shall for the present be the College of Surgeons, Dublin.
3. That the following persons with others, shall be Trustees of the Funds (*to be filled up*), and shall continue so to be, till removed by a majority of members present at a full meeting.
4. That it be compulsory on all Poor-law Medical Officers from the date of enrollment to pay, by way of deduction from their salaries, quarterly, or as such may be paid to them, 6d. per pound on their gross pay, towards the Retiring Superannuation Fund, this will give an annual income of about £2,000.
5. That in order to create a Fund, and to enable such medical officers, as may wish, to come under the more immediate benefit of the Society's Funds, it will be optional for such members to pay a sum on enrolment equal to years' contribution to the Fund, with interest thereon at five per cent.
6. That with the exceptional benefit to be secured to members by the optional payment under the foregoing rule, the amount of which benefit is to be settled by Committee, no member can derive any benefit who has not been years a contributor to the Fund.
7. That a medical officer of thirty years service, and over sixty years of age, may retire on full pay ? provided his contributions to the Fund, with compound interest thereon at five per cent, have amounted to the sum of.——
8. That a Poor-law Medical Officer of less than thirty years' service, voluntarily retiring from the Poor-law Medical Service, may either receive such amount of compensation, or annuity, as the Committee may deem fit, according to his length of service, or he may have the option of continuing a member for the residue of the thirty years by payment of his contributions as hitherto.
9. That dismissal from the Poor-law Medical Service may void membership, and be a bar to the receiving of any benefit from the Fund, subject nevertheless to the operation of the following rule.
10. That any member who may have been dismissed the service, or compelled to resign, by the Poor-law Commissioners can bring his case before a full meeting of the members, and should two-thirds of the members present and voting, find, after due hearing and consideration of the case, that the circumstances did not warrant his dismissal, the application of Rule 9 be remitted in his case, so far as the meeting may decide.
11. That all contributions to the Fund shall be paid in to bank to credit of the Trustees, who shall invest them for the benefit of the Society.
12. That voluntary gifts, donations, or subscriptions, in aid of this Fund, be received and duly placed to the credit of the Trustees, for the benefit of the Society.
13. That a Committee of Management be appointed, also a paid Secretary and Auditor.

No 2.

Rules specially applicable to the Widows Fund Branch of the Society.

1. That it be constituted and named "The Widows' Fund Branch of the Poor-law Medical Officers Superannuation Fund and Widow's Annuity Society," holding its meetings at the same place.
2. That its object be, to create a Fund, from which annuities will be paid to the widows of such Poor-law Medical Officers as shall have been members, and contributors, at the period of their death.
3. That membership in the Widow's Branch shall be voluntary, but while it is specially calculated for the benefit of married officers, the unmarried are eligible for membership on paying one-half the entry and contributions so long as they remain single.
4. That the rate of contribution shall be four-pence in the pound on their pay for each married member, to be paid in a similar manner as that to the Superannuation Fund.
5. That in order to create a starting Fund each member on admission shall pay as an entry fee, a sum equal to the amount of one years contribution (or an average sum of).
6. That the following gentlemen, with others, shall be Trustees to the Fund, and shall continue so to be, until removed by vote of a majority of members present, and voting at a full meeting.
7. That monies and contributions due to the Society Branch shall be lodged in bank to credit of the Trustees, who shall invest them for the benefit of the Society.
8. That voluntary gifts, donations, and subscriptions, may be received and duly lodged to the credit of the Trustees, and invested by them for the benefit of the Society in the same way as ordinary contributions.
9. That in consideration of the contributions paid into the Funds of the Society by members, the widows of such members shall be entitled to receive an annuity of £40, subject to revision from time to time by vote of a general meeting, and upon the calculation of an actuary. Such annuity to cease in the event of the widow contracting another marriage.
10. That should the wife of a member die before her husband, the amount which should have been paid to the widow, shall be paid in due proportion for the benefit of the orphan children, until the youngest attains the age of eighteen.
11. That medical officers retain the rights of membership, and all benefits dependant thereon, notwithstanding their retirement from the Poor-law Medical Service, on condition of their continuing to pay regularly the same amount of contribution as hitherto.
12. That any married Poor-law Medical Officers who shall neglect to avail himself of the opportunity of membership for six months from enrolment of the Society, can only join the Society afterwards by payment of a sum equal to the contributions he should have paid from the time he was first entitled to join the Society as a married man, together with double entry fee.
13. That all members on admission shall sign the deed of settlement, and any other covenants binding them to conform to the Society's Rules.
14. That a Committee of Management be appointed, also a Secretary and Auditor, and that separate accounts shall be kept for each member.

TO THE EDITOR OF THE IRISH MEDICAL ASSOCIATION JOURNAL.

Sir,—Your account of the proceedings at Castleconnell, co. Limerick, are calculated to awaken unpleasant reflections in the minds of Poor-law Medical Officers. If the Poor-law Commissioners can dismiss an officer on a charge preferred by an individual, or a clique, without a fair trial by sworn investigation, after the accused has demanded such, thereby clearly raising the question of his guilt or innocence, it surely looks *rather too* arbitrary in days when even-handed justice is the professed rule wherever the British flag waves and British law bears sway. Even the best conducted officer could not feel secure for a week if such high handed practice should or could be carried out. Because there are generally two parties, at least, to be conciliated in every Board, or Committee, and the doctor will find it hard, or impossible, to keep both on his side. Besides this, there is an evident antagonism between the interests of the poor on the one hand, and of the rate-payers (represented by the committee) on the other; and if the doctor insists on the former getting their dues, he treads on the corns of the latter, and is often discountenanced and persecuted.

The visits of inspectors once in one, three, or five years, useful as far as they go, seem of little use in correcting these evils, and the Commissioners (with great respect be it said) seem to know nothing about them. So long as matters go on smoothly, and the doctor can manage to conciliate his governors, so as to avoid complaints, he may do pretty much as he pleases, that is if he has a conscience or anything of that sort he will try to do his duty to the poor; but, if not, ———. But if a complaint be made by a committee man, or a guardian, woe to the unlucky doctor who has *managed so awkwardly* as to come into collision with one of these powerful potentates. However frivolous the charge, it must be fully met and answered, although it cost quires of writing (as you know a fool may start an objection or insinuate a complaint which a wise man will find it hard to answer), otherwise comes the sworn investigation with all its disagreeable concomitants, or it may be, as in this case, dismissal by sealed order. It is no wonder the medical officer (although the working bee of the system, and the man who knows most about it) is afraid to say or do anything which might give offence to one of those who can work him so much trouble at so little cost to themselves, and in whose hands is placed—not wisely—the regulation of his salary.

It is some little credit and comfort that among Dr. Porters's committee, one has been found to express himself in a manner which embodies the idea of perfect justice. Mr. Tinsley said—"I neither know, nor care for, Dr. Porter, but by all means let him have a fair trial," or words to that effect. That is spoken like a man of honour. Would there were many Mr. Tinsleys on Dispensary Committees! We should not then have the hole and corner work so much in favour in some quarters.

I am, yours, &c.,

"M. O. OF 18 YEARS' STANDING."

MONETARY QUALIFICATIONS FOR DISPENSARIES.

On the justice of the course which a persecuting clique have adopted towards Dr. Porter, of Castle Connell, and which the Poor-law Commissioners have considered themselves justified in countenancing and abetting, we have spoken freely in another part of this issue. We think it proper, however, to observe that the *Limerick Reporter* has put forth, in several successive publications, an argument in Dr. Porter's favour, which we think requires repudiation on the behalf of the Profession. It is stated that Dr. Porter paid the widow of the late Dr. Bomford £200 on assuming the appointment.

We venture to remark that this seems to us to be a reason which rather goes to palliate the act of the Commissioners in dismissing the medical officer. It would be a precedent destructive of the interests of the poor and the just claims of Poor-law Medical men, if such a taxation of the incoming officer were held in any respect to entitle him to special consideration, or to give him any lien whatever on the appointment. If his duties were neglected, or his official position infringed in any respect, the dismissal of Dr. Porter, or any other medical officer, would be perfectly proper; and as to the hardship he would suffer in losing his money, we should be disposed to say, serve him right!

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, SEPTEMBER 28, 1870.

CONTENTS.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

PROFESSOR TYNDALL ON THE SCIENTIFIC USE OF THE IMAGINATION.

PROF. TYNDALL lectured on Friday evening upon the above subject in the Philharmonic Hall at Liverpool; it was one of the most important evenings during the whole of British Association meetings. Prof. Tyndall, upon coming forward, was greeted with loud cheers. He began by detailing the circumstances under which the lecture had been composed, and proceeded to give instances of the use that scientific men had already made of the power of imagination. In the phenomena of sound they travelled a very little way from downright sensible experience; yet still the imagination was to some extent exercised. The bodily eye, for example, could not see the condensations and rarefactions of the waves of sound. They were constructed in thought, and their existence as firmly believed in as that of the air itself. But their experience had to be carried into a new region, where a new use was to be made of it. Having mastered the cause and mechanism of sound, it was desired to know the cause and mechanism of light. The lecturer proceeded to show how, be the force of imagination and reason combined, the mysteries connected with the phenomena of light may be penetrated. He showed that in the atmosphere there are particles which defy both the microscope and the balance, which do not darken the air, and which exist, nevertheless, in multitudes sufficient to reduce to insignificance the Israelitish hyberbole regarding the sands upon the sea-shore. It could not be too distinctly borne in mind that between the microscopic limit and the true molecular limit there was room for infinite permutations and combinations. It was in this region that the poles of the atoms were arranged, that tendency was given to their powers, so that when these poles and powers had free action and proper stimulus in a suitable environment, they determined first the germ, and afterwards the complete organism. This first marshalling of the atoms, on which all subsequent action depended, baffled a keener power than that of the microscope. At all events, it was plain that beyond the present outposts of microscopic inquiry lay an immense field for the exercise of the imagination.

Alluding to the primordial germ theory which Mr. Darwin placed at the root of life in his "Origin of Species," he said the human imagination would infallibly look behind the germ and inquire into the history of its genesis. From the examination of the solar system, Kant and Laplace, came to the conclusion, that its various bodies once formed part of the same undislocated mass; in our day this hypothesis had received the independent countenance of spectrum analysis, which proved the same substance to be common to the earth and sun. Life could hardly have been present on the earth, how then did it come there. Two views offered themselves. Life was present potentially in matter when in the nebulous form, and was unfolded from it by the way of natural development; or it was a principal inserted into matter at a later date. After paying a passing compliment to the readiness of the clergy to receive and argue these theories, in which he said that the greatest cowards of the present day were not to be found among the clergy, but within the pale of science itself, Prof. Tyndall proceeded to observe that there were the strongest grounds for believing that during a certain period of its history the earth was not, nor was it fit to be, the theatre of life. Whether this was ever the nebulous period, or merely a molton period, did not much matter, and if he reverted to the nebulous condition, it was because the probabilities were really on its side. The question was this—did creative energy pause until the nebulous matter had condensed, until the earth had been detached, until the solar fire had so far withdrawn from the earth's vicinity as to permit a crust to gather round the planet? Did it wait until the air was isolated, until the seas were formed, until evaporation, condensation, and the descent of rain had begun, until the eroding forces of the atmosphere had weathered and decomposed the molten rocks so as to form soils, until the sun's rays had become so tempered by distance and by waste as to be chemically fit for the decompositions necessary to vegetable life? Having waited through these Æons until the proper conditions had set in, did he send the fiat forth, "Let life be!" These questions defined a hypothesis not without its difficulties; but they might rest secure in the belief that it could never be stormed and that it was sure if it yielded at all to yield to a prolonged siege. The process must be slow and secular which

commended the rival hypothesis of natural evolution to the public mind. For what were the core and essence of this hypothesis? Strip it naked, and we stood face to face with the notion that not alone the more ignoble forms of animalcular or animal life, not alone the nobler forms of the horse and lion, not only the exquisite and wonderful mechanism of the human body, but that the human mind itself—emotion, intellect, will, and all their phenomena—were once latent in a fiery cloud. Surely, the mere statement of such a notion was more than a refutation. But the hypothesis would probably go even further than this. Many who hold it would probably assent to the position that at the present moment all our philosophy, all our poetry, all our science, and all our art—Plato, Shakespeare, Newton, and Raphael—are potential in the fires of the sun. We longed to learn something of our origin. If the evolution hypothesis were correct, even this unsatisfied yearning must have come to us across the ages which separated the unconscious primæval mist from the consciousness of to-day. Surely these notions represented an absurdity too monstrous to be entertained by any sane mind. Why were these notions absurd, and why should sanity reject them? The law of relativity which played so important a part might find its application here. These evolution notions were absurd, monstrous, and fit only for the intellectual gibbet in relation to the ideas concerning matter which were drilled into us when young. Spirit and matter had ever been presented to us in the modest contrast,—the one as all-noble, the other as all-vile. But was this correct? Did it represent what our mightiest spiritual teacher would call the eternal fact of the universe? Supposing instead of having the foregoing antithesis of spirit and matter we had been taught to regard them as equally worthy and equally wonderful; to consider them in fact as two opposite faces of the self-same mystery. Was it not probable that our repugnance to the idea of primæval union between spirit and matter might be considerably abated? Without this total revolution the evolution hypothesis must stand condemned, but in many profoundly thoughtful minds such a revolution had already taken place. In substance, if not in word, their position as regarded spirit and matter was "What God hath joined together, let not man put asunder." He had thus led them to the outer rim of speculative science, for beyond the nebula scientific thought had never ventured hitherto; and he had tried to state that which ought in fairness to be outspoken. This evolution hypothesis was not to be flouted away contemptuously, nor to be denounced as wicked; and, instead of fearing the hypothesis, we should seek to steady ourselves in its presence upon our faith in the ultimate triumph of truth.

Its existence as a hypothesis in the mind was, we might believe him, quite compatible with the simultaneous existence of all those virtues to which the term Christian had been applied. For, granting the nebula and its potential life, there still remained to baffle and bewilder the question whence came they? The advocates regarded the nebula hypothesis as probable, and, in the utter absence of any evidence to prove the act illegal, they extended the method of nature from the present into the past. They accepted as probable the unbroken sequence of development from the nebula to the present time. They had as little fellowship with the atheist who said there was no God, as with the atheist who professed to know the mind of God. "Two things," said Immanuel Kant, "fill me with awe—the starry heavens and the sense of moral responsibility in man." And in his hours of health and strength and sanity, when the stroke of action has set in, the scientific investigator finds himself overshadowed by the same awe. Breaking contact with the hampering details of earth, it associates him with a power which gives fulness and tone to the existence, but which he can neither analyse nor comprehend.

As one of the local papers said the Professor ended his theme as if thinking aloud. He ceased, and the spell which had bound his hearers was broken, and an outburst of applause followed loud and long.

CHEMICAL SECTION.

This section was under the presidency of Professor H. E. Roscoe, B.A., Ph.D., F.R.S., F.C.S., who, in his address reviewed the progress of chemical science since the last meeting of the association in Exeter. The president pointed out that in spite of the numerous and important brilliant discoveries of which every year has to boast, we are really but very imperfectly acquainted with the fundamental laws which regulate chemical actions, and that our knowledge of the ultimate constitution of matter upon which those laws were based, was but of the most elementary nature. In proof of this he referred to the difference now existing among chemists as to the existence of atoms, some regarding it as the very life of chemistry; while others, while admitting that the theory explains certain chemical facts, are reluctant to accept it as true. Sir Wm. Thompson had not only come to the conclusion that matter is not infinitely divisible (and therefore that atoms exist), but had attempted to give an idea of their size,—"the mean distance between the centres of contiguous molecules is less than the hundred-millionth, and greater than the two-thousand millionth, of a centimetre." Professor Roscoe said he considered that the results of the mechanical theory of gases—which presupposed molecules—rendered the existence of indivisible particles more than likely. In this connection he referred to the death of Graham and his researches in molecular chemistry. The next topic was Dr. Andrew's (of Belfast) experiments with gases, which have upset the theory that the three states of matter, solid, liquid, and gaseous, were distinct, and dependent upon pressure or temperature. He had proved that a large number of, and probably all, easily condensible gases possess a critical point of temperature at and above which no increase of pressure can be made to effect a change into the liquid state, the body remaining as a homogeneous fluid, whilst below this critical temperature certain increase of pressure always effects a separation into two layers of liquid and gaseous matter. As examples of the power of modern methods of research, the president referred to the researches in solar physics of Frankland, Lockyer, and Zollner, the latter chemist having arrived at the probable absolute temperature of the sun's atmosphere as well as that of the internal molten mass. These results, said Professor Roscoe, are so interesting and remarkable as being arrived at by the combination of recent spectroscopic observation with high mathematical analysis, that I may perhaps be permitted shortly to state them. Starting from the eruptive nature of a certain class of solar protuberances, Zollner thinks that the extraordinary rapidity with which these red flames shoot forth proves that the hydrogen of which they are mainly composed must have burst out from under great pressure; and if so, the hydrogen must have been confined by a zone or layer of liquid from which it breaks loose. Assuming the existence of such a layer of incandescent liquid, then applying to the problem the principles and methods of the mechanical theory of gases, and placing in his formulæ the data of pressure and rate of motion as observed by Lockyer on the sun's surface, Zollner arrives at the conclusion that the difference of pressure needed to produce an explosion capable of projecting a prominence to the height of 3·0 minutes above the sun's surface, a height not unfrequently noticed, is 4,070,000 atmospheres. This enormous pressure is attained at a depth of 139 geographical miles under the sun's surface, or at that of 1-658th part of the sun's semi-diameter. In order to produce this gigantic pressure the difference in temperature between the inclosed hydrogen and that existing in the solar atmosphere amounts to 74,910 deg. Cent. In a similar way Zollner calculates the approximate absolute temperature of the sun's atmosphere, which he finds to be 27,700 deg. Cent.—a temperature about eight times as high as that given by Bunsen for the oxhydrogen flame, and one at which iron must exist in a permanently gaseous form. Among the more purely chemical subjects to which the president went on to refer were: the experiments of Julius Thompson, of Copenhagen, as to the heat of chemical combinations; the invention of a new galvanic battery by Bunsen, the electro-motive force of which to the most powerful battery now known is as 25 to 18; to the discovery in organic chemistry of a missing link among the oxy-sulphur acids—hydro-sulphurous acid H 2 So 2; to the metallic vandates which had been found to have a corresponding order of salts to the phosphates. In organic chemistry he referred at some length to the investigations on mellitic acid. The discovery of the sedative properties of chloral hydrate marked an era in medical chemistry second only to the discovery of the anæsthetic properties of chloroform. The chemistry of colouring matters had received an enormous impetus in the practical working of the brilliant discovery of the production of artificial alizarine, the colouring matter of madder. This discovery differs from all former results, inasmuch as it has reference to the artificial production of a natural vegetable colouring substance in enormous demand. During the past year much progress has been made in the practical working of the processes by which the colouring matter is obtained. The president referred in the last place to the utilisation of waste products in manufacture, and enu-

merated three valuable processes recently introduced into our most important chemical manufacture—that of alkali, Dr. Mori's method of recovering sulphur from the vat waste, Weldon's process for the recovery of black oxide of manganese, and Mr. Deacon's mode of producing chlorine from hydrochloric acid without the aid of manganese.

SECTION FOR BIOLOGY.

Professor Rolleston presided in this section, which was divided into three departments, that of zoology and botany, that of anatomy and physiology, and that of ethnology and anthropology.

Professor Rolleston, in his opening address, drew attention to the importance in the interests of science of trained students observing natural history, and he especially urged the necessity of local observations. He expressed a wish that there was in every district a Gilbert White to write its natural history, as White wrote that of Selborne. He urged the desirableness of establishing "field clubs," and expressed an opinion that it was to the development of provincial museums that we must look in the future for the extension of intellectual pursuits throughout the land. From these museums, while the chief object of them should be to obtain collections from the districts in which they were placed, he would not exclude foreign specimens, but he insisted upon the proper classifying and cataloguing of all specimens. While not depreciating scientific instruction as a means of training the mind, he cautioned scientific students against the neglect of literary pursuits. Proceeding to review the subjects which will be considered in the section, Professor Rolleston said that one of the most important of these subjects, that of spontaneous generation, touched upon certain susceptibilities lying outside the realm of science. He, however, reminded his audience that in the sectional discussions they had only to do with the scientific arguments bearing upon the questions; and he hoped that the committee would be supported by the members in excluding all extraneous considerations. Truth being one, all roads leading to it would assuredly converge sooner or later; their business was to see that the road with which they were particularly concerned was properly laid out. In this view he was glad to be able to fortify himself by the dictum of Archbishop Whately:—"The possessor of real faith will be fully convinced that whatever suppressed physical fact appears to militate against his religion will be proved to be natural, or else be reconcilable with his religion." The archbishop further said that if he were to found a church he would make it one of his articles that it should not be lawful to bring forward Scripture or religious considerations to disprove scientific theory, which only should be applied in the region of morals. He (the lecturer) wished that Archbishop Whately had founded such a church. (Hear, hear, and cheers.) This, and other testimonies which he quoted, were most important, but he could not forbear to point out what might seem to be a want even in the dicta of such men. They had allotted the privilege of error of teaching to the utterances of only one of the parties concerned; they had forgotten the woe which religious men and theologians had brought upon the world because of the offences which they, with ill-considered zeal, had created. They had left something unsaid which might be summed up in the homely caution that "there may be faults on both sides." He trusted that discussion upon the scientific aspects of these great questions would not be restrained, it being kept in mind that mutual forbearance might slacken progress as well as excite mutual jealousies. In conclusion, he expressed a hope that the association would adopt some means to carry out the suggestions he had made in the opening of his address. He would be more than satisfied, and all his objects would be fully accomplished, if only as much money could be obtained for these purposes as was lost to the people every year through suffering and death, occasioned directly by ignorance of scientific facts and principles relating to sanitary arrangements alone.

THE SOCIAL SCIENCE CONGRESS FOR 1870.

The annual congress of the National Association for the Promotion of Social Science was opened last Wednesday at Newcastle-upon-Tyne, when the inaugural address was delivered by the Duke of Northumberland, the president of the year.

His Grace, who was received with cheers, proceeded, after some opening remarks, to discourse with much eloquence on the suitability of Newcastle for the meeting of a congress assembled to discuss important problems relating to the improvement and welfare of the human race.

He then proceeded to review a number of social or socio-political topics of great general interest. The pressure on our space prevents us giving more than a few extracts from the duke's address, selected with a view to their suitability to our columns.

EDUCATION.

With regard to the instruction of youth, I think we may congratulate ourselves on the passing of a measure calculated to reconcile, as far as they can be reconciled, the advocates of the rival systems the merits of which have been so warmly contended for in the late discussions upon this much-debated matter. Yet the measure now become law must be considered rather as a preliminary preparation for the fulfilment of a scheme than a scheme itself. It has not proscribed religious, though it has dogmatic, teaching in the schools hereafter to be created by rating, and the country must be congratulated on having brought to bear the practical good sense of the nation on this all important point at a moment when the authors of the measure might have been induced to yield to pressure in the opposite direction. Holding the conviction that education in its proper sense is the fostering and directing the growth of the spiritual as well as intellectual part of man's nature (though I am somewhat loath to repeat what many will consider an universally acknowledged truism), I esteem it a miserable mistake to look on instruction, which is only conveying information, as satisfying the real requisites of society in this matter, which ought to be the fitting of the man, not only for the discharge of the duties of the station allotted to him here below, but for the far higher one he ought to aspire to hereafter—the education of the whole man, not merely the cultivation of the intellect.

Religious or Secular Education.—I must express my regret that those who were entrusted with the management of the Education Bill were induced to consent to the clause forbidding the teaching of any formulæ in the schools maintained by rates. It is not so much on account of my attachment to the Church of England that I lament it, as on account of its ignoring that which I hold to be a necessity with most minds—the adoption of some concrete form or creed by which religion can be engraved on the memory, if not on the heart. Abstract principles find no holding ground in ordinary intellects. Most men are not thinkers, and never can be, but an idea may be impressed on their minds and form a basis of action, upon which they may be quite unable to reason. To supply this groundwork is the office of definite religious formulæ. I am sufficiently narrow-minded to be convinced that there is not a sect which really believes in Christ whose doctrines would not form a better foundation for a man's life than a mere set of philosophic axioms, which, asserting no hold over the heart, impress themselves but very feebly on the ordinary understanding. The Sermon on the Mount, taught by mere human authority in the same way as the philosophy of Greece, would, I doubt not, have as little influence over a man's conduct as that exercised by the wisdom of the Athenian sages or the maxims of Confucius. That philosophy has failed to essentially ameliorate or elevate mankind, whilst the Christian religion, in spite of, and even perhaps through, the very antagonisms which have sprung up in the midst of the Christian Church, has had a power for good, to which, leaving out other proofs of a more general and cogent description, I hope our meeting here to-day is a true, though perhaps a feeble testimony.

Compulsion.—The question of compulsory education, properly so called, can hardly be said to have received a solution anywhere, and I may well hesitate to express an opinion upon it. Abroad its success has been extremely doubtful. In America it seems, to judge from their own statistics as well as from the authorities, both native and foreign, who have written on the subject, that apart from the character of the education given, the system can be but partially carried into effect from the difficulty of enforcing it on those to whom it is applicable; whilst, as might be expected, greater success has attended the more regular and despotic pressure of the German governments. In the crowded state of the population of this country, the difficulty of providing the means of subsistence is so great, and, with regret it must be confessed, the ignoring of the advantages of instruction so common, that

compulsory measures will be far more severely felt; and the more so from the entire freedom hitherto enjoyed, and in this direction too often misused by the people at large. I fear that, from the contemplation of society in America, one cannot conclude that the system of education in operation there has produced the beneficial effects which we hope to see result from our efforts. Making every allowance for the crowds of foreigners which, hardly landed from Europe, find themselves on a level with the native born, we cannot but mark the inclination to maintain the exploded errors of old European societies, and observe with sadness the same profound ignorance of the truths of political economy, the same ruinous inclination to consider capital as the enemy of labour, and, alas! the same propensity to violence and outrage which prevails so lamentably in certain sections of our own working classes, whilst neither morality nor sobriety appear to have been promoted in that proportion which the fond hopes of the founders of their educational system had promised to their posterity.

The Scotch Plan.—The plan pursued in the sister kingdom of Scotland presents in many respects a favourable contrast. It is rendered almost compulsory by universal usage and a deep conviction of its benefits, the best, indeed the only mode, in which one would, as a general rule, desire to see education made compulsory; and yet, deeply rooted as it is in the feelings of the Scotch people, and quite as successful as any other that can be instanced, it is a question whether its tendency has been to foster a spirit of religious charity and goodwill amongst the different classes of society, content with existing institutions, sobriety, and morality, to the same extent as it has engendered that spirit of critical disquisition and inquiry, as well as of self-reliance, energy, and frugality which are the peculiar characteristics of that people.

COMPETITIVE EXAMINATIONS.

The competitive examination, now the only mode by which entrance is to be obtained through the straight and narrow gate which admits to government employment, has two great disadvantages—firstly, that of being in itself a very unfair and unjust test as regards the candidate himself; and, secondly, of affording no proof of his real fitness for such employment. With respect to the first, it must be obvious that the candidate's success must depend quite as much on the attainments of his fellow competitors as on his own; it is complicated by the great variations unfairly introduced year by year into the standard by which those attainments are estimated, whilst there is on the part of the examiners a natural and ever-increasing propensity to raise their requirements. The result is a practice has been introduced too well known by the name of cramming—that is, gorging the memory with knowledge which the mind is not required or enabled to digest, so that success becomes a matter of memory rather than of intellectual power. As to the second point, the candidate who is successful too often brings to the service of government a mind and body exhausted by premature exertion, to whom the drudgery of the petty duties of official routine is disgusting, the more so as he is conscious of being fitted by superior attainments, if not by superior intellect, for far higher posts and occupations. These duties are, therefore, performed grudgingly and without spirit, and relinquished for any employment holding out brighter prospects than the niggardly pay doled out by the parsimony of the Government to its servants. It is not less doubtful whether this measure has been successful in producing the changes which it was supposed would result from it. The humble talent which it was one of the alleged objects of those who introduced the practice to bring forward for the higher offices, finds itself, as a general rule, placed at great disadvantage in the race with the richer class of competitors, to whom money must, as it does in other things, smooth and facilitate the road to the attainments required. May we not conclude that, after all, a less rigid rule would in reality be advantageous to all parties? Without advocating the practice of our transatlantic brethren, where any and every one, from the rail-splitter to the millionaire, may pretend to fill any office in the State, can it be desirable that Government employment in this country should be closed to every man who cannot, before he arrives at manhood, pass an examination which the highest medical authorities declare to be generally injurious to the body, and many well qualified to decide, have declared to be almost as detrimental to the mind and intellect. These are not solely my own opinions, but in my intercourse with men who have administered every department in the State, many of them foremost in the advancement of what are usually called Liberal ideas, they have expressed to me in private their concurrence in the views I now state, though they are too conscious of the hold that the present system has on the public mind to be willing to run counter to it. Possibly, however, and I trust it may be so, my words may find an echo in the breasts of some of those around me, whose minds refuse to bow before the tyranny of the popular creed of the day, or to be cramped by the teaching of a narrow and unpractical philosophy, which holds knowledge, however deep and solid, insignificant when weighed against multifarious attainment, however superficial, or versatility of genius, however useless for practical purposes. I will not dwell on the cruelty to the candidates rejected in competition from no fault of their own, and yet on whom the disappointment of failure and a certain stigma must rest, than which there are few things harder for the young to bear, or more injurious to their characters. Speaking in a general sense, it is not by confining minds to distinct channels of occupation, by immuring them within the close limits of particular callings and professions, ignoring all talent unless exercised in a particular groove—thus imitating under another form the long-exploded mistake which permitted no man to practise any trade, or as it was called, mystery, unless he belonged to some guild or association, hermetically sealed to all but those to whom the jealousy of the ruling members from time to time vouchsafed an entrance—that society will make progress in the solution of the great problem of maintaining and increasing the welfare of an ever-growing population. It is rather by giving as free scope as possible to the display of the talents and the exercise of the energies of the individuals composing it, and by removing impediments to the employment of such energies and such talents for the public benefit.

SANITATION.

No expense has been spared in bringing the necessary supplies of pure water to most of our cities and great towns. The difficulty of dealing with it after it has been rendered noxious by the uses to which it is there applied, and its consequent pollution with refuse matter of every description, is principally that of carriage. Some recommend its purification by filtering, which, supposing this effectually done, still leaves the trouble and expense to be incurred of conveying away the solid residue. Others, and I think it the more correct solution of the problem, recommend that the water should continue to convey its burden to sites where it can be allowed to deposit it as a fertilizing agent in the soil, and, whatever the cost in particular localities, this appears, on the whole, the most natural and the least operose of the schemes devised, and by the proof of experience effectual for the object desired. The state of the law with respect to the poisonous products which some manufactories discharge into the sewers, and which thus find their way into waters hitherto uncontaminated, will scarcely be thought sufficiently stringent by those who are exposed to suffer from this unwarrantable proceeding. I trust that the reading of some papers on this subject, which we may hope to hear from those of our members who have examined into this matter on behalf of the government, will demonstrate to all concerned that the prevention of the mischief is alike practicable and generally inexpensive; but at all events, it should be considered by the manufacturer as part of the cost of the processes, and as a first charge on the profits of his manufacture.

EMIGRATION.

The physical evils affecting the condition of the huge masses crowded into the comparatively narrow area of our large towns are hardly less palpable than the moral mischief consequent on this unnatural and unwholesome condition. But these latter, alas! admit of no more physical remedy, Palliatives must, of course, be applied in the shape of improved lodging, greater facilities for cleanliness and ventilation, better supplies of water, and, as far as possible, the enforcement of the provisions against the pollution of the air by smoke; but these are but palliatives which can only be carried into effect by a far more close and diligent system of supervision than is, or perhaps can be, at present exercised. It is a saddening thought that, raise the existing population to whatever pitch of comfort and prosperity you may, that very prosperity only invites the influx of the needier portion of that of the surrounding districts, and when the reverses to which all commercial and manufacturing societies are exposed take place, the new comers do not as a rule return to their original localities, but remain an ever increasing burden of want, wretchedness, and moral debasement on the communities into which they have migrated. What remedy is there? I see none, unless it be

the bridging over the distance, so to speak, between the labouring population of this country and those regions where the demand for labour is greater than the supply, by a regular and systematic plan of emigration, which shall, as far as possible, surround the emigrant on his arrival in another land with the same influences, institutions, and advantages as he leaves in the mother country. I am happy to see that amongst the subjects to be submitted to your attention this is likely to be fully canvassed, and that there are those amongst us who will bring to bear on it the experience of many years of foreign service in a great variety of our colonies. Hitherto government emigration may be said to have been confined almost entirely to the labouring class, and to the protection of that class its attention has been solely directed. No one thinks that it ought to have been less. But it may be a question whether it might not go further, and that by some admixture of emigrants of a higher class great benefit might not be conferred on both. It is generally held that without some capital a man above the rank of a labourer or workman is useless as a colonist. Is it possible to devise some course of special instruction and training by which such persons may be fitted to seek abroad a freer existence than that afforded by the only occupations which are open to them at home, overstocked as the market for their employment, and consequently ill paid as their service, is? But if this idea be held to partake a little of the visionary, no one will be inclined to dispute the advantages emigration offers to every one, whatever may be his antecedents, who seeks a market for the manual labour he cannot dispose of at home.

Original Communications.

A CASE OF RUPTURED UTERUS SUCCESSFULLY TREATED.

By Dr. Scott, of Bagnalstown.

On Thursday, the 28th of July, I was sent for to attend in her confinement a poor woman residing in the neighbourhood of this town. As I happened to be from home at the time, Mr. Borthistle, of the City of Dublin Hospital, who was on a visit at my home, kindly attended. On examining the case he found some symptoms of ruptured uterus, and knowing the woman to be in a dangerous condition, at once despatched a messenger for me. I arrived about four o'clock, p.m., bringing my midwifery instruments with me, and found the patient in bed. She was a thin, spare woman of about forty-five years of age, and the mother of five children. Her previous labours had been natural and of short duration. She always enjoyed good health. Her pains, I was told, set in about six o'clock the evening before, after a row she had with a neighbouring woman, but they were not troublesome until six o'clock in the morning, when there was a good deal of flooding. The waters came away about ten o'clock, and for two hours the pains were very violent. The nurse in attendance stated that she expected the birth of the child every moment as the head was well down on the perinæum. The patient was resting on her knees and elbows, and, during a very violent pain, she suddenly found something break (own words), and she described the rupture as something like the bursting of a bladder, with a rush of water in the lower part of abdomen. Labour pains at once ceased, but a more distressing pain set in about the pit of her stomach, with great tenderness to the touch, and sickness with inclination to vomit. On examining the abdomen externally, I felt the limbs of the child through the thin walls, about two or three inches below the ensiform cartilage; and, on examining per vaginam, I found the head had receded about four inches, which helped to confirm the diagnosis Mr. B. had made, that there was an extensive rupture, and that the child had partly escaped. It was my duty to deliver her immediately, but from circumstances over which I had no control, did not attempt to operate until after eight o'clock—remaining with her all the time. Previous to operating, I gave a full dose of opium with brandy. I had very little trouble in getting on the forceps, but had a deal of pulling before I delivered her of a very large male child, who was, of course, dead. As there was no hæmorrhage, I let the woman rest for about twenty minutes, then introduced my hand to take away the placenta, which I found over the right ileum floating in fluid. On gently pulling the funis, it came away, followed by about a pint of dark grumous blood. While my hand was in the abdomen I could distinctly feel the uterus firmly contracted. After giving her some stimulants with laudanum, I attempted to put on the bandage, but the tenderness of which she all along complained was so great, that she would not allow me to tighten it on her.

My young friend, Mr. B., suggested grain doses of opium, which I gave her every two hours, combined with two grains of the grey powder, and this she continued to take until the gums became quite tender; linseed poultices and stupes being kept applied to the abdomen. Immediately the gums were affected she began to get relief from the pain and tenderness. Her diet consisted of milk, chicken broth, &c., but no more stimulants were allowed, nor were they much needed. What appeared strange there was no lochia, or other discharge, during recovery. The woman is now quite convalescent (August 29th), and able to go about. The cause of the rupture I cannot say; there may have been some thinning at the seat of rupture, which could not resist the strong labour pains.

CLINICAL MEMORANDA.—SUBCUTANEOUS INJECTION OF MORPHIA CASES.

Reported by John Martin, M.D., M.Ch., Assistant-Surgeon to Mayfield Factory Dispensary.

The subcutaneous method of administering morphia has now so firmly established its claims to the favourable consideration of the Profession, that I feel it would be a task, quite superfluous on my part, to say much in its advocacy. No greater boon could have been conferred upon those, whose duty leads them to scenes of pain and anguish, than the power of giving *immediate* ease; and how often is it the lot of those, who in such cases, proper to its use, have called to their aid the hypodermic syringe and morphia solution, to see the agonies subside, even before the operation is concluded, and the worn-out sufferer sink into a quiet sleep. Such are, indeed, moments of happiness to those who love their Profession, for the good it is able to accomplish. In offering the following brief notes of cases, in which the good results obtainable from the hypodermic use of morphia were apparent, I do so merely to record my experiences for the encouragement of others, and as a contribution to the literature of this branch of therapeutics, for I am convinced as time goes on, that the subcutaneous administration of the *active principles* of medicines, will receive a larger and more deserved amount of attention than it does even at the present time.

First Case.—Anne McClelland, æt. thirty. Until about three years previous to commencement of present illness had been a weaver in a cotton factory; since leaving that employment has been a needlewoman. Has at all times been delicate and weak-chested. Health began to show decided symptoms of a break-up about three months previous to the date of present notes, July 10th, 1870, since when preliminary consumption has made rapid progress. During the last two months has suffered terribly from violent headaches, profuse perspirations, obstinate constipation, loss of sleep, wasting and extreme emaciation, and for the last ten days she has been losing her appetite, which up to that time had held good.

Physical examination showed that both lungs were universally and deeply implicated; loud bruits were to be heard over the mitral and aortic valves. There was no enlargement of the area of cardiac dulness. She was

dreadfully harassed with a racking cough, attended by muco-purulent expectoration. She had been over two months unable to stir from her bed, and signs of bedsores were becoming apparent. Altogether, she was in a state of the utmost misery, and death seemed the only possible relief to her sufferings. Opium and morphia failed completely in giving her any rest at night. I then commenced giving her subcutaneously every night one-third of a grain of morphia, first trying what effect it would have upon her with a quarter grain dose. This I continued until August the 17th, 1870, the date of her death, with the following results :—

1. Night sweats stopped ; felt quite cool all night ; immediately after the operation she felt a pleasant glow spread over her whole body, but this subsided after a little.
2. Slept well ; at first was a little thirsty.
3. The harassing cough greatly diminished.
4. Regained strength—being able after eight days to leave the bed, and sit up for a little every day, until about ten days before her death.
5. Appetite returned ; drank plenty of milk, whilst taking other nourishment, such as beef tea, &c.
6. Bowels, previously costive, acted regularly, requiring no medicine to move them.
7. Death came gradually, unattended by much pain or suffering, to the last the morphia giving her a good night's rest.
8. Any omission to give the injection was followed by a relapse.

This was one of the most forcible illustrations of the good effects of morphia given hypodermically. Though no other result but death could be hoped for in her case, yet it served admirably to smooth her path to the grave, giving her ease and comfort when she might have been suffering the most intolerable misery.

(To be continued.)

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the MEDICAL PRESS.)

No. V.

THE WORTHING SEWAGE FARM.

THE sewage of Worthing is leased by the local board of the place to a company called the Worthing Land Improvement Society, who have contracted to take the sewage for twenty-one years on the following terms—namely, for the first seven years for nothing, for the second seven years at a rental of £10 per annum, and for the third seven years at an estimated value derived from the previous fourteen years' experience. The local board is under an obligation to deliver it, on the above terms, upon the land of the society, and the society have wisely agreed to take no more of the sewage than they like, and only when they like.

The sewage farm consists of about ninety-six acres, of which about eighty-three are under irrigation, half being pasture land and the rest Italian rye grass.

The soil is a very porous loam to the depth of from two to six feet, under which there is gravel lying upon chalk. The soil is, therefore, admirably suited for irrigation purposes.

The town of Worthing has a resident population of about 7,500, and it is so well drained and sewered that the flow of sewage during the day time is at the rate of 55,000 gallons per hour.

For the sake of economising the steam-engine power of the water-works, the whole of the sewage of the town is brought by gravitation to two sewage tanks or wells about thirty feet deep, adjoining the chalk wells from which the water-supply of the town is obtained, and it is lifted from these tanks by the water-works' engine to a height of about nine feet above the ground, and delivered by means of a wooden trough to the irrigation grounds belonging to the Land Improvement Society. In this manner about four-fifths of the day sewage, but none of the night, is distributed upon the land, which, as usual, is sodden and offensive. The composition of the sewage and of the effluent water was as follows :—

Constituents per gallon.	Raw sewage.	Effluent water.
	Grains.	Grains.
Total solid matter in solution.	30·33	40·67
Chloride of sodium . .	—	—
Organic matter . . .	2·37	1·25
Ammonia	0·235	0·089
Ditto organic . . .	0·075	0·021
Nitrogen as nitrates, &c. .	0·338	0·340
Oxygen required to oxydise	0·323	0·123
Matters in suspension . .	4·38	0·00
Organic matter . . .	0·87	0·00
Mineral ditto . . .	3·51	0·00

It is evident, from these results, that the sewage of Worthing is largely diluted with subsoil water, and that it is of little value for agricultural purposes ; but, diluted as it is, the Land Society do not take one-third of it, the rest being allowed to flow from the tanks into the Teville stream, which carries it into the sea to the eastward of the town. Time will show how far the undertaking of the company is a sanitary success, for the condition of the Teville is still very unsatisfactory, and the proximity of the sewage well to the water-supply well is, at least, suspicious.

As to the commercial profits of the undertaking, we could obtain but little information, but they ought to be considerable, seeing that the sewage is put upon the land and given to the company by the local authoritiy, and that the company can take it only when they choose.

No. VI.

THE SEWAGE MEADOWS AT CARLISLE.

THE population of Carlisle is about 31,000, and the sewage of the town amounts to about 800,000 or 900,000 gallons per day. It flows towards the river Eden by two outfalls, one of which still runs into the bed of the river, and the other is leased to Mr. McDougall, at a nominal rent, for fourteen or twenty-one years. The sewage from this outfall amounts to about 500,000 gallons a day, and it flows by gravitation to a well at Willow-holme, which is at the head of the irrigation fields. It is there treated with a solution of carbolate of lime in the proportion of two gallons of crude carbolic acid and 18 lbs. of lime to the day's sewage. The carbolate of lime runs into the sewage in a graduated stream, and the mixture is lifted by a Gywnn's pump, that is worked by a steam engine of eight-horse power, and discharged into a trough upon a rather high bank which skirts the farm for about half a

mile. From this trough it is distributed upon the land, wherever it is required, by moveable iron gutters, about six feet long and a foot wide, placed end to end. There are about forty of these discharges, and they are changed every twelve or fourteen hours, so that the whole of the land, amounting to about 120 acres, is thus irrigated at least three times a year. The land is entirely grazing land for sheep and cattle, and is let to a butcher of the town at a rental of £8 an acre.

The soil is composed to a considerable depth of disintegrated red sandstone, and is so porous that the sewage quickly disappears from the surface, and is lost in the subsoil water, there being no actual outfall into the river. To obtain, therefore, a sample of the effluent water, we were obliged to dig a hole in the ground and collect the subsoil water. This, together with a sample of the original sewage, was submitted to analysis, with the following results :—

Constituents per gallon.	Raw sewage.	Effluent water.
	Grains.	Grains.
Solid matter in solution . .	30·17	17·67
Chloride of sodium . .	—	—
Organic matter . . .	6·25	2·15
Ammonia	1·920	0·192
Ditto organic . . .	0·120	0·020
Nitrogen as nitrates, &c. .	0·036	0·103
Oxygen required to oxydise	0·780	0·278
Matters in suspension . .	3·62	Not ascertainable.
Organic matter . . .	2·17	
Mineral ditto . . .	1·45	

In this case the sewage was much below the average strength, and was evidently diluted to a large extent with subsoil water before it reached the works; and the effluent water obtained from the hole in the ground was also much diluted with river water, so that the purifying effect of the land upon it was not clearly discoverable.

One fact, however, of great importance was manifest, namely, that the addition of carbolate of lime to the sewage arrested its decomposition, and prevented it from being offensive when distributed over the ground, without injuring vegetation.

The commercial profits of this undertaking are not very clear, although we were informed by Mr. McDougall that he had spent about £1,800 upon the plant, &c., of the farm, and that he paid all the cost of distributing the sewage upon the ground, as well as the rent of it (£4 an acre); and that in return he obtained £8 an acre for the land. This was the condition of things in 1867.

SPECIAL CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENT.

(*Continued.*)

PARIS, SEPTEMBER, 1870.

HAVING now considered the influence of traumatic lesions of the spinal cord on the production of eschars, it remains to pass in review the spontaneous diseases of the spinal cord, and to discover which are those which more peculiarly favour its development. Intra-spinal hæmorrhage and acute central myelitis, both one and the other producing irritation of all the parts of the grey matter in a certain extent of its length, give rise, generally, to the rapid formation of eschars. On the other hand, eschars usually are wanting in cases where the grey substance is not affected in the central parts, but only in the area of the anterior cornuæ, as is seen in infantile paralysis and general spinal palsy. Diseases almost exclusively limited to the whole columns do not produce them. And we may say the same thing with respect to tumours, Pott's disease, or partial myelitis, which, in truth, alter the spinal cord in its whole thickness, but only for a very short part of its length. Thus, eschars in case of spinal disease are the consequence, not of absence of action of the cerebro-spinal centre, but of irritation of some of its parts.

Disturbance of the nutrition of parts consecutive on lesions of the nerve-centres have pretty frequently their seat in the joints. The differences which these articular affections present, according to the nature of the primitive lesions, authorise us to distinguish two principal groups of these. The first comprehends those resembling acute or sub-acute rheumatism, that is accompanied by swelling, redness and pain, sometimes rather acute and sometimes ending in effusion into the joints. Acute or sub-acute inflammation of the joints of paralysed limbs may also arise in myelitis, as is shown by the cases of Gull and others where joint affections developed themselves whilst eschars were arising. In the joint affections of hemiplegic patients, described first in 1846 by Scott Alison and then by Brown-Séquard, these are limited to the paralysed limbs, and particularly to the upper extremity. They occur more frequently after softening of the brain, more rarely after cerebral hæmorrhage. They habitually arise fifteen days or a month after the attack, at the moment of the appearance of tardy contractions, or even later than this. We easily comprehend the interest which these affections present in a diagnostic point of view, since acute articular rheumatism is an affection which is often bound up with certain forms of cerebral softening, and also sometimes appears after wounds. On the other hand, many spinal affections are wrongly attributed to rheumatism, because of the existence of joint complications. The clinical characters which make the latter easily recognisable are principally :—Their limitation to the joints of the paralysed limbs, and the co-existence of other disorders of nutrition of the same kind, such as eschars, and, when the cord is affected, acute muscular atrophy and cystitis, &c. The type of the second group of spinal joint affections is met with in locomotor ataxy. This affection coincides, it may be said, with the *début* of the ataxy. Without any external cause, a swelling of the limb may appear, generally without pain or fever. In a few days the general tumefaction disappears, but there remains at the level of the joint a swelling resulting from hydrarthrosis. One or two weeks after the invasion we find a crackling, which shows an already grave alteration of the articular surfaces. Consecutive luxations sometimes occur. These joint affections occupy most frequently the knee, the shoulder, or the elbow. The ends of the articulations become sometimes greatly wasted. Thus, in three months' time, the head of the humerus may become entirely destroyed. M. Charcot remarks that there is usually complete absence of any traumatic, or rheumatismal, or gouty cause for such phenomena. Volkmann has given it as his opinion that the joint affections of ataxic patients is simply the result of the distortion which the ligaments undergo; but they occur also in the upper extremity. The clinical characters of these joint affections are truly specific. The *début* is sudden, marked by a general swelling of the limb, not produced by ordinary œdema; the rapid alteration of the osseous surfaces, and, lastly, its appearance at a determinate epoch of the disease to which it is related, are all curious.

The following is the direct answer to the question as to the cause of the joint affection. Believing, as M. Charcot did, that it was, indeed, a lesion belonging to

the spinal affection, he found by minute examination that it could not be attributed to any lesion of the nerves of the periphery. He therefore believes that he has shown that the lesions of the grey matter of the cord are the origin of these joint affections in locomotor ataxy. It is not rare to see the grey matter affected in this disease; but generally it is only so in the posterior horns of the cord. But this was not the case in two cases of locomotor ataxia with joint affection, in which microscopic examination was made of the spinal cord. The anterior cornua were, in these two cases, remarkably atrophied; a certain number of nerve-cells, especially those of the external group, had disappeared without leaving any trace. The alteration, besides, was chiefly noticeable in the anterior cornu on the side corresponding to the articular lesion. It was seated in the cervical region in the shoulder-joint affection, above the lumbar region in the knee-joint affection. Above and below these points, the grey substances of the anterior cornua were healthy. From all of the foregoing, it is probable that the inflammatory process, primarily developed in the posterior columns of the cord, by extending itself gradually to certain regions of the anterior cornua, has been enabled to develope the joint affection. If this were the case, we might naturally be inclined to admit that the joint affections of myelitis and those ensuing after softening of the brain result from the invasion of these same grey regions of the spinal cord. In the case of cerebral softening, the descending sclerosis of one of the lateral columns might be looked upon as the point of departure of the diffusion of the inflammatory process. Remak and others have recently remarked, in progressive muscular atrophy, some joint affections which much resemble by their characters the joint affection of the ataxy. There is nothing which ought to surprise us in this, when we consider that a lesion of the nerve-cells of the anterior cornua of the grey matter of the cord appears to be the origin of progressive muscular atrophy.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

[LETTER FROM OUR SPECIAL CORRESPONDENT.]

Reception Room, Liverpool,
21st September, 1870.

THE Fortieth Meeting of this Association has, without doubt, been a special success. The previous Liverpool meeting had been held sixteen years before under the presidency of the Earl of Harrowby. The progress of the town, with its gorgeous buildings (unequalled out of London), is but typical of the stride that science itself has made in this term of sixteen years. The local papers seem to think "the present gathering not so remarkable for the presence of distinguished men as that held here on that occasion." We confess we do not see the point of this observation. When we meet in street or platform the familiar faces of Tyndall, Huxley, Murchison, Cobbold, Farr, Gassiot, Houghton, Jevons, Lyell, Lubbock, Lankester, Stokes (Cambridge), Rolleston, Richardson, Roscoe, Angus Smith, Thomson, Williamson, Grove, and many others who are the bone and sinews of progressive knowledge—can we wish for much more.

It is true that we missed the foreigners. This branch of the visitors forms one of the most admirable adjuncts of such meetings as these, but the iron grip of war has for a time barbarianized those great countries, Germany and France—the cradles of science—and Great Britain has on this occasion been thrown upon its own resources, and we must confess that it has done its duty well. Although restricted from this particular feast of Minerva, we have no doubt that science will, like the Phœnix, rise with redoubled vigour amongst our continental brethren.

The visitors at the Liverpool meeting had an opportunity of listening to perhaps two of the finest orators within the realms of science. The president is, perhaps, one of the best chairmen, or impromptu speakers, I have met, and it is really a treat to have dropped across him in a "Sectional Meeting." The palm of oratory must, however, be awarded to Tyndall, whose excellent constructive faculty, finely rounded phrases, and rich imagery, creates a feeling of intense pleasure to the listener. A slight touch of verbosity occasionally mars them, but what of that, it is no import. His discourse "On the Scientific use of the Imagination" is an *Essay* equally suited to quiet perusal as it was to delivery.

In the Chemical Section, on Tuesday last, Professor Williamson brought before the members present, the important question of Government Aid to Science. It seems that the Government Commissioners propose forming a college of their own for the Indian Service. He condemned this, and other contemplated recommendations. The feeling against Government monopoly of scientific education is strongly felt, as it should be, by the "B.A.s"; and, when we consider that the Commission was instituted at their request, their opinion, if firmly expressed, should have considerable weight. We want State aid, but not monopoly. We want development of talent, not a Government nomination.

The Geographical and Biological Sections, as usual, attracted a large concourse of outsiders. Letters, such as Sir Samuel Baker's, from the White Nile in Africa, and Sir Roderick Murchison's communication about Livingstone, could not fail in attracting all the non-scientific public.

Dr. Brown-Séquard, and his papers, created a considerable amount of interest, particularly as there was an attempt to condemn vivisection by practically stopping all grants for researches in which vivisection was used. As regards the use of vivisection for lecture demonstration, it is, perhaps, open to discussion, but that such can be prohibited in original research is absurd.

The prevailing topic at the Liverpool Meeting has been Biogenesis and its attendant phenomena—changes produced by germinal ferments—infectious diseases of the animal and vegetable life, &c. The term Biogenesis is used by Huxley to express the hypothesis that living matter always arises from the agency of pre-existing living matter.

The President's address was completely taken up with this and kindred subjects. The discourse of Tyndall was inseparably connected with them, whilst there were no less than twelve or more section papers all dealing with these interesting points of investigation. Mr. Tichborne entered into the chemical part of the question in the Chemical Section, which brought forth Professors Roscoe, Williamson, and Angus Smith.

The Committee Reports were elaborate and important, but it would take up too much space to do them justice, suffice it to say that all went on as merrily as marriage bells, and only one little point tended to mar the hilarity of the Meeting for 1870, it was the severe and sudden illness of one of the most valued and well-known members of the Association. His necessitated return to town cast for some time a gloom over the section, where he was so much respected.

Diphtheritic Paralysis.

DR. LEUBE reports a case (*Arch. f. Klin. Med*), in which in addition to the loss of motor power, there were lowering of the sensibility of the skin, and complete loss of sensation in the mucous membrane of the larynx above the free border of the vocal cords; whilst coughing was excited as soon as a sound was passed below the glottis. The difference is explained by the lower part being supplied by the tracheal branch of the recurrent as well as by the superior laryngeal nerve. The patient was fed for ten days by means of an œsophageal tube, and treated with strychnine, injected subcutaneously in doses of gr. 1-12 to 1-4 daily. There was rapid improvement in all the symptoms.

Registered for Transmission Abroad.

THE
MEDICAL PRESS AND CIRCULAR
Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
,, If Paid in Advance 1 1 8

, Post-office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, SEPTEMBER 28, 1870.

BABY FARMING.

Margaret Waters has been found guilty, and sentenced to death. This conclusion to the case which has so long agitated the public mind is not surprising. From the details that had already been published, and from what we had otherwise learned, we were quite prepared for it. Until the trial had been held, we felt it right to refrain from the expression of such an opinion, but now there can be no reason for reticence. We may therefore freely state that we have no doubt that the case in question is only one of many in which traffic in human life is constantly carried on, and that some steps ought to be taken to put an end to such a scandal.

Before we offer our own suggestion as to the step we consider advisable, we may, however, stay to make one or two casual observations on the trial itself. In the first place we are not at all pleased with the professional evidence as related in the newspapers. We do not question that narcotics had been employed as believed by all the medical men who saw the infants. The symptoms were, in fact, unmistakable. But we object to the very positive terms in which some asserted that such agents should *never* be given to young people. Of course, everyone knows that the younger the child, the more susceptible is it to the influence of narcotics, and that they ought never to be administered except with great caution, and under medical advice. But we are free to confess that we have ourselves given opiates to infants with great success, and that we do not intend to exclude them from our pharmacopœia, although told rather flippantly that they kill babies "like a shot." Many years ago we related to a coroner our practice in this respect, and thereby saved a brother practitioner from an undeserved rebuke, which might have resulted from such positive testimony as that given in the case now under consideration. There is another point in this respect, everyone knows that many soothing syrups and other nostrums, freely sold by chemists, contain opiates, and are constantly administered without medical advice to young children by the most affectionate mothers. We admit the practice is to be reprehended as highly dangerous, and the public sale of such compounds is a disgrace. But the practice exists. Nay! Is so universal, that if minute doses of opium were generally fatal to babies, there would be few grown up people in these islands.

We may congratulate one witness that he did not countenance the absurd notion of the public that lime-water was added to the milk of these unfortunate infants with the view of poisoning them. Even baby farmers need not be painted blacker than they are, and it is quite possible that lime-water was used in good faith.

Let us guard against misunderstanding. We are not controverting the statement that drugging in excess was resorted to, to shorten the lives of the babies at Brixton—the evidence on that point is clear enough. There is, therefore, the less necessity for exaggerating the dangers of giving opium to children, and in a Law Court we do not like to see statements so sweeping as to exclude exceptional instances.

Having discharged a duty as Medical Journalists, in alluding to this part of the subject, we have no intention of following the other particulars of the case. The public has at last learned what many have long felt assured was the horrible practice. A case has been tracked home, and yet we do not think that it is an isolated one; nor do we believe it is the worst in existence. We are now brought face to face with a social plague-spot, that demands the earnest attention of all, and opens up many problems to which we have not to-day space to allude.

Nor is the subject new. These recent disclosures carry us back to the early part of last century, when, as described by Captain Coram, numbers of helpless infants were found exposed by the roadside. Indeed, we appear to have retrograded, for in those days there is reason to believe the little victims were the offspring of the poorer classes, in the present many of them evidently belong to persons removed from the immediate pressure of pecuniary difficulty. In the columns of this journal, we some years since, inserted a series of letters disclosing the nefarious practices of advertising quacks, who, under various aliases, ministered to the vices of the age and fleeced their victims. We have since helped to expose the evils of Baby-farms and the practice of Baby-farming, it is now our purpose to direct attention to the existence of a kindred evil, not less serious in its nature, and we fear even more murderous in practice.

From enquiries we have instituted, we have reason to know there are in London and its suburbs numerous establishments in which "ladies may receive every attention during confinement, and be assured of the strictest secresy." The mere fact of a woman seeking such a place, for her hour of trial is *primâ facie* evidence of the child being not welcome; for what female legitimately about to become a mother would desire to be amongst strangers at such a time? The proprietors of these establishments, well versed in the practice of their art, undertake all the duties of midwifery, and there seems to be little doubt, although legal proof may be wanting, that in some cases the infant never sees light but is ruthlessly stifled in its birth. These houses are well known to the police, who are convinced that it is from them that the still-born babes found in the neighbouring gardens must have come, but they are unable to prove it therefore are prudently silent. Yet, day after day, bodies are found in the streets

and squares of London, scores in each week, thousands every year, and nothing is done to check the practice.

We may be asked what can be done? As we have pointed out the evil we may be fairly called upon to prescribe the remedy. In the proceedings of the Commission of Inquiry into the Trade outrages in Sheffield, we have a precedent which it would be well to follow in the present case. As we have stated the police can point out the houses and find the occupiers. Cannot a Royal Commission be appointed to induce some of their accomplices by fear of punishment or hopes of pardon to disclose the working of the system, and devise some means for regulating such establishments by placing them under the inspection of competent medical officers?

Notes on Current Topics.

About the War and Wounded

Under the date of September 12th, 1870, a Paris Correspondent writes to us as follows :—

I suppose I must tell you something more about what is going on in this sad city, with respect to the ambulances. It has been noticed that the wounded soldiers who arrived recently at the terminus of the Strasbourg railway after the last combats, in place of being installed, as they generally have been, in closed railway compartments, are laid on straw in open waggons. This mode of transport is recommended by many doctors as being more wholesome, and is to be adopted whenever the weather is fine enough to permit of it. It is curious that waggon ambulances have not been adopted, like those made use of in the United States during the slave-war. Dr. Evans, of nitrous oxide celebrity, writes to say that, in that war a very large number of the wounded had to be transported by rail to the Northern States. Now, the shaking of ordinary carriages exposed more or less the wounded to painful tortures. Accordingly, in order to lessen or prevent these, a member of the Sanitary Commission devised the model of a waggon, which, by mechanical means, might assure the comfortable transport of the wounded. Twelve of these carriages, communicating between the army and the hospitals, were constantly in use. Litter-beds, which could be detached at will, without disturbing the patients, are disposed regularly on each side of the carriage, and hung by means of india-rubber bands which lessen the shocks. The ventilation was carefully attended to, and the light softly tempered. There were pipes for communicating with the surgeons and the male and female attendants. These latter had in their care, neatly packed, provisions of tea, coffee, and drugs; a neat stove for cooking was in the carriage, &c. Dr. Thurston, director-general of the Medical Department of the Army at Nashville, said he was persuaded that the rapid transport, the careful treatment during the journey, and the care of the attendants had saved many lives. And Dr. Barnam made the observation, that he had transported 20,472 patients by railway, and only lost one of them. It is a great pity that, as the French and German people have determined to kill each other for some reason or other, which I, as a non-fighting man, do not understand, the Army authorities had not been obliged to pass an examination in that admirable work *the Sanitary Commission of the United States.*

Dr. Savoye, an old M.P. here has put his house at Excideuil at the service of the wounded, and Clichy prison has been put to the same good destination. Versailles and St. Cloud palaces, too, are to be used for ambulances. So much for utility as against imperial splendours. There are four sedentary ambulances of the Parisian press, one at the Ecole des ponts-et-chausies, in the Rue des Saints-piers, another in the Avenue de l'Empereur (now I believe called the Avenue de Victor Noir), a third in the Rue de Courcelles and the fourth in the Conservation des Arts-et-metiers. Another ambulance of forty beds is established at Courbevoie by the inhabitants by private subscription, and the splendid chateau of the Central Society of Agriculture at Harcourt (Eure) has been made into an hospital.

An admirable writer in the *Mouvement Medical* advises that courses on diseases of armies and special lectures on bandages and the dressing of wounds should be carried on continually, and that there should be also lectures on the hygiene of camps at the same time. According to the *Debats*, there are a good number of the wounded soldiers from Reichsoffen now in the military hospital of Versailles. It is said that the stupid *intendance* has kept many military surgeons at Versailles, instead of allowing the patients to be attended to by civilians, and sending the surgeons to the Seat of War, when they were so greviously wanted recently. The best thing the poor senate did just before its dissolution, was to grant the whole of the vast space it had at its command for an ambulance. M. Nélaton, himself a senator, was to be the director-general of this great ambulance, and the physicians appointed were Dr. Boyer and Dr. Constantin Paul. It is said that thousands of Prussian soldiers are in the hospitals of Nancy and other towns, suffering from choleraic dysentery. Would that such miseries would soften the hearts of Bismarck and the fatalist King of Prussia, and make it more easy to make peace in this distracted land. A touching visit was recently made by the secretary of the ambulance of the Parisian Press, accompanied by other gentlemen to the wounded soldiers in the military hospitals in Paris, in order to ascertain which of these poor fellows would like to be sent home to their native villages and to assist them and their families in case of needy circumstances. This is to be done to all the hospitals for wounded throughout France. Verily, we advance in civilisation in some things although, we appear to retrograde in others. The following letter has been written to General Trochu (*Union Medicale.*)

"General, I take the liberty to recommend to all your solicitude the organisation of the surgical service of the Garde Nationale Mobile, which in a few days may be in face of the enemy. As it at present is constituted, each battalion has only an assistant major, chosen among the students, who are even materially unable to give in most cases any efficacious assistance. I have every reason to believe that if an appeal were made to the young doctors of the civil hospitals, they would not be long in sending in their names, too glad to be of service to their friends.

"Signed, Hourteloup."

It has been announced that M. Husson intended to retain all the "internes" in the Parisian hospitals. But whatever was his attentions, it is certain that most of the hospitals are wanting in these constituents of their staffs.

Russia, it is said has appointed a commission to create a medical reserve of 1,000 surgeons. How much better would it have been for the combatants had such a step been taken by them. We have already urged that this should

be done, and we would repeat that large numbers of our Army Surgeons ought to have been sent to gain experience in the field, and help the sick and wounded.

Cattle plague is seriously inconveniencing the Prussians, especially round Metz.

Fever, cholera, and dysentery are also committing ravages, the extent of which is being, as far as possible, concealed. When, after the war, the long list of dead is reckoned, it will be seen how terrible has been the havoc of disease.

The Irish assistance has been gratefully accepted by France.

Extraordinary cases are alluded to by many correspondents, and after the war is over we do not doubt that most valuable contributions to military surgery will be made. We are only sorry so few of our own military brethren have been sent to profit by the awful lessons.

Of the numerous letters from the Seat of War, communicated to the papers by the National Society, that of Dr. M'Cormack, dated Sedan, September 16th, and published in all the dailies last Saturday, will attract particular attention. Our respected *confrère* is chief of the Anglo-American Ambulance at Sedan, and his former contributions to our columns will make his name familiar to our readers. We regret we have no space for extracts.

The Liverpool Reports.

We cannot say much for the reports of the Liverpool Scientific Congress that have appeared in the papers. Is it the war that has upset the reporters, and made the staff look upon the Congress as a bore. Even *Nature*, to which we looked this year to supply such an account as we should like to see, has disappointed us. When we saw *Nature's* preliminary articles on Liverpool, we exclaimed, now at last we shall have an accurate and complete *resumé* of everything. But patience, perhaps another year we shall have peace, and then science may be better served. There is enterprise enough amongst us, and nowhere more manifest than in *Nature*, but here, we fancy, a golden opportunity has been thrown away. The journal of science, *par excellence*, was the one to give a perfect account of the Scientific Congress of the year.

Nephrotomy.

A new operation is likely to be introduced under this name. In the *Annales de la Soc. Méd. de Liège* are given the particulars of a case of successful excision of the entire kidney. The operator was Professor Simon, and the occasion was the following:—Having met with strong and extensive adhesions in a case of ovariotomy, M. Simon was obliged to excise at once the two ovaries and the uterus itself. The left ureter, involved in these adhesions, was divided, and from this, notwithstanding the cure, a double fistula resulted; one opening being situated below the umbilicus in the abdominal cicatrix, and the other in the stump of the cervix uteri and vagina. It being impossible to effect the occlusion of these fistulas by the autoplastic process, M. Simon attempted the extirpation of the kidney. Taking his stand on the fact that ovariotomy, uterotomy, and splenotomy are even more serious as regards the injury done to the peritoneum, and supposing that the function of the excised kidney might be performed by its fellow, he made some experiments so as to judge beforehand of the chances of this operation. Four dogs were submitted to it, of which only one died, the other three recovered. From this he concluded that life is compatible with the removal of a kidney.

On the 2nd of August, 1869, the operation was performed at the hospital of Heidelberg as follows:—The patient being chloroformed and laid on her back, a first incision of the integuments was carried from the lower edge of the eleventh rib to half-way between the twelfth and the crest of the ilium at a distance of some six centimétres outside the spinal apophyses of the vertebra. Then dividing layer by layer the subjacent tissues, the aponeuroses of the internal oblique and tranversalis muscles, he pressed down the external border of the sacro-lumbalis, along which the incision had been made, and the quadratus lumborum was divided. The kidney being thus exposed without the infliction of injury on the greater or less abdominal nerves, or on any important organ, its cellulo-adipose capsule was opened from above downwards, and the organ itself, isolated, enucleated with the finger, sprang out. A firm ligature was applied to the renal vessels, and the excision was made, leaving only a portion of the hilus intended to act as a *point d'appui* to the ligature, and to prevent it from slipping. A few sutures reunited the two edges of the incision. Forty minutes sufficed for the performance of this delicate operation.

Next day bilious vomitings, probably due to the chloroform, ensued without much fever. The urine was turbid, and in small quantity; there was suppression of the discharge by the fistula. Skin moist.

Pulse from 130 to 140 on the third day; symptoms of incipient peritonitis. No trace of the paralysis of the lower limbs observed in the dogs which had undergone Nephrotomy. No delirium. Local state satisfactory; pus in small amount and healthy; proud flesh at the bottom of the wound. Some points of suture were removed. On November (August?) 13th, there was no longer any fever, appetite good; the patient regained strength, and began to sit up. On the 29th, the wound had cicatrised, except the opening for the ligatures, discharging one or two drops of pus daily, the patient left hospital quite well some days subsequently.

"Peculiar" Idiotcy.

The direction of the learned judge that the jury should acquit the "Peculiar People" of criminal negligence in omitting to obtain proper medical aid for their dying child, appears, though no doubt strictly legal, as illogical and unmeaning, in the light of common sense, as the mania of the Peculiar People themselves. His lordship directed an acquittal because the medical witnesses would not swear that the child would certainly have recovered if due medical care had been given.

The evidence was thus literally at fault, because there was no absolute proof that the witholding of treatment was the certain cause of death.

But what witness can conscientiously swear to such a statement? Who can say that any patient would certainly have lived, or would certainly have died, if such and such things were done. Such a dictum does not belong to anything humane, and it seems therefore ridiculous to require from a witness any more specific declaration than that the child's chances of recovery were criminally prejudiced by witholding medical aid.

The Yellow Fever in Spain.

A most alarming report has come to us of the existence of a frightful epidemic of yellow fever in Barcelona in Spain, to which more than 1,000 persons had already succumbed.

A correspondent of the *Glasgow Mail* communicates to that journal a statement on the subject, which throw ridicule and doubt upon the statement and which we give *quantum valeat*, because it seems to us not in the least improbable that an outcry about fever might be discounted by the Spanish authorities at a very good price.

The correspondent says :—

"It has gone all over Europe that the yellow fever exists at Barcelona. So it does—officially. But I hear on excellent authority that it is not the real yellow fever of the tropics at all, but a 'relapsing fever,' such as prevailed in London a year or two ago—stimulated, no doubt, by the smells from the harbour, which has been dredged lately, and by the dirty habits and poor style of living of the inhabitants of the quarter in which it appeared. Nevertheless, the Board of Health (Junta de Sanidad) maintains that yellow fever exists, and Barcelona has been declared 'foul,' and placed in quarantine. Spanish officials love quarantine, for it gives admirable opportunities for corruption; and what do they care about the commercial losses of other nations? The Barcelonese fever was supposed to be brought by a steamer from Havannah. That steamer was notoriously in a suspicious condition, but its passengers were allowed to land on paying half a dollar a head! Now mark how an act of this kind—dishonest in itself—falls peculiarly hard upon foreigners. Soon after the arrival of the Spanish steamer just mentioned, and the panic consequent on the rumours of yellow fever, comes an English steamer from Marseilles, with a clean bill of health, and free from illness. The Junta de Sanidad immediately make her the scapegoat—the populace being enraged against themselves—and send her to Port Mahon for ten days' quarantine, on the pretext that, though having come clean from Marseilles, she had loaded in the Black Sea. By this measure a loss of hundreds is imposed upon the steamer's owners, and she has to run the risk of her cargo of wheat being spoiled.

Disease in Omnibuses.

Last Monday morning was very foggy in London. Getting into an omnibus we were a little surprised to find among the passengers (in its mother's lap) a child in a paroxysm of whooping-cough. Many are the reflections suggested by this incident. The explanation was that the child was on the way to one of the large hospitals. If whooping-cough, why not measles also, or scarlatina, or any other disease? The public is more interested than the Profession in this matter.

Nitro-Glycerine.

New interest is attached to this substance by the report of its employment in war. It is said that it may be kept in a condition in which it will be harmless by mixing it with alcohol.

A Baby Show.

Our attention has been directed to a disgusting exhibition, yclept a Baby Show, held at Clay Cross on Friday last, in the Auction Room of a Mr. Pearson. We know that Clay Cross is noted for the superior quality of its coal, but we were not aware the residents were so foolish, or that eighteen mothers could have been found mad enough to enter their last born as candidates in competition for a set of trays, the vulgar offering of some cheap John. However eighteen mothers did enter their children. Two persons were selected from a vast concourse of people —colliers, we presume, out for a holiday—whose society the auctioneer courts to weigh the candidates. The child of a woman named Collidge, weighing 28¼ lbs., stood first on the list of the eighteen; and the next weighed 25¾ lbs. We learn further Mr. Pearson presented each unsuccesssul child with a useful bread knife!—to eat its pap with? Is there no clergy in power at Clay Cross, or do they want the services of some indefatigable missionary who will try to civilize them? This baby-showing needs suppressing with an iron hand, and we hope to have no more of them.

The Operation of the Contagious Diseases Acts.

A report of the Chief Commissioner of Police to the Board of Admiralty on the Operation of the Contagious Diseases Acts in the Plymouth and Devonport district has just been presented to Parliament.

The Commissioner says these Returns show that 7,766 women have been placed on the Register, and that the following numbers have been removed therefrom, and for the causes stated :—

Left the district	2,558
Married	385
Entered homes	451
Restored to Friends	1,249
Died	107
Total	4,750

Leaving 3,016 still on the Register.

The Returns also show a decrease by one-half of the number of men in hospital for contagious disease.

In order to show the beneficial operation of the Act, I am desirous of calling particular attention to the effects produced at Plymouth. There has been, from year to year, at this station a steady and increasing diminution in the number of brothels, as likewise of prostitutes frequenting the same; the brothels have decreased from 356 to 131, and the number of prostitutes from 1,770 to 645.

When the Act of 1864 was first put in operation, over 300 of the youngest prostitutes left the neighbourhood. These were mostly country girls from the mining districts, of which there were then large numbers practising prostitution at Plymouth and its neighbourhood; and as many as 12 and sometimes 18 herding together in one house, in the utmost filth, wretchedness, and disease, and in such a condition of privation that clothing had often to be obtained for them by the police before they could go with decency through the streets to the hospital.

As a proof that the places of those giving up prostitution are not filled by new comers, whole streets in which many, and in some cases most, of the houses were brothels, and the principal part of the inhabitants prostitutes, before and some time after the first Contagious Diseases Act came into operation have now but one or two prostitutes living in them.

For example, Castle street, Plymouth, and Castle Dyke lane adjoining, which formerly contained 132 prostitutes, have at the present time *two* prostitutes only living in them.

The following particulars, extracted from the Register at Plymouth, show the beneficial effect of the Act up to the 26th March, 1870 :—

Entered homes - - - -	203
Restored to friends - - -	693
Married - - - - -	161
Left the district, and, in many cases believed to have returned to their friends - - - -	658

And in addition to the above, more than 500 young girls, found in houses of ill-fame, have left the district and returned to their friends on being spoken to by the police, before being brought under the provisions of the Acts.

The same results are observable at other stations only in a less marked degree ; for instance, at Woolwich:—

Entered homes - - - -	68
Restored to friends - - -	102
Married - - - - -	45
Left the district - - - -	287

Whilst the decrease of disease amonst the women is likewise remarkable. I may mention Chatham ; the disease in—

1868 was - - - - -	70 per cent.
1869 „ - - - - -	18 „
1870 „ - - - - -	6 „

Clandestine prostitution, particularly amongst married women and servant girls, has much diminished ; this, in all probability, proceeds from the fear of being brought under the operation of the Act.

The improvement that has taken place in the persons, clothing, and homes of the common women, as regards cleanliness and order, is most marked. Many of the women formerly looked bloated from drink, whilst others were greatly emaciated, and looked haggard through disease. Their language and habits are greatly altered—swearing, drunkenness, and indecency of behaviour have become quite exceptional ; the women now look fresh and healthy, and are most respectful in their manner ; in fact, these poor creatures feel that they are not altogether outcasts from society, but that there are people who still take an interest in their moral and physical welfare.

William C. Harris,
Col. Henderson, C.B. Assistant Commissioner.

Submitted for the information of the Lords Commissioners of the Admiralty.

E. Y. W. Henderson,
Commissioner Metropolitan Police.

The Cost of the Highgate Infirmary.

The finance committee of the guardians of the poor of St. Pancras have just made a return of the entire cost of the Highgate Infirmary, about which so much uproar was created at the commencement of last year, when it was declared by the opponents that a sum of £100,000, would scarcely cover the outlay. From the return which has been furnished by the guardians to the managers of the Central London Sick Asylum district, it appears that the total cost of this large establishment, ready to be handed over to them, is £49,659 8s. 6d. The managers have referred the statement to a committee to report, when the cost will be subdivided and apportioned between the several parishes forming the district, and the parish of St. Pancras be recouped the difference between the entire cost and there own share of it.

The Naval Medical Service.

The following is the abstract of the meritorious services which have recently secured promotion in the Naval Medical Service for the following officers :—Staff-Surg. H. Slade entered the service on the 4th of June, 1847, and was employed as assistant-surgeon on the Coast of Africa, Home, and East Indian Stations. He was promoted for services in the Burmese war ; and served as surgeon on the East Indian, Home, North American and West Indian, Baltic, South-East Coast of America, and Australian stations. He distinguished himself on two occasions by his attention to the wounded after the actions of Pakehinahina and Gate Pah in New Zealand, in 1864 and 1865. Staff-Surgeon William Bennett Dalby, M.D., entered the Navy on the 12th of May, 1846, and served as assistant-surgeon on the Home and Mediterranean stations, and at Plymouth Hospital. As surgeon, he was employed during the Russian war at Therapia Hospital, and subsequently on the Home, Cape of Good Hope, and West Coast of Africa stations ; at Haslar Hospital, and as medical officer in charge of the naval cadet's sick quarters at Dartmouth, where he his still serving. He has been specially commended for his services on several occasions. Staff-Surg. Ahmuty Irwin entered the Navy on Jan. 4, 1851, and served as assistant-surgeon at Plymouth Hospital, on the South-East Coast of America and the Mediterranean stations, and with the Naval Brigade in the Crimea, where he was severely wounded. As surgeon, he has been employed on the Mediterranean, Home, West Coast of Africa, East Indies and China, and North American and West Indian stations. His name was mentioned in the *London Gazette* as being continually under fire when attending the wounded at the capture of Ningpo from the rebels in 1862. Mr. Irwin is now serving at Plymouth Hospital.

Damp Churches.

It is surprising at this season of the year, when people are most affected by atmospheric changes, the apathy or indifference which exists in country places of having the damp, sepulchral air of churches, locked up during the other six days of the week, improved by heating before the congregation assemble. We have known persons predisposed to thoracic affections, suffer severely by sitting in cold churches throughout the morning service. All we can say is, that when the temperature and condition of the atmosphere of churches are neglected, that it is an essential of great moment overlooked , and that persons coming to worship are thereby made to suffer, not through incaution on their part, but owing to utter carelessnes on the side of those who should know better. Our remark will meet, it is hoped, with the attention which the importance of the subject demands.

A Pestilential Swarming of Aphides.

Owing to the long protracted drought, turnips, cabbages, and other varieties of vegetables, have been seriously injured by the "fly." It was expected when rain came that the insects would have been washed away, and thus de-

stroyed, but instead, they seem to thrive the more ; and, during the last few, warm, sunshiny days, the atmosphere has been literally filled with these entomological creatures. We learn that in agricultural districts where turnips are cultivated, and that in towns where the sanitary arrangements of the locality are defective, and the sewage insufficient, that swarms of *aphides* swarm the air from noon to sunset, making it uncomfortable and injurious to the people since they find their way into their eyes, mouth, and nose. We understand where these prevail in such superabundance that thoracic diseases are very prevalent. We believe districts bordering on the sea are exempt from this pestilential swarming of aphides, so prevalent in the Midland Counties.

The Skins of old Silk Hats for the Wounded.

We know of no better substitute for lint than the skins of old silk hats, if washed and dried after being removed off the hat. We have known them used in preference to lint, and we are surprised to think that so many are put aside as valueless when such excellent use might be made of them at any time, but more especially at the present moment when lint, and everything pertaining to it, is in such earnest request by the humane for dressing the wounds of the injured soldiers in the Franco-Prussian War. There are few households in which a few old hats are not to be disentombed. We recommend their skinning, washing in soft water, and drying slowly, and afterwards being forwarded to those whose mission is catering for the poor stricken down soldier, and we promise that they will be found of great utility in the hospitals, and of much value to both surgeon and patient.

Nice and Mentone.

Last week we felt it our duty to warn medical men against advising patients to winter in Nice, Mentone, Monaco, &c. As we predicted, the attempt has already been made to represent these places as quite safe, and even the English Consul has written to make light of the disturbances that have occurred. It would be easy to imagine that very sad scenes might take place without our consul knowing much about it in his summer retreat up the mountains. But, admitting that the disturbances have hitherto been slight, we repeat that ever since its annexation to France, Nice has been but a smouldering volcano that may at any moment burst forth. Present events are certainly exciting, and we have received notice of several violent demonstrations in the Southern towns of France. But besides the danger of anarchy, which seems to rapidly increase, it is not to be forgotten that there is considerable difficulty in the mere journey, and even supposing peace to be shortly proclaimed, famine in many districts may bring famine prices throughout the country. On the whole, we repeat our advice to select from the numerous English winter resorts, and for this year at least forego continental travel.

A Correspondent's Reward.

One of our correspondents who has, within a few weeks, interested himself in the controversy as to the possibility of celibacy, informs us that he has received from an anonymous donor, of the tender sex, as an offering in acknowledgement of his courageous defence of those on whose charity doubts were thrown, a pearl necklace, with a silver crucifix attached, which the fair donor says has been blessed by His Holiness the Pope. This spiritual treasure was enclosed in a rather material and undignified envelope—a pill box—and with it a very strong and thoroughly feminine denunciation of the correspondent who originated the presumed slander.

Army Medical Department.

The United Service Gazette understands that a new grade of commissioned officers is likely to be established in the Army Medical Department. At present there are but two captains of orderlies employed in the service, one at Netley, and the other at Woolwich. It is the duty of these gentlemen to superintend the servants in the hospital, and to relieve the principal medical officers of many of those executive functions which tie the hands of the doctors in the smaller hospitals. It has been proposed, therefore, that in all hospitals of any size, such as garrison, camp, and general hospitals, there shall be an officer to supervise under the principal medical officer, and that his rank shall be ensign, lieutenant, or captain, according to the accommodation for patients in the building. It is stated that these appointments will be offered to assistant and deputy purveyors, both on the active and half-pay list.

Dispensers at the Naval Hospitals.

The United Service Gazette says that all dispensers now in the service who pass the examination ordered for their class will receive the new rates of increased pay. Those dispensers who do not pass the prescribed examination will retain their old rates of pay, and receive in addition a sum as store allowance.

Spermatic Disease.

We regret to observe the following advertisement in our contemporary *The Boston Medical and Surgical Journal* :—

"IMPROVED SPERMATORRHŒA RINGS—of pure silver, for preventing and curing Nocturnal Emissions. Price $3—to physicians, $2. They can be sent by mail in a letter.

"Sold by E. M. SKINNER, Chemist, &c., 287 Tremont street, a little south of Boylston street, Boston, Mass."

Such appliances, as we have already shown, only tend to keep up the disease, by producing local irritation and the concentration of the mind on the subject. Such an advertisement should not be admitted into the columns of a medical journal.

The Obstetric Position.

Whilst the universally recognised obstetric position in Great Britain is having the woman placed on her left side, with the buttocks near to the edge of the bed, the knees raised upwards towards the abdomen, and the chest bent in a downward and forward direction towards the knees, we regret to be informed that the very disgusting and dangerous position of keeping the patient in a kneeling posture, with the head and elbows resting on a chair, is very generally followed in the County Palatine of Lancashire, and some parts of Cornwall. In the important towns of Blackburn, Bacup, Todmorden, and Burnley, we learn with horror that not only do the midwives practice

this method of delivery, but that, in only too numerous instances the doctors countenance it, whether from its being a custom of the country insisted on by the women, and practised with the twofold object of convenience and pleasing, or that the position is considered to facilitate parturition, we are not prepared to say. But, in raising our protest against a brutal habit, disgusting in the extreme; for surely it is a degrading sight to see a woman on her knees, leaning upon a chair before her, with a shawl tied around the abdomen, which, upon the occasion of a labour pain, is tightened by the attendant, who places a knee upon the patient's back, and pulls upon the knotted shawl with all vigour. We are alarmed at the after consequences, when the delivery of the child is effected, and the placenta removed; the woman is undressed of her everyday garments, new linen put on, a binder adjusted, and then walked off to bed, hence flooding is very usual—and who can wonder at its occurring? We give the Lancashire people every credit for cleanliness, and for thrift; but in exposing their women at the time of parturition to great danger, for the sake of saving a little additional washing, we highly censure them. We do not advocate the parturient going early to bed—every practical accoucheur knows the time when they ought, and he deserves much censure indeed if he patronises delivery in the manner we write about, in order to condemn. It is usual, we know, in protracted cases, for the patient to be allowed to suffer a pain or two kneeling, but to deliver them in that posture is literally disgraceful. In some parts of Cornwall the same practice exists. If medical men would only refuse to assist or deliver in that position, and take the trouble of explaining the danger consequent upon it, we believe the disgusting practice would die out.

The Tread-Mill.

Of all forms of punishment the tread-mill seems the most absurd, the most unhealthy, and unprofitable. It is one of the last remnants of a barbarian age, which we hope soon to see abolished, and a more useful, yet less rigorous system, combining profitable labour with healthful employment, introduced into our prisons. There are many dark tales, never disclosed, of horrible occurrences which take place on "*The Mill*," or disgusting consequences attending the irksome and monotonous "*tread*," which the turnkey never reveals. Fainting men, with broken shins, may be accused of laziness or carelessness; but when human beings taken off this horrible wheel of punishment have been known to die quickly, it is high time the subject was investigated, and some philanthropic Board of Superintendence would abolish the present wheel and suggest some-more healthful method by way of substitute and precedent for other gaols. Sydney Smith, as long back as 1824, lucidly directed attention to this irksome, dull, monotonous, and disgusting tread-mill, where a man does not see his work, does not know what he is doing, or what progress he is making. We cannot do better than quote his exact words. "There is no room for art, contrivance, ingenuity, and superior skill—all which are the cheering circumstances of human labour. The husbandman sees the field gradually subdued by the plough; the smith beats the rude mass of iron by degrees into its meditated shape, and gives it a meditated utility; but the treader does nothing but tread, he sees no change of objects, admires no new selection of parts, imparts no new qualities to matter, and gives to it no new arrangements and positions." The system of punishment, with an attempt at labour combined, is simply ridiculous, whilst it is not only cruel, but dangerous, entrusting the management of the wheel, and the persons selected to be put upon it, to ignorant turnkeys.

Correspondence.

MORE MEDICAL TESTIMONY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Dear Sir,—The valuable and interesting matter contained in the accompanying correspondence, which I have had with one of the oldest and most respected members of your Profession in this city, will be, I trust, in your estimation, my sufficient apology for requesting you to give it a place in your columns. Your readers, and the general public, will see in it, a further evidence in justification of the strong opinions expressed during the past quarter of a century or more, as to the injurious effects of alcohol on the human frame; and as to its utterly ruinous effects on all classes of society in a moral point of view. The address on this subject, in both its physical and its moral aspects, delivered so long since by my respected friend, comprises those arguments which might be expected from an enlightened physician, anxious at that early day in the Temperance reformation, to give public warning of the terribly deleterious effects and influences of alcohol on the health and morals of the people. And I consider the publication of the opinions of "Medicus" in the present day, peculiarly valuable, because it affords such good additional evidence to the truthfulness of the abundant similar warnings which have been given to an apparently paralyzed public, utterly unconscious of the folly,—I might say insanity, they are guilty of, in using alcohol as a common beverage. May this evidence be rapidly multiplied, and with similar right-good-will, by medical men, and other scientific men; until intelligent men shall be made ashamed of themselves for showing so bad an example to the ignorant, by using this poison as they now do; and until the manufacturers and retail dispensers of it, shall be made to fear the danger of a strong expression of public displeasure—such as is evinced in America,—for the mischief they are doing to society, and for which the wealth they accumulate should be considered by them, a miserable compensation. And it is only a few out of the large number engaged in this injurious trade, that are successful even in this regard; to the many, I have good reason for believing it is a source of loss instead of again.

I am, my dear Sir, very truly yours,

James Haughton.

35 Eccles street, Dublin, September 9th, 1870.

Saturday, September 3rd, 1870.

My dear Sir,—Your temperance papers (for which many thanks) remind me that I am no recent convert to the cause of temperance. More than thirty years ago, when I delivered at the Dublin Institution, Sackville street, a few Lectures on the best mode of improving the health of the working classes, in which I dwelt in the strongest terms on the evils occasioned to both soul and body by an indulgence in alcoholic drinks, and every recurring year since has convinced me of the soundness and propriety of the views then advanced. I feel thoroughly satisfied that the tissues of our frame, can be nourished, supported, and fitted for their proper functions, by good beef and mutton, eggs, milk, &c., together with the various vegetable compounds furnished by an allwise and bountiful Creator, and that all this assimilation may be effected without the aid of any artificial stimulant, whether in shape of small beer or sparkling champagne. It is said wine is the milk of old age. I am inclined to reverse it further, and maintain that good new milk is the wholesomest and best treatment for advanced life, milk being in fact white blood, and possessing all the elements of nutrition, but like the air we breathe it is not properly estimated by mankind. Either the stomach is in a sound normal condition or it is not, if in a healthy condition the proper stimulant is good healthy food, if not in a healthy state, assuredly alcohol is not the suitable remedy. Alcoholic drinks are only calculable as it were to provoke the digestive organs to accomplish, what they are incapable of effecting. Suppose your servant came in to you and said, "Sir, the horse won't take

his oats. I want a glass of whiskey, to assist his digestion." You are, I am aware, too polite to him, even to give him a rude answer, but in place of that, you would naturally say, "Well, James," or whatever the name may be, "since the horse is averse to take his oats, there must be something wrong with his intestinal canal. Give him a mash of bran, and a day or two of rest, and all will be right."

But I feel my dear Sir, I should apologise for entering so fully on a subject that you have so long, so eloquently, and so effectually advocated, but I have now, I may say at the close of a long and anxious life witnessed so much crime, so much *domestic* misery occasioned by this vile propensity that I cannot avoid giving expression to my feelings. It is only within the last few weeks, I was called to visit a widow lady, left with two lovely children with ample means; every comfort that money could produce. She fell into this deplorable practice, and when last called to her, I found her stiff and cold. She had passed away in a state of beastly intoxication. In several cases, after every expedient that could be thought of, a lunatic asylum becomes our only resource.

But to turn from this revolting, heart-rending subject, I greatly fear your excellent suggestions for the establishment of peace are not likely to be followed out. What a strange compound is man? One hundred thousand human beings, have been sent before their Creator, with feelings of rancour and hatred in their hearts, and all for what? Some paltry slip of territory, the right to which could readily be adjusted by arbitration. Verily the heart of man, as the Scriptures informs us is a nest of unclean birds. What we all want is Charity. "My commandment is that you love one another as I have loved you. He that loveth his neighbour hath fulfilled the law" (Rom. xiii.). "By charity alone," says St. Augustin, "the children of God are distinguished from the children of Satan." But I must bring to a close this long, prosy rambling detail, and by way of a little enlivenment, I shall conclude by giving you an anecdote, recorded by the Marquis of Lansdown. His lordship went up to pat a horse, which he had just before corrected with a whip, when he was checked by the warning voice of the groom. "Don't go near him, my Lord? They bear malice for all the world like Christians!"

Yours truly,
"Medicus."

My Dear Sir,—I felt greatly obliged by your long and most interesting letter. It must be a very pleasant reflection to you to know, that the opinions you held and lectured on years ago respecting the dangers resulting from the use of alcoholic liquors, are at length becoming the general sentiment of the Medical Profession. What we have now to contend with is, the scientific feeling that alcoholic liquors when used in very small quantity, are beneficial,—but the craving desire for them which pervades all classes (the rich quite as madly as the poor), and which, like the use of tobacco and other stimulants injurious to man,—overbears all sense and reason, and causes the slaves of these habits to attribute their ailments to any cause rather than to the real destroyer, which has gotten them so completely in his power. In order to help on the progress of truth in regard to this matter, I would like to make your excellent remarks public, and as your *name* would add great weight to them, I ask your permission to publish it also.

Very truly yours,
James Haughton.

35 Eccles street, Dublin, September 3rd, 1870.

Tuesday, September 6th, 1870.

My Dear Sir,—A few hurried lines written in an unreserved gossiping kind of way, and in the midst of professional engagements of one kind or another, could hardly be expected to assume a costume suited to the keen discerning eye of a fastidious public. Moreover, at my advanced period of life with one foot in the stirup, as Sancho Panzas says, or as we say in Ireland, with the daisy quilt ready to receive you at a moment's warning, I am, I confess, although my sentiments are pretty well known to the profession and in a small way to the community at large, on the all important subject of temperance, averse to place myself in a prominent position before the public. Repose, tranquillity, retirement, are more suited to my tastes; I am, therefore, averse that my name should be attached to any document on the subject. If, however, the scanty materials in your hands are at all calculated to promote an object so meritorious, and which you have so much at heart, I am willing you should give them publicity under an assumed name, or *nom de plume* as we say.

Well now, as we are on the subject of temperance, there is one question I should like to ask. Suppose the object fully accomplished—How is the revenue of the country to be met? No doubt you would have your working classes better clad; their abodes better furnished; their children instead of infesting our streets in a state of semi-nudity, while their mothers, as I have repeatedly known, are tippling behind our attractive spirit casks in the neighbourhood. Your gin palaces would be abolished, and instead, you would have vaccine institutions or in plain English, you would have the honest dairyman, instead of being hustled up in an obscure corner, assume his proper position, dispersing the wholesomest nutriment ever offered by the Almighty, for the support of man. Look all through Creation. What do we find, but milk in some forms, furnished by the bountiful hand of the Creator, for the support of the young of all animals in their helpless, feeble condition. All this is very true, but still they are not *excisable* articles, and I confess I do not see clearly, how the deficiences are to be supplied in the event of the suppression of the manufacture of all alcoholic drinks? With great respect,

Believe me, my dear Sir, yours very truly,
"Medicus."

P.S.—"Medicus" has started a difficulty on the question of Revenue, in case the advocates of "Permissive Bill" legislation shall be successful in carrying their measure, which demands a few words in reply from me.

When that measure shall be enacted, it will only come into effect gradually, throughout the kingdom; leaving ample time to the Chancellor of the Exchequer to regulate his Budget from other sources. A much smaller revenue will then answer all his purposes, as the expenses needed for governing the Nation will obviously be much smaller in amount.

Our local taxation will be greatly lessened; as we shall then have few criminals to punish; little poverty to relieve; and not one half the sickness and insanity which must now be provided for, to guard against. These happy results are already experienced at Saltaire, and in numerous other places in England. And in Ireland, in the County Tyrone, and in the town of Bessbrook, both on a large scale (comprising about 14,000 inhabitants), and throughout the United Kingdom, upon many private estates, the details of which it would occupy too much of your space to enter upon.

The sum now destroyed annually in great Great Britain and Ireland, by the use of poisonous alcoholic compounds, amounts to nearly two hundred and thirty millions of pounds sterling. When the operation of the "Permissive Bill" shall direct this enormous sum, out of ruinous, into improving, channels of expenditure, it is obvious that the revenue of the kingdom must be improved by the change; and also, that no good national work need be set aside, or postponed, for want of ample funds for its accomplishment.

These are a few of my reasons for supposing that the fears of "Medicus" on the subject of Revenue, are groundless; and also for the opinion which I often give public expression to, that to the cruel and most indefensible liquor traffic, may be fairly traced nearly all the crime and poverty which afflict the land.

James Haughton.

Obituary.

WM. CHOWNE, M.D., F.R.C.P.

The subject of this brief notice became a member of the College of Surgeons in 1813, and soon after commenced practice in the populous district of Holland in Lincolnshire. In 1827, he graduated in the University of Edinburgh, left his country practice, and became a member of the College of Physicians of London, at which College he obtained his diploma of Licentiate in 1833. Soon after he commenced practice in London, and was elected to the office of Physician Accoucheur to the St. George's and St. James's Dispensary. This office, however (in which he was succeeded by Sir James Eyre) he resigned, in order to become a candidate for that of Assistant Physician to the Charing Cross Hospital. The election terminated in Dr. Chowne's favour, and from

that time up to 1869 he has taken a most active share of the duties, both of the hospital and the medical school attached to it. He for many years occupied the obstetric chair, giving the whole of the lectures in this department as well as a portion of those upon Medical Jurisprudence.

Dr. Chowne was President of the Westminster Medical Society in its palmy days, and was one of the few who stood by it in its difficulties, when its home was the Hunterian Museum in Windmill Street. He also lent it valuable service upon its recovering its prosperity at the epoch when the good understanding always existing between the Westminster Medical Society and the Medical Society of London, led to a union of the two; which the high repute and the orthodox character of each rendered the more easy. The two societies by this arrangement became joint proprietors of a valuable library of many thousands of scarce and important volumes; of a freehold property, the bequest of the late Dr. Lettsom; and of two medals annually, (a gold and a silver one) bequeathed by the late Dr. Fothergill also to the Medical Society of London. The negotiation of this union was conducted by a deputation from each society, and Dr. Chowne, who was chosen as a member of the deputation on the part of the Medical Society of London, greatly assisted the happy issue.

Dr. Chowne was much liked as a teacher. His profession appears to have been a labour of love to him; and from the cares and duties of a most active life he managed to snatch sufficient leisure to devote himself to a long-cherished idea for the amelioration and improvement of our sanitary regulations, and, ere his demise, the adoption by sanitary reformers of his ideas, must have been highly grateful to him.

THE LATE MR. JOHN GUY OF SWINDON.

Another pupil of Abernethy has passed away in Mr. Guy, of Swindon, who, after a career of half a century, in which he had earned the love of the community in which he moved, reposes from his labours. His son who had succeeded him in practice, died last December.

MR. BRETT.

The death is also announced of Mr. E. S. Brett, of Bridlington, in Yorkshire, where he had practised nearly forty years.

DR. FEARN, F.R.C.S.

Samuel W. Fearn, of Derby, has also passed from among us. He was a very skilful operator, and one of the first to amputate through the knee-joint. He had successfully also removed the upper and lower jaw, and on three occasions had removed the os calcis.

NOTICES TO CORRESPONDENTS.

DANGEROUS NAMES.

Dr. De Chaumont and Count Wallowicz, both in our Army, and both British citizens, were to go to the war, but others have been substituted—it is said, on account of their names. The *Edinburgh Courant* thus writes about it:—

"'What's in a name!' Treachery—breach of neutrality—national complications—possible precipitation of Britain into war—and all sorts of impossible things. So, at least, thinks Earl Granville, who really seems to be in a chronic state of consternation lest he should give offence to one or other of the combatants on the Continent. The noble Lord has just given the last finishing touch to the ridiculous and nerveless character of his foreign policy by countermanding the journey of a respectable citizen of Edinburgh (who, as staff surgeon, had been appointed to proceed on a medical mission to the seat of war), because that gentleman happened to bear a French patronymic! Dr. De Chaumont cannot be allowed to perform a service, for which he is peculiarly qualified, because Earl Granville, forsooth, is afraid Count Bismarck may be offended by the sound of his name! To complete the farce, it only requires that his Lordship should, with his usual amiability, be induced to reconsider his decision, and to provide Dr. De Chaumont with a note of introduction to Bismarck, somewhat after the following apologetic fashion:—'Dr. De Chaumont, whom we send to gather information which may be useful to our wounded in the future, is the very best man we have for the purpose; but, as he, though a British subject, is of French extraction, and was baptized by a French name, I beseech you not to eat him—for he really could not help it.' Clearly Mr. Disraeli was wrong when he said that national politics were now conducted on parish principles. Even Bumbledom will wield its wand of authority with more firmness than Lord Granville can muster to stiffen the seals of office between his trembling fingers."

ETIQUETTE.

To the Editor of "The Medical Press and Circular."

Sir,—Allow me to agree with the remarks of your correspondent, "Cantharides," on the subject of the "Roasted-Apple Association," and to ask—Medical Press and Circular excepted—if the editors of certain professional journals, who preach etiquette and presume to teach us how to perform our duties, practice etiquette themselves, that is, the professional etiquette of the journalist? Does it consist in shutting the portals of their organ to those whose only sin is the fact of their contributing to other papers? Is it professional etiquette to be told, "If you write for us alone, we shall gladly accept your MSS., but you must confine yourself to us!" This does not altogether refer to the "Roasted-Apple Association." Has the Wandering Jew heard of the *Persian Iris*, which appears only to some to possess a sweet perfume, whilst to the majority it is scentless. God knows we are sick of this green *agrafias* and orange-coloured *auriculas*. We want sincerity of principle as much as we detest cliqueism and jealousy.

I am, &c.,

Another Member of the Roasted-Apple Association.

THE RELATIVE VALUE OF DEGREES.

To the Editor of "The Medical Press and Circular."

Sir,—You would greatly oblige by submitting the following to the columns of your valuable paper. Being a medical student myself, and desirous of knowing the best school or college from which to take a degree, I should wish to know whether the Dublin Schools of Anatomy, or the degrees granted by them, are looked down upon in England or the Colonies. Hoping that some of your readers may afford me information,

I am, &c., &c., De Burgh Griffith.

*** The Licenses of Irish Corporations and Universities occupy the highest position, and confer on their holders prestige quite equivalent to those of any English body. For English Poor-law appointments, the London College of Surgeons, and Apothecaries' Hall, are *de rigueur*, and would give to their Licentiates a higher consideration than Irish diplomas.—Ed. M. P. & C.

The pressure on our space caused by the proceedings of the two Scientific Congresses, compels us to hold over several original communications, letters, and other material.

Correspondents not answered are requested to look at "Notices" the following week.

Dr. Ross.—Report received.

J. B. Browne.—Proofs shall be sent.

F. R. S.—The Sewage Question came up both at Liverpool and Newcastle.

R. S.—Notes of the case would be acceptable. Brevity is no objection—quite the contrary.

LL.D.—You are quite justified in naming your qualifications and appointment in the title-page of your book.

A Poor-Law Doctor.—The fee seems to us very moderate.

A Celibate.—We cannot insert your letter. It is not medical, not even physiological, but purely theological, and so quite outside the range of a medical journal. The controversy is closed, as you could have noticed in our last impression. It was necessary to admit replies to a phrase which might offend some, and which, had we not accidentally overlooked, we should not have inserted.

Mr. Haviland.—The abstract has been received.

F.R.S.—Our contemporary is quite mistaken.

Hygienicus.—The matter is being discussed by the Social Science Congress, and some report will be furnished in our columns.

Mr. Hind.—Your request will be complied with.

VACANCIES.

West Riding Lunatic Asylum, Wakefield.—Assistant Medical Officer. (See advertisement.)

Sevenoaks Union.—Medical Officer. Salary £35, with extras.

Northumberland County Lunatic Asylum.—Assistant Medical Officer. Salary £85.

Central London District Schools.—Resident Assistant Medical Officer at Hanwell. Salary £100, with board and residence.

Liverpool Dispensaries.—Resident House Surgeon at £140, and two Assistant House Surgeons at £103 per annum, each with residence, &c.

North Riding.—Gaol Surgeon. Salary £100, inclusive of medicines.

Kidderminster Infirmary.—House Surgeon. Salary £100, with residence.

APPOINTMENTS.

Burge, F. J., sen., M.R.C.S., Medical Officer for the Hammersmith District of the Metropolitan Mutual Aid Society.

Douglas, A. E., M.D., Medical Officer for the Warrenpoint Dispensary District of the Newry Union, Co. Down.

Duke, S., M.D., Medical Officer for the Camberwell New-road District of the Metropolitan Mutual Medical Aid Society.

Eagar, R., M.D., Resident Superintendent to St. Luke's Hospital.

Fussell, E. F., M.B., M.R.C.P., Assistant-Physician Sussex County Hospital.

Greene, R., L.R.C.P., Assistant Medical Officer to the Sussex Lunatic Asylum, Haywards heath.

Hilliard, H. C., M.D., Medical Tutor and Demonstrator of Anatomy to Queen's College, Birmingham.

Huston, R. T., L.K.Q.C.P.I., Medical Officer for District No. 4 of the Holsworthy Union, Devon.

Jervis, C., M.R.C.S., House-Surgeon at St. Mary's Hospital.

Kempe, C. P., M.R.C.S., Medical Officer for the Camden-town District of the Metropolitan Mutual Medical Aid Society.

Pottle, J. R., M.R.C.S., Medical Officer for the City-road District of the Metropolitan Mutual Medical Aid Society.

Rosser, W., M.B., M.R.C.S., Resident Medical Officer to, and Lecturer on Chemistry at, Trinity College, Glenalmond, Perth.

Timothy, P. V., M.D., Medical Officer for the Finsbury District of the Metropolitan Mutual Medical Aid Society.

Turner, G. E. W., L.R.C.P.Ed., Assistant Medical Officer at the Cotonhill Lunatic Asylum, Stafford.

ANALYTICAL REPORT
ON
BEBE'S DUBLIN XXX PORTER.
By MR. TICHBORNE, F.C.S., &c.,
Apothecaries' Hall, Dublin.

FROM the evidence given before the Parliamentary Committee, and from the published reports extant, it would appear that most of the great porter brewers do not adulterate. The nearest approach to anything of this kind would seem to be in the use of salt, and that only to a moderate degree. It is, however, equally well known that, as a rule, the porter is not bottled by the brewers, but by men who make bottling a special business; or, what is more frequently the case, it is bought in the wood by the publicans, or retailers, and bottled by them. It is self-evident that the name of a good brewer upon the label is not always a guarantee for the quality of the porter.

The object of the present report is to examine the quality of porter sent out by one of the best known bottlers in Dublin. The bottles were labelled, "*Guinness's Dublin Stout, XXX, Brewed for Exportation. Bottled by John Bebe.*"

We give the result in a tabular form :—

(Specific gravity, 1·0195.)	Grains per gallon
Alcohol (proof spirit)	7,630
Solid matter	4,816
Saccharine matter	2,300
Ash	126
Albuminous substances (nitrogen, 132 per cent.)	574
Acidity (acetic acid)	245

It is evident from the above analysis that this bottled porter represents fairly Guinness's XXX stout, a genuine and pure porter containing more than the average quantity of alcohol.

In speaking of the London porter, one of the most popular lecturers on food says that that beverage (of which there are prodigious quantities consumed) is miserably drugged in the public-houses. Its strength is reduced by water, and its qualities are brought up again by treacle, liquorice, and salt, and various narcotic agents which are added to make up for the loss of alcohol. To such a condition has the porter-drinking population been brought, that they do not know genuine porter when they drink it, and having acquired a taste for its wretched substitute, they reject the unadulterated article.

The specimen examined may be viewed as the type of a pure beverage, and where the desire for fermented malt liquors is indicated by natural taste, few beverages would combine such nutritious value with mild stimulating properties.

In drinking a glass of porter (½ pint) similar to that analysed, the consumer takes in about 1½ ounce of pabulum (including the alcohol) of easy digestibility. In stimulating property, a glass of Guinness's porter of the above quality is equivalent to one-half of its bulk of moselle or good claret, a wine-glass of sherry, or an ounce of brandy.—MEDICAL PRESS, Dec. 15.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 5, 1870.

CONTENTS.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

PROTOPLASM AND THE GERM THEORIES.

DR. CHILD, remarked upon this subject that protoplasm was as a rule a more or less viscous fluid, consisting mainly of the four elements—oxygen, hydrogen, carbon, and nitrogen—such as constitute the living portion of every organism, animal or vegetable. Some portion of these substances is decomposed by every action of life in the organism in which it exists. It is capable of repairing the loss thus occasioned by assimilation to itself with new matter derived directly or indirectly from the inorganic world. We are unable by any process to discriminate between the protoplasm of the lowest plant and that of the highest animal; but, as a matter of fact, the protoplasm of one kind of organism so far differs from another as to conform to peculiarities of type. The protoplasm of a fungus in its early state, for instance, developed into an adult fungus, and never took another form. The earliest discoverable state of every organism is that of a simple minute mass of protoplasm, and beyond this stage many organisms never progress. Organisms are capable of reproduction and multiplication by means of detached portions of their protoplasm. Those eight propositions would be sufficient, with the help of one other which is very generally admitted—that while vegetable organisms are capable of assimilating to their protoplasm certain inorganic compounds, the animal world has to find its nutriment ready made from the vegetable kingdom. What he had to call attention to was the various germ theories which had been put forward. After an examination of the experimental evidence put forward, Dr. Child said that the conclusions which he had arrived at on the theoretical relation of the question of abiogenesis, were that it appeared to him that abiogenesis in some form or other was a necessary consequence of certain other theories which were gaining ground at the present moment, such as the origin of species and the theory of evolution. It was hardly conceivable that we could theoretically hold that the original simple forms from which the whole animal and vegetable world had been developed, had sprung into existence out of the regular order of the evolution of the universe. What was called the germ theory of disease threw an interesting light on the question. Zymotic diseases were now generally believed to result from the multiplication or reproduction of germs in the blood of the man or animal affected. The matter to be accounted for was how the germ diseases appeared, disappeared, and afterwards again cropped up in the same district and at great intervals of time. If the old theories were to be maintained in their entirety as to the fixity of species, every one of these diseases must have existed somewhere from the beginning. That was a view which was hardly credible, but that it was held he proved by a quotation from a work by Dr. Budd, of Bristol. On the other hand the view derivable from the process of evolution would be simply that wherever certain different degrees of complication in the structure of the earth's crust arise, we should find the same reproduction of minute organic beings, and probably this process was taking place at different times in different parts of the world exactly as favouring circumstances occurred.

Mr. Samuelson read a paper "On the Controversy on Spontaneous Generation."

Mr. Samuelson's paper comprised a comprehensive view of the present position of the controversy on heterogenesis, or the supposed creation of the lowest forms of plants and animals *de novo*. He thought the importance of the theological bearing of the subject had been overrated, and expressed his belief that those who adopted the theory of the creation of living forms only from germs already in existence would eventually find their view to be correct. Proceeding to criticise the labours of Dr. Bastian, Mr. Samuelson characterised as vague the terms in which that gentleman had described the results of his experiments. He also showed that some of them were opposed to the results he (Mr. Samuelson) had obtained. From a series of experiments extending over many years, he had little doubt that the plant types really spring from atmospheric germs. In 1863 Mr. Samuelson found the same plant types—various stages of mildew—in infusions of orange juice, cabbage juice, and pure distilled water exposed to the air; and during the past summer he again found the identical types in infusion of orange juice, and in water caught in a shower of rain. At both periods he found lowly animal types in the atmosphere. Leaving the results of his experiments to the judgment of men of science, Mr. Samuelson said that if the believers in spontaneous generation still insisted that their hypothesis had not been refuted, he would retort that their experiments had only proved so far their inability to exclude invisible germs from their infusions.

The Chairman intimated that if it was the wish of the audience, Dr. Crace Calvert's paper relating to fermentation, which had been entered in another department, might be read with advantage in this. (Applause.)

Dr. Crace Calvert referred to some experiments which he had completed, and to another series on which he had been engaged for the last twelve months, and which were likely to take him another twelve months to perfect. His endeavour was to take air from the breath of patients suffering from typhoid and scarlet fever and small-pox, to examine that air, and see what kind of microscopic life such breath conveyed. The first part of his experiments had led already to some interesting results, and they entirely proved the truth of Dr. Tyndall's and Mr. Samuelson's statements. He had already established the possibility of preserving air from microscopic life for seventeen days, and by the new plan he was pursuing he would be able to show that germs might be excluded for twelve months. He stated the facts demonstrating that the atmosphere contained germs of putrefaction, and that the rapidity of the development of the germs depended on the nature of the pabulum with which they came in contact. So that these phenomena, though appearing at first sight to have a similarity, differed greatly in their mode of reproduction. Dr. Calvert hoped to be able to lay the result of his experiments before the meeting next year, and observed that if he should be so successful as to announce the fact that there was a distinction between the vital life from the breath of fever patients or those suffering from small-pox, he was conscious that he would have conferred on society a great boon. (Hear.) Speaking of the difficulties attending the investigation, he said the microscope which he used magnified 1,600 times, and it required the highest power to be able to follow the microscopic life. There were little cells which could not be seen at all except by the most careful attention and by practice, and they moved about with such rapidity that he could barely follow them. He had never seen this class of cells except in connection with putrefaction.

Mr. Bentham, President of the Linnæan Society, in opening the discussion, remarked that there were two essential conditions to be observed by experimenters—accurate experiments, and sound reasoning upon them. His opinion was that the experiments as to the existence or non-existence of germs could not be taken as conclusive; they must depend altogether upon circumstantial evidence. The germs which floated in the air could not be seen by any microscope, and their presence or absence must be deduced from other circumstances. He expressed his confidence in the experiments made by Mr. Samuelson. At one time abiogenesis was supposed to exist wherever there was corruption. That theory was not now believed in. There was no case in which animals in their early state were visible to the microscope where it had not been proved that they had been derived from living animals. And what they had all just heard went to prove that, reasoning by analogy, there was no ground at present for supposing that abiogenesis exists.

CURIOUS EXPERIMENT IN MAGNETIC INDUCTION.

Mr. S. A. Varley exhibited a very curious experiment, in which a bar of soft iron which normally possessed no magnetism lifted pieces of soft iron off the poles of a strong permanent magnet, yet it was clear that all the magnetism in the soft iron bar must have been derived from the permanent magnet below. He then explained that according to the laws of magnetic induction, this must necessarily be the result of such an experiment.

In the Section Anatomy and Physiology, the following papers were read :—

The report of Dr. Arthur Gamgee on the heat generated in the blood in the process of arterialisation, which was of a purely scientific character, having been taken as read, Professor Traquair contributed a paper on "The cranial osteology of *polypterus bichir.*" Professor Macalister exhibited a sketch of some varieties of the *pronator quadratus*, and at great length explained their peculiar characteristics. Professor Cleland followed with a communication on "The physical relations of consciousness and the seat of sensation—a theory proposed," and the business of the day concluded with a paper by Dr. B. W. Richardson on "New physiological researches on the effects of carbonic acid." He explained that the observations he had made were new in that they related to the direct action of carbonic acid on animal and vegetable fluids, and they were interesting equally to the zoologist and botanist as to the anatomist. But the greatest interest concentrated on the relation of the research to some of the diseases of the animal body. Thus, in instances where the temperature of the body is raised and the production of carbonic acid is excessive, the blood on the right side of the heart has its fibrine often precipitated, and in many other cases fibrinous or albuminous exuded fluids are solidified, as is the case in croup. The author, in the course of his paper, explained how rapidly blood charged with carbonic acid absorbed oxygen when exposed to that gas, and he held that carbonic acid in the venous blood was as essential to the process of respiration as was the oxygen in the pulmonary organs.

SPONTANEOUS GENERATION.

At a meeting which was held in the reading room at the Free Library, Professor Rolleston presided, and the attendance was unusually large, the great attraction being Dr. Bastian's reply to the two objections of Professor Huxley relative to certain experiments made in the investigation of the theory of spontaneous generation. Professor Huxley, in his inaugural address, referring to these experiments, said the first reply which suggested itself was the probability that there must be some error about them, because they were performed every day on an enormous scale with quite contrary results—meat, fruits, and vegetables, the very materials of the most fermentable and putrescible infusions being preserved to the extent of thousands of tons every year by a method which was a mere application of Spallanzani's experiment. Did the professor, Dr. Bastian asked, presume that these preserved meats were free from living organisms? The ordinary method of preserving meat in cans, as practised at Mr. M'Call's establishment in London, was this—Large numbers of the cans containing meat, and having only a small aperture in the top, were placed in a bath containing a solution of chloride of calcium capable of being heated to 263 or 264 degrees Fahrenheit before it boiled, and they were submitted for more than an hour and a-half to a heat of 230 degrees Fahrenheit, corresponding with 110 degrees Centigrade, a temperature which Pasteur considered sufficient to destroy any pre-existing life which might be in solution. Afterwards, the tins having been hermetically sealed, the temperature was rapidly raised to 260 degrees Fahrenheit, equivalent to 126 degrees Centigrade, and this temperature was maintained for half-an-hour. Mr. M'Call assured him that there was a certain definite percentage of failures in meat so preserved. Some of these were undoubtedly to be explained by defective closure of the cases, but on the other hand, there were a certain number of failures where it was possible to find no flaw or defect whatever in the tin. They might remain good for two or three years, and then from some unknown cause they were found to become putrid, which was always known by a bulging out of the ends of the tin, caused by the generation of gas inside. Wishing to ascertain the microscopic condition of meats sold as perfectly good, he procured three tins, one of salmon, one of lobster, and one of Jullien's soup. He opened them, and submitted their contents to microscopic examination, and found in each of the tins a very great number of the minute living things which were met with in solutions, and which he supposed to be capable of coming into existence *de novo*. These living things consisted of minute figure-of-eight particles, *bacteria* like bodies, and filaments. As far as the filaments were concerned, they made no movement, but there was no reason to suppose they were dead. With regard to the movements exhibited by the figure-of-eight particles, there were certain Brownian movements supposed to be due to certain physical conditions of the fluid itself, and there were other movements which were unmistakably vital, and between these two extremes there were any number of conditions. It was quite possible to meet with *Bacteria* which were really living, but which, nevertheless, showed only languid movements. It was impossible to draw any sharp line of demarcation. They could not say positively when these slow movements existed that the thing was living, but on the other hand, they had no positive right to infer that they were not living. Then Professor Huxley said—"If, in the present state of science, the alternative is offered to us, either germs can stand a greater heat than has been supposed, or the molecules of dead matter, for no valid or intelligible reason that is assigned, are able to rearrange themselves into living bodies, exactly such as can be demonstrated to be frequently produced in another way, I cannot understand how choice can be, even for a moment, doubtful."

By this, he presumed, Professor Huxley meant that if these alternatives were put, he would decidedly elect to believe that the germs could stand the heat to which they had been subjected rather than that it was possible for the living things to have been originated *de novo*. Now, his own experiments, at all events, were so simple in their nature, that it did not seem to him that there was very much room for the possibilities of error suggested by the professor. Certain flasks containing solutions were taken—in some cases of organic and in others of inorganic matter; they were hermetically sealed by Professor Frankland; and then they were exposed to a temperature of from 146 to 153 degrees centigrade. He supposed that this amount of heat would destroy the germs if they were in the flasks, and that the finding of living things in the solutions afterwards would be evidence that they were produced *de novo*. He examined the flasks day after day with the greatest care, and saw nothing until the expiration of about three weeks, when certain cloud-like flocculi appeared in the solution, and after about three weeks more there appeared on one of the flocculi a minute white speck, which, though small, increased in size day by day; and when the flask was opened at the expiration of sixty-five days, the whole white mass was found to consist of fungus spores and filaments. In order to ascertain the possible effect of such a heat as the solution had been submitted to on fungus filaments, he took certain fungus filaments and spores from an organic infusion and submitted them to the same test, under precisely the same conditions; and when he examined that fungus mass afterwards he found that it was completely dissolved. There was scarcely a perfect and entire fungus filament to be seen; there was not an entire spore. In the face of that evidence he did not think it was very hard that it should be maintained that the fungus he found in the first instance was a fungus which had existed in the solution before. It had never yet been shown that any living thing could continue to live after it had been exposed to a temperature of eleven degrees centigrade; and it was because he had found living things in infusions which had been submitted to a greater heat that the evidence seemed to him at present—and that was all he said—to be decidedly in favour of the view that the living things he found in those solutions had been evolved *de novo*.

Dr. CHILD said Professor Huxley, and those who thought with him, took their stand on M. Pasteur's experiments, and if those did not hold good the whole of their evidence was swept away. They were on the horns of a dilemma. Either these living things were spontaneously produced, or they could withstand the boiling temperature. If they could withstand the boiling temperature, M. Pasteur's experiments were swept away; and if they could not withstand it, then they must be spontaneously produced.

Mr. EDDOWES remarked that the contents of the cases of preserved salmon and lobster had never reached the boiling point. They were not prepared by Mr. M'Call, or by the process which had been described, but were prepared on the Canadian coasts in a very rough way, and never kept for any length of time. He suggested that Dr. Bastian should analyse the contents of a case prepared by Mr. M'Call, and he could let him have one which he had had in his possession for fourteen years, and off the contents of which he was prepared to lunch that morning.

Professor TYNDALL said Dr. Bastian's experiments—conscientiously, earnestly, and laboriously conducted as they had been—had not produced the slightest effect on his views. Dr. Bastian had raised further barriers, obstacles, and objections which could not be met by any argument that could be brought before that meeting. They must be met by a strict scrutiny of his experiments—by going over the same ground; and he would invoke Dr. Bastian himself, in the interest of the subject, to repeat his experiments, multiply them, and seek for negative causes. If he understood aright, Dr. Bastian prepared his flasks by partly filling them with solutions or infusions. They were, he believed, about half filled. (Dr. Bastian: About that.) Then above the solution there would be air, and this, he understood, was removed by means of an air-pump; but he assured Dr. Bastian that it was perfectly impossible for the air-pump to remove the germs or dust particles, or whatever they might be, with which the air was charged, and he should like to know whether the precaution was taken to turn the flasks upside down whilst they were exposed to the heat, so as to submerge these particles in the heated liquid, because the germs might be able to sustain a much greater amount of heat in a gaseous form than in a liquid form.

Dr. BASTIAN said the flasks were frequently shaken.

Professor TYNDALL thought that was not enough. Dr. Bastian would have to repeat his experiments before they would be of any value to anybody who required strict proof.

Dr. BASTIAN.—What I maintain is that, so far as our present state of knowledge goes, the evidence is in favour of spontaneous generation.

The CHAIRMAN said, with reference to all these experiments with heat, it seemed to him that the analogy of albumen, which, after it had been exposed to the action of the digestive juice, was no longer amenable to the action of boiling water, was a great light. It was possible that the limit of endurance of heat by vitalised albumen had not been gained. Peptone was a highly complex organised albumen, and, nevertheless, it was not acted upon by heat at all. Taking a large view of the whole question, he was rather prejudiced against the theory of spontaneous generation.

THE PREVENTION OF LEAD-POISONING IN WATER.

Mr. ALEXANDER GORDON read a paper entitled "How to Prevent Lead-poisoning in Water." He first pointed out that though medical and scientific men had long been unanimous as to the desirability of abolishing lead as a means for the storage or distribution of water used for dietetic purposes, the conviction as to its danger had not yet fully forced itself upon the public mind. The result was that though hundreds and thousands of pounds were spent in obtaining pure water, in a great many cases the water no sooner crossed the threshold of our houses than it became poisoned by means of leaden pipes and cisterns. Various substitutes for lead piping had been tried, but all were more or less open to objection either from the danger of rust, the want of ductility, liability to galvanic action, or other causes. The only substitute yet manufactured which, while it conserved the purity of the water, was both ductile and cheap, was that invented by Mr. Haines, C.E., and specimens of which Mr. Gordon displayed. It consists of a leaden pipe with an internal pipe of block tin, both having been previously pressed together so as to form a homogeneous whole. By this process the piping retained all the flexibility of lead, while the inner tube of tin was strong and thick enough to prevent any access of water to the exterior leaden pipe. Mr. Gordon stated that wherever the invention had been applied its sanitary value had been found perfect. The manufacture was daily increasing, and its merits were being recognised not only in this country but in foreign countries.

The PRESIDENT said that a number of experiments were made a few years since by the Sanitary Association of Manchester, the result of which, he believed, was that no coating of tin applied in an ordinary way was sufficient to prevent the action of the water on the lead: but, according to the plan explained by Mr. Gordon, a thicker coating of tin appeared to be applied, and that seemed to be a solution of the difficulty.

ON THE USE OF DELIQUESCENT SALTS FOR LAYING DUST.

Mr. W. J. COOPER read a paper on "The Use of Solutions of Soluble Chlorides for Laying Dust in Thoroughfares," observing that at the meeting of the British Association at Norwich in 1868, he introduced the subject of the application of deliquescent chlorides for that purpose. At that time an experiment had been tried in Baker street, Portman square, throughout an exceptionally hot season, with most successful results, the surface of the macadam road being purified, hardened, and concreted, and the obnoxious dust prevented from rising. In Liverpool, in the year 1869, Bold street, Church street, and Lord street were watered with salts during the month of July; the report of the results was very favourable, and the experiments had been continued this year. It was difficult to prove the economy resulting from the use of the chlorides over a limited area, and the Westminster Board of Works, after observing the effect, resolved to extend the experiment throughout their entire district, comprising an area of 250,000 square yards, and no sooner was that course adopted than the economy in labour and water was evident. Mr. Cooper also remarked that the importance in a sanitary point of view of the use of the chlorides had been clearly established, and he argued that an effective method of remedying the evils arising from organic matter deposited on public thoroughfares was daily becoming a matter of serious consideration with sanitary authorities.

Abstracts of Lectures

DELIVERED AT THE

LONDON MEDICAL SCHOOLS

AT THE

OPENING OF THE WINTER SESSION, 1870-71.

ST. THOMAS'S HOSPITAL SCHOOL OF MEDICINE.

Abstract of address delivered on Saturday, October 1st, by HENRY GERVIS, M.D., Lecturer on Forensic Medicine to the Hospital.

After some introductory remarks and words of welcome to the entering students, Dr. Gervis proceeded to say:—It has been somewhat the fashion of late to depreciate the importance of attendance upon lectures. From this my own recollections of student life lead me to disagree. I still remember the very forms of expression which characterised the lectures of our various teachers—nay, the very sound of their voices still lingers in my ear. The power of the lecturer is akin to that of the speaker and preacher; and as to listen to a Disraeli or a Bright in the House of Commons, or to a Liddon or a Guthrie in the pulpit, is a much higher treat, and far more impressive than to read their speeches or sermons in print, so do I think a lecture listened to is far more impressive than a lecture read. In conjunction with note-taking, of whose utility Dr. Gervis spoke highly, he alluded to the medical parliamentary measure which, had it been enacted, would have made the year so eventful a one to the profession. With respect to it, Dr. Gervis expressed an opinion adverse to the three board system, but yet thought that after the plan of the London Matriculation Local Examinations could be held simultaneously in the three divisions of the Kingdom, and in this way the same level of examination be everywhere maintained, and no invidious distinction drawn between the value of the three diplomas. Some questions connected with the out-patient departments of the metropolitan hospitals and the mutual relationship of school and hospital were then alluded to; on the latter point Dr. Gervis said:—By the union of a school with the hospital we believe the benefits of the hospital are largely extended and multiplied; not only does the hospital get for its in-patients an amount of medical and surgical aid from educated and zealous attendants, such as but rarely, at all events, could ordinary paid nursing replace, but without their help its out-patient surgical and maternity departments could scarcely exist. And still further, and without any doubt, through the medium of the school, the hospital diffuses its benefits far beyond the range of its in-patient and out-patient departments. Wherever a St. Thomas's man is to be found, whether amid Canadian snows, or Indian jungle, or Australian bush, voyaging on the sea, or practising in some secluded English village, there does the munificence of the founders and governors of St. Thomas's reap fresh and precious fruits. Remarking of the present being the last introductory lecture to be given at the temporary hospital, Dr. Gervis took a retrospect of the changes that had occurred in the school during the seven years they had spent at the Surrey Gardens, and concluded as follows:—We trust that long before the dawn of another October we shall have left these temporary buildings, and entered upon occupation of others whose erection will rank among the most remarkable events of the present reign. Transferred from the south side of London Bridge to the south side of Westminster, rivalling in beauty the opposite Palace of the legislature, and in interest its nearer neighbour of Lambeth, long may St. Thomas's flourish, the pride of its governors, and staff, and school, and a perennial fountain of beneficence for the suffering poor of this realm! May it be the anxious endeavour of her present sons that the prosperity of their commonwealth suffer no less in their hands; but that, as the building of the new St. Thomas's far eclipses in splendour the building of the old, so shall its present school perpetuate and outshine the bright glories of former days.

GUY'S HOSPITAL SCHOOL OF MEDICINE.

Abstract of address delivered on Saturday, October 1st, by CHARLES BADER, M.R.C.S., Lecturer on Diseases of the Eye to the Hospital.

In prefacing his remarks, the lecturer said:—Before offering suggestions as to the mode of passing through your medical career, allow me to say a few words about Guy's Hospital itself. The hospital in a few months will have the largest number of beds among London hospitals. Though too much material may become a disadvantage to the student, and one case well observed be of more use than any number of the same kind of cases carelessly looked into, yet numerous cases simultaneously present in a hospital offer great advantages. The teacher has a choice, he can select the case which presents most of the characteristics of a disease. The student, in a short time, not only sees the chief features of a particular disease, but, like the botanist, among a large number of plants of the same species and in different stages of development, he acquires a rapid and thorough knowledge of the life and history of a disease; the patients, as I have often seen in the large Vienna hospital, find it a great relief to have fellow-sufferers who ward off the inconvenience caused by eager students; we sometimes had to forsake the pleasure of examining a case of aneurism of the aorta, merely because the patient had already been percussed, turned about, &c., by numerous fellow students. Guy's Hospital is not situated in a fashionable part of London; fever and accidents are its usual neighbours. It is surrounded by a numerous hard-working population. The medical student at once and on a large scale meets the harshest features of his work. Years before I had the good fortune of being appointed to the hospital I made it my daily pleasure to visit its pathological museum. I have seen many museums in this and other countries, but have found none superior to Guy's, and, as regards diseases of the arteries, none is equal. Those who enter the medical profession are, I hope, aware that no other profession requires a larger number of general accomplishments. To be thoroughly familiar with the subjects of surgery, midwifery, and medicine before entering private practice, is a self understood thing; but to enter the medical profession with the principles and manners of a gentleman, to have received an excellent general education, to be a good linguist, draughtsman, &c., to be in excellent health, able to share in and fond of athletic sports, are details, all of which are almost as important to success in the medical career as the professional knowledge. Instances of excellence as a linguist, as a Greek scholar, as a draughtsman having secured a medical man's success in life are of frequent occurrence. The amount of knowledge required of the student by our examining bodies as test of his proficiency in medical science is a very moderate one, and should in the fullest sense be complied with. The new Guy's man should study the geography of his hospital. He should visit the wards, the laboratories, the museum, the bath-rooms, kitchen, ventilating apparatus, &c.; the sight of the resources, size, and scientific treasures of his future *Alma Mater* will thus become a source of encouragement. The pupil should carefully impress upon his mind—first, that within a few months he will have forgotten a large portion of the book reading, chemical formulæ, &., required for the examination. To provide for this he should possess the very best books with which to make up this loss, if necessary, and should also connect himself with some one at the hospital who may keep him informed of any important work; secondly, he should not fail to visit Guy's whenever occasion presents itself, and go round the wards and continually keep up an intercourse with some of the medical

men of his school, so that if any good theory or new treatment of importance should present itself he may have the advantage of early information. No one whose means at all permit it should leave Guy's without having frequented other hospitals; for this purpose three or six months should be set apart. Hospitals for diseases of the chest, eye, ear, skin, teeth, throat, urinary organs, fistula, and especially for children, are the places to visit. The liberal character of the medical staff of those special hospitals has, in London, at least, always shown itself by the readiness with which permission to be present and to learn was granted. It would be an excellent thing, he said, if a fund existed, out of which those with insufficient means might be assisted towards the tour of several months in other countries. The contact with more accomplished fellow students necessarily raises the desire of improving one's own faculties.

KING'S COLLEGE HOSPITAL MEDICAL SCHOOL.

Introductory Address, delivered on Monday, October 3rd, by John Wood, F.R.C.S, Professor of Surgery, Surgeon to King's College Hospital, Examiner in Anatomy at the University of London.

After making the melancholy announcement of the recent death of Dr. W. Allen Miller, and paying a brief tribute to his memory, Professor Wood alluded to the objects of an introductory address, and to the changes in the Staff of the College, which resulted in his occupying his present position, then proceeded to reflect upon the alterations which each year brought about in the principles and practice of the medical art, notifying the direction in which these modifications are now chiefly progressing, and vindicating the Profession from the imputation of differences of opinion among its members, which it only shared in common with most others, dealing more with probabilities than certainties. He advocated a patient accumulation of scientific and medical facts, arranged upon the basis of the hypothesis most in accordance with the present state of knowledge, and acted upon with a provisional and qualified assent, not pushed to extremes, and waiting for that more perfect light which is sure to arise from a just comparison of the differences which the progress of knowledge in every branch will diminish, and finally cause to disappear. He then proceeded to welcome the new comers to the study of medicine, and said—

"Amid the melancholy impressions made by the hideous spectacle now presented by the chief nations of Continental Europe, ravaged and made desolate by the most frightful war that has ever raged in modern times, applying the improvements of our boasted civilization, not in the practice of the humane maxims of the Saviour, by whose name it is called, but in the enormous range, deadly precision, and scientific butchery of its engines of destruction. It cannot but be a satisfaction to you that you are this day enlisting into a corps which is not armed with the murderous 'chassepot' or the death-dealing 'mitrailleuse,' but with the pain-assuaging chloroform and the comforting bandage, with the gentle hand and the sympathising heart, helpful alike to both friend and foe, and tending those whom the fiendish passion for military glory has laid prostrate in the ruins of a late smiling land. You are as it were, binding on your arms, and I hope, imprinting upon your hearts that glorious emblem of triumph even in death, of comfort even in despair, of the most touching compassion in pain and distress, of Almighty help in time of trouble—the red cross, more ennobled now in its saving work in the rear of armies, than when raised on high in the van of battle against the infidel."

The lecturer then sketched briefly the facilities afforded by the Institution and its staff for the prosecution of scientific and medical studies, the arrangements for study and practical work required by the examining bodies, and mentioned that in accordance with the feeling prevalent among the members of the Medical Teachers' Association, a system of marking attendance in the wards of the hospital had been carried out with success during last summer. He did not agree with those who considered that it would be advisable to abolish all schedules and certificates of attendance, and to trust entirely to yearly recurring pass examinations, which could only imperfectly test practical acquirements in large numbers of candidates. Such a course would inevitably lead in the majority of cases to the postponement of serious work to within a few months of the examination, and a more common resort to the practice of grinding. He then described what he considered to be the chief use of lectures—viz., to guide the student through the difficulties of his subject, the multitude of its details, and of the books written about them, and to strike and keep up the key note of the application of true scientific principles to all the variations which claimed their attention. In a practical art, like surgery for example, the firm implantation of simple principles were of great importance to enable the surgeon under the most adverse circumstances, such as a railway catastrophe or a battle, to benefit his patients by the scientific application of makeshifts, where the ordinary apparatus is not at hand.

He condemned the manner in which charpie was used as stuffing for wounds in Continental surgery, maintaining that thus employed it became a means of contagion, and that the simpler, less painful, and more cleanly ways of dressing in vogue in our own hospitals were preferable. He thought that the best use that charpie could be applied to was a material for pads in simple fractures, and as sponges first dipped into a disinfecting fluid, and burnt after being once used, and that, even for these purposes, tow was preferable. He compared the requirements of a good surgeon with those of a good general, especially in respect to foresight and provision for eventualities, the qualities of watchfulness, coolness, courage, and rapidity of conception and execution being valuable in both, with the addition in the surgeon of skill in manipulation with his own hands in carrying out his own conceptions, while the objects of each were very different—one being to destroy life and the other to save it. The lecturer then alluded to the various tendencies to error which he had observed in the course of his career as a teacher among medical students, congratulating his audience upon the immense improvement in the standard of preliminary education which had been effected, and the better prepared and more prolific nature of the soil for the cultivation of scientific and medical subjects which had thence resulted. He urged that the practice of the Art of Diagnostic and Operative Surgery, could only be rightly founded upon a familiar acquaintance with the structures of the human body, and that to work perseveringly at the dead subject, to observe attentively is the only way to remember distinctively and usefully in Anatomy.

In the scarcity of subjects for dissection, which unhappily prevails, it was important to make the utmost possible use of them, in cultivating the art of detecting minute differences.

The lecturer advocated the earnest study of science as a valuable preparation, and training for medical pursuits, and illustrated its direct practical bearings by allusion to the discoveries of the minute living beings which were proved to be the cause of infectious diseases among the silkworms and other lower animals. He then alluded to the opportunities afforded by the hospital, to all the students, to study disease by actual experience of its effects and treatment, and said that, now-a-days, it is not sufficient to *walk* the hospital, but that the student must *work* the hospital with zeal, industry, and perseverance, in order to pass the portals of the examining bodies, who were becoming under the pressure of public opinion more and more practical in their examinations. To aid him to this end, numerous and regular examinations of a practical character, will be carried out in the various classes. These enable a man to compare his progress with that of others undergoing the same training, and were a guard against the imperfection of half-knowledge. And he concluded by warning his younger hearers against the temtations, which beset in London life the path of the young man void of understanding.

FOREIGN MEDICAL LITERATURE.

ALTERATION IN THE URINE FROM THE USE OF CARBOLIC ACID.*

By J. A. Waldenstrom.

Although this remedy has for a long time been used at the Academical Hospital in all forms of suppuration, with a view to checking decomposition of the pus, in three cases only did the urine exhibit any change which could be ascribed to the action of the carbolic acid. The first patient came in with a gangrenous phlegmon in the entire of the right leg. The largest portion of the skin and subcutaneous areolar tissue had sloughed away, so that it was possible to see the soleus muscle almost from its origin to its insertion. To arrest decomposition of the pus, the diseased bone inside the moist warm dressing was enveloped with a piece of lint dipped in the ordinary carbolic acid oil. In consequence of the nature of the affection, and of the patient's advanced age, the prognosis was very bad, and when, after the lapse of eight days, simultaneously with the complete separation of the dead areolar tissue, the urine assumed a dark-red colour, the case was regarded as hopeless. It was reasonable to suppose that the change in colour had its origin in a resolution of the blood, but, notwithstanding the employment of all the chemical reagents, its presence could not be detected in the urine, which was clear and of a strongly acid reaction. On Professor Almén, who kept the urine for closer examination, informing me that it contained carbolic acid in large quantity, I intermitted the use of the solution of the acid in question for a day, when the urine resumed its normal appearance, but as soon as the carbolic acid was again employed, the dark red colour returned. The advantage of employing carbolic acid (for preventing decomposition of the pus, and so the occurrence of septicæmia), and the possible injury from it (in producing a nephritis) made me doubtful whether I should desist from the use of it, or not. However, it was tried for some days longer, but the pieces of lint were first wrung out in a dry towel before they were laid upon the sore, and as soon as this precautionary measure was adopted, the urine preserved its normal colour.

The second patient resembled the one just spoken of in every particular, not only as regarded the seat of the complaint and its extent, but also in respect to the behaviour of the urine in relation to the greater or less quantity of carbolic acid which was used in the dressing. The third case was a middle-aged woman with a very extensive periostitis in the right thigh. The pus that escaped on incision was thin, blood-coloured, and easily underwent decomposition. The suppuration in the large cavity was profuse and of a fœtid character. With a view to check decomposition of the pus, as much as two tea-spoonfuls of a solution in oil of the acid was one day injected into the cavity, the latter having been previously rinsed out with water containing carbolic acid. The consequence was, that next day the urine possessed a tarry colour. Some days later, when the urine had regained its usual appearance, the same injection was repeated with a precisely similar result. The urine was then more closely examined and was found to contain both albumen and the colouring matter of the blood. The latter had already disappeared next day, but the albumen continued, although in small quantity, for a few days. Death occurred as a consequence of septicæmia. A similar transitory presence of albumen in the urine was also observed in a patient who used carbolic acid internally for a syphilitic cutaneous eruption.

From what has been stated we see then that carbolic acid is not as harmless as it is often represented to be. Separated by the kidneys, it acts as an irritant on these organs and may give occasion either to an hyperæmia alone, or to a parenchymatous inflammation, which is not an unimportant complication of the other affections, even if they are not so serious. Neumann's investigations on the action of carbolic acid on dogs poisoned therewith, also show that a considerable fatty degeneration in combination with a molecular breaking-up of the cells of the liver, hyperæmia of the kidneys with a turbidity and separation of the epithelium in the urinary passages are the changes constantly met with on *post-mortem* examination.*

This obliges us to take the greatest precautions in the use, whether internal or external, of carbolic acid, and frequently to examine the urine in order to be able instantly to withhold it on the occurrence of a state of renal irritation. In solution in oil, too, carbolic acid appears to be more readily absorbed than in an aqueous solution, so that we should, in affections such as the two first brought forward, where the acid comes into direct contact with a large granulating surface, prefer the latter form to the former in using it; unless it be made weaker than usually employed (one part in six to eight.)

The cause of this altered colour of the urine, which is met with only in the external use of the remedy, we do not know with certainty, but it probably depends on the presence of some unknown oxidised products of carbolic acid. It may be assumed that this oxidation takes place prior to the absorption of the acid, because, otherwise, we should find the alteration in colour of the urine in cases of its internal use also.

* Translated from the "Upsala Läkareförenings Förhandlingar." Vol. 5, Part ii. 1870. P. 105. By J. W. Moore, M.B., M.Ch., Dub., L.K.Q.C.P.I., Ex-schol., T.C.D.

* Archiv. für Dermatol. u. Syphil. Part 3. 1869. P. 432.

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the Medical Press.)

No. VII.

CROYDON SEWAGE FARM.

The population of Croydon is about 50,000, and the water supply, which is constant, amounts to about forty-nine gallons a head. The sewage varies in quantity, according to the state of the weather, from 3,000,000 to 5,000,000 gallons a day, and it flows in two directions—namely, to the Beddington farm, which receives the largest proportion of it, and to the Norwood farm.

The *Beddington Farm* is a little to the west of the town, and about a mile from the Town Hall. It consists of 382 acres of very porous soil upon a deep bed of gravel, and of these about 270 acres are under irrigation by means of open carriers. The sewage, which amounts to about 2,000,000 gallons a day in dry weather, and to more than double that quantity in wet weather, flows by gravitation to the straining tanks, where a portion of the solid matters are detained and removed from it. It then runs through open irrigation channels upon the land, about thirty or forty acres being used at a time for three days, and the crop is chiefly Rye grass, with a little permanent grass, and water cresses are cultivated in the effluent streams. Mangold wurzel and other crops have been tried, but without sufficient success to encourage a repetition of them, except for purely experimental purposes.

The land is at all times in a sodden and offensive condition, and according to the evidence of Mr. Creasy, the surgeon of the neighbouring orphan asylum, who practises largely in the district, and of Mr. Smee, the eminent surgeon and fellow of the Royal Society, who has a garden

in the locality, the smell is sometimes quite sickening. Mr. Creasy, indeed, states that typhoid fever is nearly always present in the houses about the farm, and that all diseases assume a typhoid character, so that Medical men speak of the patient as having a sewage tongue.

Samples of sewage were taken from the farm, as well as samples of outfall water, and the following are the results of the analysis of them :—

Constituents per gallon.	Raw sewage.	Effluent water.
	Grains.	Grains.
Solid matter in solution . .	27·67	27·17
Chloride of sodium . .	—	—
Organic matter . . .	2·20	0·75
Ammonia	2·000	0·120
Do. organic . .	0·240	0·015
Nitrogen as nitrates, &c. .	0·000	0·349
Oxygen required to oxydise	0.432	0·242
Matters in suspension . .	10·16	0·00
Organic matter . . .	4·12	0·00
Mineral ditto . . .	6·04	0·00

From which it is evident that the sewage is very weak from dilution with subsoil water, and that it is sufficiently purified by the soil to be admissible into a running stream. It would seem, however, from the Report of the Rivers' Pollution Commission (p. 88), that during frost the purification of the sewage is much impaired, especially when the sewage is strong. It must also be stated that the whole of the subsoil water of the locality is so tainted as to be unfit for drinking purposes, and that every well is polluted ; in fact, according to the analytical inquiries of Dr. Frankland, as stated by Dr. Carpenter, the chalk well in Croydon, from which the water supply for the town is obtained, is charged to a large extent with nitrates, and the other oxydised products of sewage.

The *Norwood Sewage Farm*, which receives the other outfall sewage, is situated at South Norwood, a little beyond the parish boundary of Croydon. It consists of thirty-seven acres of stiff clay land, to which about twenty-four acres of additional land of the same character are about to be added. The sewage amounts to about 300,000 gallons a day, and it is furnished by about 5,000 persons. As in the last case, the sewage flows to the farm by gravitation, and after being strained, to separate the coarser solid matters, it is run upon the ground by open carriers, and where it is likely to be very offensive, by partly covered drain-pipes. The ground is chiefly laid out with Italian rye grass, although a few mangolds and potatoes have been grown by way of experiment, but the success of the experiment does not appear to be encouraging.

As might be expected, the ground, which is an impervious clay, is always in a very noisome condition, and the sewage is not sufficiently well purified, except during the time of active vegetation, to be admissible into a running stream ; in fact, there are great complaints of the stench of the sewage, and of the effluvium from the irrigated ground, by those who reside in the neighbourhood ; and the Rivers' Pollution Commissioners say in their report (p. 86), that during frost the purification of the sewage is not at all satisfactory, for they remark that, on two occasions, when "the frost was by no means severe, yet the organic nitrogen rose from 0·098 to 0·419 per 100,000 parts of effluent water, showing that the removal of offensive nitrogenous organic matter was partially arrested, and indicating that during a severe winter the purification of sewage upon a non-absorptive clay soil may be seriously interfered with," and on some other occasions, when the effluent water was "exceptionally impure," they think it arose from unpurified sewage gaining access to the outfall drains through cracks in the soil. These, in fact, are just the difficulties which stand in the way of the purification of sewage, whenever it is distributed upon impervious clay soils, and soils that are liable to crack in dry weather.

The samples of raw sewage and of effluent water which were taken and analysed had the following composition :—

Constituents per gallon.	Raw sewage.	Effluent water.
	Grains.	Grains.
Solid matter in solution . .	41·00	58·19
Chloride of sodium . .	—	—
Organic matter . . .	3·49	4·00
Ammonia	2·000	0·320
Do. organic . .	0·320	0·040
Nitrogen as nitrates, &c. .	0·556	0·601
Oxygen required to oxydise.	0·916	0 824
Matters in suspension . .	11·01	1·98
Organic matter . . .	6·03	0·18
Mineral ditto . . .	4·98	0 80

In this case, as in the faulty cases referred to by the Rivers' Pollution Commissioners, the effluent water was in a very unsatisfactory condition, and so it has been on other occasions when we have examined it.

As regards the commercial success of these farms, it would seem that until recently the farm at Beddington has been let to Mr. Marriage for £5 an acre, the local Board paying a rent of £4 an acre, so that the return to the Board has been £1 an acre for the sewage, and for the cost of supplying it, and for the outlay which they have encountered in preparing the ground—the profit, therefore, considering all things, cannot be much, if there be any ; and on attempting to raise the rent of the farm, the tenant has declined to continue in it, and attempts are now being made to form a joint-stock company to work it. It is, however, remarkable, that those who have been most prominent in expressing their opinions of the value of the undertaking, are evidently very disinclined to enter upon it commercially, and how it will end we are unable to say.

At Norwood the rent paid by the local Board is £10 per acre for the new land which they have taken, and £400 per annum for the thirty-seven acres already under irrigation, and the wages and general expenses, exclusive of the interest of money for laying out the land, and for wages of the surveyor, are about £300 a year, and the returns for the crops sold are about £750 a year ; but the profits depend, as elsewhere, upon the very precarious demand for rye grass, which must be sold when it is ready to cut, let the price be what it may, or it will rot upon the ground ; and hence the price of it ranges from a shilling to threepence a rod of six square feet. Anything which disturbs the demand, as the cattle plague, for instance, or a plentiful crop of hay, reduces the value of the grass to a nominal sum ; but of this we shall have more to say in our concluding remarks, when we review the whole of the facts of the subject and generalize upon them.

Registered for Transmission Abroad.

THE

MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
,, If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 5, 1870.

REDUCTION IN THE SUBSCRIPTION OF OUR JOURNAL.

THE NEW POSTAL REGULATIONS.

The course which the Medical Press and Circular shall pursue in reference to the new postal arrangements has been a subject of anxious consideration with us. On the one hand we have felt bound to give our subscribers the entire benefit of the reduction in our expenditure, and the question has been only in what way that could best be done. On the other hand, the postal authorities interposed so many disabilities and obstructions to the carrying out of our intention that we have found it difficult to do so. In fact, the Postal Act appears to have been carefully framed to prevent the introduction of improvements in such periodicals as the Medical Press and Circular, and to confine the benefits of the halfpenny postage to ordinary newspapers, and we have been obliged, therefore, to submit to the penalty imposed by the Post Office.

It is right that our subscribers should be aware of the exact circumstances. Our expenditure is reduced by one farthing per copy, or 1s. 1d. for each annual subscriber. We have felt that the remission of the sum would be insignificant, and would make our subscription accounts complicated in the working, and we have resolved, therefore, to reduce the rate for advanced payment with the new year to £1, and thus add one-half more to the *bonus* which the postal authorities offer our readers.

We have said that the postal authorities have desired to prevent journals like ours from availing themselves of the new arrangements, and they have attempted to do so by enacting that no periodical shall pass for the halfpenny which is stitched. While we feel that it is a narrow-minded and illiberal policy in a professedly Liberal Government to throw difficulties in the way of publishers making their periodicals as perfect as possible, we are compelled to obey, and in future our journal will be delivered carefully cut, but not stitched. It likewise deprives us of the privilege of re-transmission.

The Medical Press and Circular will in future be the cheapest medical journal in the United Kingdom, and we pledge ourselves, that if our efforts can avail, its value as a professional and scientific recorder shall increase as its price decreases. As the success of any publication depends primarily upon the efforts of its subscribers to obtain additional supporters amongst friends at home or at a distance, we appeal to those who know the independence and impartiality of the conductors of this Journal to further extend its influence and promote the best interests of our common profession.

SANITARY PROGRESS.

The Health Department of the Social Science Association is that in which medical men naturally take the most interest; and the address of Mr. Rawlinson, as President of the Department, went over some of the chief points in the progress made of late years. The President of the Royal Sanitary Commission, Sir C. Adderley, was present on the occasion, and announced that the report would soon appear, so that legislation might be effected next year. Since 1848 plenty of legislation has taken place, and it would almost appear that the great want is rather consolidation and explanation than further laws. A paper was read by Mr. Michael advocating a codification of the existing sanitary laws as a basis for further legislation, and this proposal will commend itself to many minds. At the same time we require an authority in which the country would have confidence, to direct and control, and to which all would look for guidance. In fact, we need a Ministry of Health which should deliver us from the several conflicting and incompetent powers that at present exist. As to the many local Boards of Health that exist, it is to be lamented that they do not comprise, as a rule, the local intelligence on sanitary matters, nor do they even represent it. It was clearly shown at the Congress that we have neither simplicity in the law nor efficiency in its action, and any scheme that would give us these would prove of great value. Commissions we have had over and over again, and desultory legislation has landed us in a quagmire. How are we to get out of it? The discussion that has taken place will be useful in educating the country as to the necessity of studying these questions. We commend to all the concluding paragraph of Mr. Rawlinson's address:—

"Sanitary Science, before it can be of practical use, must be learned by statesmen. The strength of a nation is in its health; and where there is the healthiest community, there bodily purity and morals will have the greatest development. Empires, monarchies, and republics have this lesson to learn. In the cities of the republican States of North America, the worst sanitary defects of the worst cities of Europe are being repeated. The sanitary engineer of the future will know nothing of 'refuse matter' other than as an useful product, which, properly applied to the soil, will add to the wealth of the community. The aim and end of statesmanship ought to be to ensure to every individual born in the State means of health and of morality. Each Englishman's home should not only be his castle, but his hospital. Charity will not then degrade, but will elevate; and that alone will be true charity which assists the poor to assist themselves, and so live independent of almsbegging and almsgiving. We are now proud of our charities—of our public hospitals, which cost £1,000 per bed, *plus* the additional expenses of administration, in which hospital-beds sick men are treated at a money rate three times greater than the wages they could ever earn when in health. 'Our charitable institutions are the glory of our land; but happy will that State be which neither possesses nor needs such form of glory."

EDUCATION IN MENTAL DISEASES.

THE *Pall Mall Gazette* has devoted well-merited attention to existing faults and the English Lunacy system, and in a recent issue it proceeds to argue that those faults are in a great degree the result of deficiencies of medical education in mental disease. It sets forth certain suggestions, the gist of which is that education in lunacy should be enforced in future by the introduction of the subject into licensing examinations, and by the devotion of certain portions of hospitals to mental diseases.

This line of argument opens up an important question of medical education—whether there be any subject in medicine which should be regarded as a speciality to be learned only by persons devoting themselves to its practice, or whether, on the other hand, a duly qualified surgeon should be assumed to be capable of practising every department of medicine and surgery without distinction. Now, it seems to us that, however undesirable it may be to establish partition walls between different branches of medicine, nevertheless, there are certain collateral branches of medicine which ought to be looked upon (as indeed they are practically) as specialities—not necessarily part of a practitioner's education. Lunacy appears to be a case strictly in point, and we therefore hold that medical students should not be compelled to acquaint themselves with any of its details which lie outside a medical circle. Firstly, it is a subject for the study of which a lifetime is too little, and of which no general practitioner could be expected to have any real remedy. Secondly, cases of lunacy requiring medical treatment are such an unusual event in the life of a medical practitioner that labour spent in acquiring a knowledge of the subject would be a very bad investment. Thirdly, the methods of obtaining experience in disease in hospitals are inapplicable to the study of lunacy, and if a student were thoroughly versed in every form of lunacy which could be kept or treated in hospital, he could still know nothing of the subject as a whole.

It is a very mistaken policy, we think, to attempt to take such subjects out of the hands of specialists. It is impossible to do so, because the money value of occasional cases will not repay the labour. A little knowledge of specialities is a very dangerous thing, and a practitioner who repudiates responsibility the moment he finds himself out of his depth is a much more reliable doctor than the versatile genius who is encouraged to believe that he has been taught, and is capable of treating all diseases.

Working practitioners should, in our opinion, be thorough masters of everyday surgery, and the less they think about lunacy, ophthalmic surgery, and other specialities, the better for themselves, their patients, and their profession.

IRISH MEDICAL CHARITIES.

THE scandalous abuse of the Medical Charities of Ireland by or on behalf of persons who are in no way entitled to the benefits of their operation, is a matter concerning which every Poor-law Medical Officer in Ireland is able personally to testify. It is, however, seldom that a guardian thinks it worth while to enter any protest against the perpetration of repeated instances of injustice both to the ratepayers and the doctor, and we are gratified to see that Mr. Shee, of Clonmel, has not hesitated to expose the abuse of the Medical Charities of his Union in this way.

At the last meeting of the Board he called the attention of the Board to the indiscriminate manner in which visiting tickets were granted by members of dispensary committees within the union, and the hardship which such a mode of proceeding entailed on the doctors. He alluded to instances which came under his notice where parties well able to walk about and to travel to the dispensary obtained tickets from members of the dispensary committees to have doctors to visit them. On one occasion a doctor was brought a distance of nine miles to see a woman whom he had attended six weeks previously at her confinement: on arriving at the place he found his patient digging potatoes, and on questioning her concerning the necessity she had for having him visit her, she told him she wanted him to come out to get her child registered. He did not want to have the doctors too carefully shielded from performing their duties, but he thought that members of dispensary committees ought to exercise discrimination in granting visiting tickets, as there were very many instances occurring where doctors were sent a journey of perhaps eighteen miles on errands just as frivolous as the one to which he alluded.

The members present all concurred with Mr. Shee in the justness of his remarks, and it was decided upon to have the opinion of the board on the subject in question represented to the different dispensary committees.

Few medical officers, we regret to say, can calculate on protection from their guardians, and any system which gives scope for such abuses, and makes it necessary for guardians to interfere, obviously requires reform. Under existing arrangements the medical man is practically defenceless. He may have certain reasons to know that the patient is well able to pay, or well enough to be brought to the dispensary, and yet he must obey the red ticket, and continue to attend until the termination of the case. The regulations confer upon him the valuable privilege of applying to have the ticket cancelled by his committee at its next meeting. Probably no meeting takes place for a couple of months, before the lapse of which the patient is either cured or dead. Probably the committee may be inclined to stand by their co-committee man who gave the ticket, and may refuse to cancel it. If they are so complaisant as to do so, the contumacious member may issue another ticket before the meeting has broken up, and the doctor *must* attend on it as if nothing had been done. One of hundreds of instances of this abuse has come to our knowledge within a few days. The clergyman of a suburban village issues a red ticket to which the medical officer immediately attends. On reaching the house he discovers his patient is the child of a well-to-do beerhouse keeper, whose wife informs him that she never had a dispensary doctor inside her door before—that she had not asked for medical charity at all, but merely accepted it at the solicitation of the clergyman. The medical officer hints to his clerical friend that a beerhouse proprietor who had always paid for medical advice was hardly a pauper within the meaning of the law, and suggests courteously a little discrimination as to the recipients of relief. The attendance on the child has hardly expired when another red ticket comes from the same clergyman for the wife of the same person. The medical officer attends and prescribes, but the same night, the patient being in pain, thinks it too far to send a messenger about one mile for the doctor, but calls in a nearer practitioner, whom she properly pays. The conclusion is obvious. The woman felt her unfitness for charitable relief—was ready to pay until Lord Bountiful interferes to make her his *protegé* at the expense of the doctor—and thinks so little of the expense, that she actually does pay another practitioner sooner than send a mile for gratis help.

MEDICINE AND PHILOSOPHY.

THE addition of a new section of Psychology to the annual gathering of the British Medical Association, has been adverted to by one of our contemporaries, as a sign that the study of mental science is about to be recognised as of importance in the medical art. It is, truly, high time that this idea were carried out, since in the very country where the illustrious physician Locke did so much to rescue the study of metaphysics from the dreams of dogmatists of all kinds, there has of late years, been quite a deplorable ignorance of ought connected with theories of the mind, among the rank and file, and even the captains of our medical faculty. It has been, indeed,

the fashion of late years all through England, especially, to decry the study of what is called philosophy, as leading to no useful result. The consequence of which has, of course, been, that for more than a century, perhaps, England has produced no philosopher worthy of the name ; and that his genius has entirely lain in the practical departments of life. Great engineers, and great surgeons, great practical men of all kinds she has produced in scores ; but to Scotland, perhaps, alone of the departments of the British Islands has been until quite recently, left the study of those parts of human knowledge which were disdained by Oxford, Cambridge, Dublin, or Durham.

Mr. Lowe, indeed, has made a very true observation only a few days ago at Elgin, that the Scotch people know the value of education, which he truly adds is more than the English people do. He merely, we opine, pointed to the fact that philosophy has been so neglected in the latter country, that there is at present no clear idea before the mind of the majority of its inhabitants, as to what the aim of human existence ought to be ; and this is true also for France. In that country, the dreams of Cousin and his predecessors, have left the majority of Frenchmen without any idea of what constitutes truth : or, for instance, what ought to be the morality of a state or an individual. It is such want of philosophy, that has, in all probability, sent the French rudderless into the midst of this terrible war. Signs of better times are indeed traceable in the recent works on philosophy in France and Germany, by Taine and Büchner : but these works are too recent to have been able to produce any sufficient effect on great nations still embued with the mere sceptical ideas of Kant or Cousin. Fortunately for this country and for its medical art, as well, our illustrious writers of recent days, have almost begun to reign triumphantly over the best intellects among the younger men of the professions of law, medicine, and even, we suspect, of divinity. No medical man, who desires to understand the physicians' art thoroughly, can now afford to be ignorant of the writings of Locke, Hartley, James Mill, John Mill, and Alexander Bain. And many medical men seem to prefer to any of these names that of Herbert Spencer, whose works, indeed, are especially interesting to the naturalist, on account of the painstaking way in which that author has traced the rudiments of mind through the whole scale of animated beings, beginning from the lowliest. Nor must we forget, in our enumerations or workers in this department of thought, Mr. Lewes, who has shown what an amount of goood work can be done by a student, who had, we believe, no professional training in physiology, when he sets himself seriously to the study of that science. We regretted to notice in a respected contemporary, a tendency (we imagine) to disparage the methods followed by the Mills, Grote and Bain in accounting for the way in which ideas arise in the mind. We admit that such observers as Dr. Maudsley and Dr. Laycock have many specific experiences of mental pathology which may sometimes give men valuable insight into the theory of mental states, but, on the whole, we have failed to derive from the perusal of the works of either of these authors anything like the clear ideas which are to be found in the writings of others.

A very able essay on physical ethics has recently been published by a fellow of Brasenose College, Oxford, of the name of Mr. Alfred Barratt, which bids fair to redeem Oxford from the stigma of having become merely an upper school for the teaching of classics and a little mathematics. Here, again, Mr. Barratt has taken the ideas of Locke, Hartley, and the Mills, as his guide, and has produced a most readable work showing, we think, conclusively that physiology must eventually be acknowledged to be the supreme arbiter in all questions of morals. How often must not all instructed persons have felt keenly that at present in medicine as in other arts, there is no common standard of appeal by which the disputes of Moralists may be decided ; no orderly arranged building where each particular induction of experience may be stored in its proper department, but that Morality is little more than a confused agglommeration of facts and maxims from which each may choose according to his whim, and find authority for the gratification of every passing impulse ?

Moral empirics have hitherto proceeded on the same method as some of ourselves in medicine, by arrogating to themselves cures which nature works, and by pronouncing incurable those diseases which they have failed to alleviate, and so both have deceived many. But, as we soon come to doubt the statements of the one class, why should we longer place implicit trust in those of the other ? Why do we refuse to admit a mathematical formula, unless we can see the reason for it, or, in other words, connect it with the fundamental axioms of the science—yet accept a moral maxim, simply because we have been taught it in our youth or seen it asserted in some dogmatic or fashionable treatise ?

" Physics beware of metaphysics," said Newton, and we in like manner might say " Physiology beware of dogmatic Morality." To the medical men of the future we feel convinced, it belongs to lay down the foundation of a system of utilitarian morality. They alone of all mankind are sufficiently acquainted with the details of the human organism to be able to understand all its wants and unexpressed longings ; but we must in the future determine no longer to consider all study of psychology as out of the domain of the physician. Never was there a greater blunder than this. In former days the clergy united the offices of moral teachers and that of physicians. It was an evil hour when these two departments were supposed to be able to be separated. True morality must be based on physiology, and hence we rejoice to think that medical men are beginning again to read the writings of Locke, Hartley, Hume, and Bain. Without doing so we predict that the science of hygiene for instance, will remain a most imperfect one, and that therapeutics and social science must be content to dwell in a period of perpetual infancy. There is no need that it should be so any longer.

Notes on Current Topics.

About the War and Wounded.

The *Times* has published interesting letters from E. Garrett, M.D., and Elizabeth Blackwell, M.D., respecting the sick and wounded. Miss Garrett who, as our readers will remember, took her M.D. at the University of Paris, urges the need of lady nurses and shows how much they can do. She has just returned from the Seat of War and speaks with authority. The American lady M.D., sets forth the great benefits conferred by women on the sick and wounded in her country's civil war, and urges that similar measures should be adopted on the Continent.

*
* *

A Special Correspondent of the *Pall Mall Gazette* related some cruelties of which the Germans were guilty. Four persons took upon themselves to contradict this statement in a letter garbling the correspondent's assertions and thereby drawing upon themselves a severe, but well deserved rebuke from the *Pall Mall*. The individuals were, however, scarcely of sufficient importance for the *Pall Mall* to take notice of them, but it is well that when one person contradicts another it should be understood that between gentlemen such conduct would be looked upon as unpardonable. What a ridiculous thing it is, after all, for any one to be such a partizan, as to be ready to deny what some one asserts he has himself wit-

nessed. Why should our countrymen thus commit themselves as though they were Germans?

***

A very important letter from Sir J. G. T. Sinclair, has been published, describing what he saw at Sedan and other places he has just visited. He is not at all satisfied with the management of the National Society, and we hope his strictures will be taken in good part, for he further offers some very useful suggestions. He speaks well of the Johanniter who have been severely criticised in other quarters. From all we gather it seems clear that there are many persons about who are really little, if any use, to the sick and wounded, but who succeed in travelling and other matters, at a cheaper rate than those who make no pretence. Sir J. G. T. Sinclair also found accumulations of stores and drugs where they were not needed, and dearth in other places. He does not approve of the ambulance being sent out as proposed under Prof. Longmore, for he thinks that there are plenty there which ought to be utilised, and he found that many of the English surgeons had had little or nothing to do since they had been there, as our foreign brethren kept all the best operations in their own hands.

***

The International Field Hospital we lately announced as about to be established under Dr. Thudichum and Mr. Simon, is now in working order, and we have no doubt that it will be a really model institution.

***

An ambulance is going out for 200 on full service scale, fitted up by the Medical Department of the Army, and it will be under the direction of Prof. Longmore than whom none is more fitted for such a duty. There will be 12 surgeons under him, and we hope they will make some valuable contributions to military surgery.

***

Pirigoff, the great Russian Surgeon, has gone to Basle to the International Society there. Virchow, Langenbeck, and others, too, are at work among the wounded, as are many other illustrious foreign surgeons.

***

An Italian ambulance is, we believe, in Paris, but at present, of course, we are not likely to hear much from the beleagured city, Only one or two of our usual French papers have lately come to hand.

***

The regions devastated by the war present the aspect of plague-stricken countries. Everywhere the sick and wounded abound. Sickness is on the increase, and will no doubt, soon exhibit its ascendancy ever the sword. Winter, too, is approaching, and there seems a probability of a winter campaign, which will greatly aggravate this sad state of affairs.

Pork-pies and Sausages.

The season has again returned for a revival in the trade and general consumption of pork-pies and sausages. We should be sorry to injure an important trade carried on in the preparation and sale of these commodities; but as we find our annotations so extensively quoted, we would fain offer a word of warning to the public, because of the unfair and disreputable advantages taken by a certain class of manufacturer. The pork-pies of Melton Mowbray have long enjoyed a well-deserved notoriety, and we believe all coming from that town may be safely consumed without any deleterious consequence resulting; but we have good grounds for stating that, as a rule, the most inferior descriptions of pork are used in making pies and sausages—pork, in truth, that could not be exposed for sale in shops without incurring the risk of seizure and fine. We understand the pig-killers of the north of Ireland are even on the *qui vive* for the entrails of animals wherewith to manufacture sausages, and that these are exported from Belfast to London in large quantities. In some of the provincial districts of England the pork butcher enjoys a similar means of increasing his trade, and they are not over-particular in purchasing a diseased animal to make sausages. It is a rather difficult subject to identify affected meat once minced in the sausage machine and flavoured with sage, but the after consequences not unfrequently reveal, by a train of disagreeable symptoms, with which we are only too familiar, the nature of the pork employed by the manufacturer. We advise our friends to exercise discrimination in the purchase of these luxuries if they wish to guard against parasitic diseases, or save themselves the suffering attendant upon diseased and unwholesome articles of food. Whilst there is one pork butcher to be depended upon, there are ninety-nine who cannot. We recommend, then, the pork to be purchased and the pies to be baked, and the sausages prepared in the house of the consumer, or under the superintendence of some reliable person.

Pseudo-Membranous or Fibrinous Bronchitis.

Under the above titles, Professor Lebert, of Breslau, has published, in the *Deutsches Archiv. für Klinische Medicin*, a very instructive monograph in relation to a form of disease of the bronchi and air-cells of the lung, which has as yet been but imperfectly recognized and studied.

Professor Lebert describes this disease as an acute fibrinous bronchitis, common in childhood and youth, but rare among the aged, and far more common among males than females.

The disease is characterized by severe paroxysmal cough, extreme dyspnœa, and about the fourth or sixth day there is abundant expectoration of fibrinous matter, mixed often with blood. The fibrinous casts and cylinders are best recognised on examination of the sputa under water.

The auscultatory sounds do not present anything specially distinct from those met with in ordinary chronic bronchitis, and the disease runs a course varying from one to three weeks or more.

In three out of twenty-seven cases death occurred from strangulation, but, as a general rule, the prognosis of the disease in its chronic form is favourable.

It should be kept in mind that the chronic form of fibrinous bronchitis may occur as a symptomatic affection during the course of some other complaint, as for instance, syphilis, tuberculosis, emphysema, and fatty disease of the heart.

When closely examined by themselves the true fibrinous casts are found not to contain any of the red blood corpuscles, but to be composed of white blood cells, pus corpuscles, with epithelium coagulated together in a fibrinous exudation.

Sometimes, after a patient has suffered long with this fibrinous bronchitis and great dyspnœa, there comes on an intense paroxysm of cough and copious expectoration, after which the fibrogenetic action ceases and general convalescence sets in.

A real Boulevard.

Cheapside is now luxuriating in a little quiet. A new asphalte paving is being laid down, and even if it is not so durable as blocks of granite, we hope to see the system extend and so to secure some comfort in being relieved from the effects of the jolting when we venture to drive, and the noise when we walk, in our metropolitan thoroughfares. What a treat it is to stroll along the Thames Embankment out of the range of the everlasting dirt that renders London streets the nuisance of even strong nerved people. What must be the sufferings of those who have irritable nerves and are compelled to live in modern Babylon none can tell. How many diseases may be traced to this as one of the evils of town life few can guess. Our brethren should investigate this point lately brought vividly before the present writer.

A Nest for the Thrush.

We believe there are certain localities in London where thrush is always epidemic, and that it is the rule, instead of the exception, for all children at one time or another to be affected by it in some form. In provincial districts the same rule holds good, for it has been observed in those streets wherein sanitary arrangements are defective and cleanliness not attended to, that the children invariably suffer, in most instances, to an aggravated extent, and in no few cases die from thrush. It is greatly to be deplored the apathy of most Boards of Health, for, if sewage and sanitary arrangements were rendered effective, where they are defective, the common occurrence of thrush might be then more directly brought home to the parent. A correspondent writing to us on the "Nest for Thrush" speaks of a street in a provincial town wherein every young child contracts, and is expected to get, thrush. Surely, this is a terrible state of things, for we hold a child should no more have thrush than variola.

Water-tanks and Cisterns.

After the summer drought when the tanks and cisterns become low in their water-mark, we recommend them to be examined, and if need be repaired, but in every instance well and carefully cleansed before being allowed to fill up again with water. This is just the season that mischief is done, and disease induced and propagated by the use of bad water, because the sediment, if not washed out, becomes mingled with every fresh influx of water. A few years ago we knew a very general and most virulent and fatal epidemic of diphtheria, produced at a Coastguard station by the neglect of this essential duty. It was only when the water-tank was drained, thoroughly cleansed, and its interior whitewashed, that the disease began to abate, and that its virulence was checked. This month we had practical experience of a sharp attack of typhoid fever invading several members of a family who used the water from a cistern which was *dry* in the summer, and into which the recently fallen rain was allowed to accumulate for use without its being previously examined, but when this was done, the amount of filth and mud was truly alarming, for no water coming in contact with it could possibly be pure or free from those gases which are the original causes of blood diseases. We read of leaden cisterns which the dry weather of last summer robbed of their water for some weeks, and that after they received a supply and it was used for domestic purposes that most disagreeable symptoms evinced themselves, in fact, that all who consumed water from the cistern suffered from the incipient train of phenomena which usher in lead poisoning. It behoves us, since we presume to cater for the public health, to advise that all tanks and cisterns should be most carefully examined and thoroughly cleansed before the approach of winter. The chief cost will be the deprivation of water for a few days, a trivial circumstance compared to the deleterious consequences that may ensue from filthy and neglected receptacles for the water we drink.

Glitter.

We notice with a sense of the ridiculous the movements of those of our brethren who have taken advantage of the war on the Continent and the present holiday season of making themselves conspicuous by showing themselves at the Seat of War, and writing home communications to the papers with name and qualifications attached in full thereto, with a most microscopic eye for detail, and not alone satisfied with this, they must needs take every opportunity, when safe again on English soil, of questioning the authority and criticising the communications of those engaged doing *real* work who may write home. We don't wish to be unnecessarily severe, but we cannot refrain telling some of our brethren that the most brilliant anemone possesses no perfume, and that the wandering bee who flits about in the moonlight, intoxicates itself on the blossom of the trebizond. A word to the wise is sufficient we hope in abolishing this vulgar glitter.

Cyder Poisoning.

It will be in the recollection of our readers that several well marked cases of lead poisoning traceable to the drinking of cyder occurred last year. It may not prove *mal apropos* if, at the present season, we remind those who manufacture their own cyder of the great care and absolute necessity of guarding against putting the cyder in leaden receptacles, for a most common sense reason. The acid character of the cyder is sure to act upon the lead, and produce accordingly its deleterious influence upon the system of those who may consume it, in proportion to the length of time in which the cyder was in contact with the lead.

One remarkable case occurred last year when a man, who made a large quantity of cyder more than he had vessels to receive it, placed it in a leaden cistern for a time, but all who partook of that from the cistern were seized with unequivocal symptoms of lead poisoning, so that it was condemned for the use of pigs, and even these too, became affected in a marked degree.

Several persons were convicted and fined in London on Saturday last, for refusing to comply with the provisions of the Vaccination Act—the magistrate intimating that in all cases brought before him he will inflict such penalties as the negligence of so useful a provision warrants.

The Late Dr. Augustus Waller.

We regret to announce the death at Geneva, on the 18th September, of Dr. Augustus Waller, F.R.S. Dr. Waller held a high place among those physiologists who have enriched their science by original research. He made many contributions to the physiology of the nervous system, and introduced a new method of investigation applicable to various objects of inquiry, which has tended to advance our knowledge. He twice received the Monthyon Prize of the French Academy of Sciences—first in 1852 for a research, in which he was assisted by Prof. Badge, of Bonn, and again in 1856 for his experiments, showing an important relation between the nutrition of nerve fibres and their connection with nervous centres. He died quite suddenly in a fit of angina pectoris, to which complaint he had been for some time subject. He had recently resided at Geneva. We believe he was one who, in spite of their boast of fairness in elections, the authorities of University College unaccountably passed over.

The Accomplices of Baby-Murder.

One of the baby-torturers is to be hanged, and the other sent to prison for eighteen months. Well and good! but what about the persons who by nod and wink incited them to the murder of the poor babes? When the daily papers have exhausted their virtuous horror against these murderesses, perhaps they will bring forth from beneath the cloak, which has been thrown over them, the infamous women and their paramours, who have consigned, we fear knowingly, their babes to such a fate. Let us be spared the mock indignation which assails the condemned and defenceless agent, while it keeps snugly concealed from observation the fashionable inciter, to the crime for which their servant is about to suffer.

The police must know in many instances who and what are these persons. Let them, at least, have the condemnation of publicity.

Daniel Come to Judgment.

The inevitable working man has effected a lodgment in a body in which our profession is more especially concerned, and in the person of a Mr. Applegarth is selected to deliver judgment on syphilis prevention.

The principle that a "working man" is to be entrusted with medico-scientific investigations because he is a working man, and not a lord or a gentleman, or a professional man, is rather peculiar in its logical bearings.

As the English nation, in the person of Mr. George Odger, has gone to make peace, we are bound to presume that diplomacy is intuitive, and is as much part of a "working man's" economy, as large feet or prominent ears, but we object to science being constituted one of the innate qualifications of the "working man."

We have experience that a lord or an M.P. may, as a committeeman, be a blockhead, but until he shows himself to be so, the *primâ facie* evidence is all on the side of his educational competency. In estimating the committee value of the "working man," the evidence is all the other way, and it appears to be a peculiar policy to ask a man to give an opinion on science, because we know that his pursuits have made it impossible for him to know anything about the subject.

If the Government really meant to find out the truth about syphilis prevention, they would put men of education and observant habits to search for it, and not spouting blacksmiths or political mosquitos.

It has been pointed out to us that in our number for September 7th, we compared the cost of the Dublin and Queen's University qualifications, giving the cost of the former as £99 4s., of the latter as £5.

Our correspondent says :—

"This is a mistake, the cost of the Dublin degree is £5 for the liceat ad exam, and £11 for the degree itself. The £99 4s. is probably the aggregate of fees during the curriculum, and in the Queen's University these would amount to a sum not much short of that mentioned for Dublin."

We quoted the figures from the Parliamentary return.

Pharmaceutical Frauds.

A striking display of the audacity which impunity engenders was made last week by a Mr. Rimmington in the presence of the Pharmaceutical Conference. We have more than once pointed out that the product sold in commerce as citrate of magnesia is an impudent fraud on the consumer—contains universally no citric acid or magnesia whatever, and is not in the slightest degree aperient in its action. Mr. Rimmington not only openly admits the regular practice of this piece of roguery, but lectures the Conference on the proper admixture of tartaric acid, lead, soda, and sugar to make citrate of magnesia. If his remarks had been allowed to pass without repudiation he would have indirectly pledged the Conference to countenance the fraud; but we are pleased to observe he miscalculated the effect of usage on his audience, for many persons very properly protested against the use of what they euphuistically called a "misnomer," and Mr. Summer stated unequivocally that this was not the only misnomer which the Conference ought to denounce.

A resolution expressive of this opinion was proposed, but was received with disfavour by Mr. Greenish, Professor Attfield, and others high in pharmacy, on the ground that "there was no necessity for alteration of name so long as the preparation was only commercial, and never prescribed—if difficulties were thrown in the way of its sale by chemists, grocers would take it off their hands." Should we not have seidlitz powders and soda water brought under similar condemnation? At last the resolution was emasculated and passed.

We are surprised and ashamed at the adoption of such special pleading in defence of an obvious swindle by officials of the Pharmaceutical Society. Without doubt, the consumer, who is not behind the scenes of pharmaceutical "misnomers," is given a cheaper and worse article than that which he buys, and such a practice is a fraud, and all the worse because its perpetration is very frequent. As the lax morality of a money-making Government countenances such white lying, the responsibility of repudiating it is thrown on the Pharmaceutical Society, and we hope it will honestly fulfil the duty.

A Globule-Medical Coalition.

The daily papers inform us that a Congress of Homœopathic Practitioners met last week at Birmingham, in flattering imitation of the British Medical Association. There was, of course, an Address in Medicine, and we

learn that a considerable portion of that effusion was devoted to an endeavour to level the boundary between homœopathy and legitimate medicine. It was elaborately explained, we are told, that the homœopathic law of treatment was only followed where it was applicable, and that other remedies were prescribed when homœopathic remedies were not ascertained to be best. Such an admission issuing from the mouth of the President of the Congress is very significant, for it amounts to nothing less than an abandonment of the principle in which homœopathy has been, hitherto, supposed to consist.

But, on the part of the Profession, we must respectfully decline the fraternisation of homœopathy. If Hannemahn be god let him be god. If billionethy of a grain of medicine be sufficient for the treatment of disease, drachms and ounces must be poisonous, and their administrators criminals. The theories of homœopathy and scientific medicine are wholly inconsistent and incompatible, and he who believes in one cannot have confidence in the other, so we object, *a haute voix*, against a system of practice which provides sips of water and snuffs of flour for hippish old ladies and raking purges and mercurials for people who are really sick.

Is Pharmacy a Science or a Handicraft?

The *Lancet* has published in a recent issue a remarkable editorial essay in condemnation of the "monstrously excessive" charges made for the dispensing of medicines by pharmacists. Without staying to inquire into the reasons which may have led our contemporary to the adoption of this startling line of policy we feel it necessary to combat very strongly the cheapening policy which it advocates. We are not going to maintain high fees, on the ground of the advantage which should accrue to the Profession by "keeping up the price." That principle has suffered enough by the patronage extended by the present Government to trades unions, and it is unnecessary for us to discredit it further by attempting to control in favour of the Profession the simple principle of "buying in the cheapest market and selling in the dearest." The question cannot and ought not to be dealt with by trades-union compulsion, nevertheless it is not, in our opinion, the place of the *Lancet* to inaugurate a cheapening movement, which cannot fail, sooner or later, to reflect from chemists to doctors and surgeons.

The question is *not* what the just cost of the medicines may be as compared to their selling price, for they are only the objects on which the pharmacist exercises the skill for which he is paid, and, therefore, the cost has not very much more to say to the dispenser's fee than the wear and tear of instruments has to the remuneration of the surgeon who uses them, We altogether repudiate the idea that the duties of a pharmacist are, as the *Lancet* says,—"A mechanical thing to be done by a pupil in his second year." If such a statement be correct, what is the meaning of the Pharmacy Act, and the legal requirements for education and examination of pharmaceutical students? It is unfortunately true that the supplying of medicines by medical men has made pharmacy in some respect "a mechanical thing," not, if the system were what it should be, if the selection, analysis, preservation, and composition of medicines were confided solely to pharmacists, there would be an important position for them to occupy as guarantors to the public.

As it is, the general practitioner does not know what the medicine he compounds may be, and the patient has no safety of the purity or efficiency of the physic he takes, simply because the dispensing is done by a person who has neither the time, inclination, or special knowledge to trouble himself with pharmacy.

Believing as we do that there is no natural identity between medicine and pharmacy, and that either science is enough for the study of any one man, we object to the policy of the *Lancet* (of which its last dictum is an expansion) of making medical men into pharmacists, and pharmacists into mere vendors of perfumery and tooth brushes.

The Late Professor Miller, F.R.S.

Our readers will observe that the Introductory Lecture at King's College, delivered on Monday afternoon, and of which we furnish an abstract in another column, opened with the melancholy announcement of the death of this most distinguished professor.

Plague of Flies.

Last week we published an annotation on a swarm of Aphides. This week we find by the following, clipped from a local paper, that the evil still exists :—

"The neighbourhood of Newark was visited on Sunday last with one of the ten plagues of Egypt on a small scale. Throughout the whole of the day the atmosphere was densely crowded with millions of small flies, which almost negatived the idea of taking a stroll out. The town and neighbourhood of Nottingham have suffered from a similar visitation for more than a week."

We believe these insects have had their origin in the turnip fields and cabbage gardens. We learn that the air was literally black with them, and that it was an utter impossibility to walk abroad without swallowing a quantity, producing considerable irritation in the fauces.

Foot and mouth diseases appear to be on the increase still.

The epidemic of fever at Liverpool seems still to increase.

We understand that Mr. Henry Lee, of St. George's Hospital, has resigned the consulting surgeoncy to the Lock Hospital.

Reports from Zanzibar state that cholera had entirely disappeared from that place, but was very prevalent at Mozambique.

Nature states that the *Quarterly Journal of Science* has passed into the hands of Mr. W. Crookes, F.R.S., who will from the present time be sole proprietor and editor.

As a result of the recent grand festival at Birmingham, the funds of the General Hospital are expecting an augmentation of nearly £6,000. This is as it should be.

The next examination for the Society of Apothecaries' Annual Distribution of Prizes in Materia Medica and Pharmaceutical Chemistry will be held on the 19th and 20th of October.

By advices from India, we learn that the new barracks on the double storied system have been productive of great sickness amongst the regiment quartered in them. The buildings are damp and leaky in the extreme.

At the weekly meeting of the West Derby Guardians held on Wednesday, Mr. Bird called attention to an entry in the governor's journal, which stated that he (the governor) hearing a noise in the surgery on Friday night last went there, and found the porter struggling with the dispenser, who was very violent. The matter was brought under the notice of Dr. Reed, the surgeon, who subsequently reported that the dispenser had been partaking freely of the spirits of wine, and was consequently in a "complete state of madness."

SCOTLAND.

Glasgow.—At a meeting of the Faculty of Physicians and Surgeons, held on Monday the 27th, a portrait of Dr. A. Dunlop Anderson, a late much respected President, was presented, and is to be placed in the Hall of the Faculty.

St. Andrews.—At a recent meeting of the town council of this city there was inserted in the minutes the expression of regret for the great loss which the council and city had sustained by the death of Dr. Adamson.

Aberdeen.—Dr. Dyce Davidson has been elected Ophthalmic Surgeon to the Royal Infirmary in room of Dr. Ogston.

Literature.

TREATMENT OF HEPATITIS AND ABSCESS OF THE LIVER WITH CHLORIDE OF AMMONIA.*

This paper of Dr. Stewart is an enlargement of a contribution to the *Lancet* published some months since. He recommends in hepatic attacks "when the acute symptoms have been allayed and suppuration is either threatened or already established, or in the event of the patient having come under observation in the primary acute stage as soon as the symptoms local and general, shall have been abated and diaphoresis fully established that chloride of ammonia should be administered in doses of gr. xx morning and evening." Dr. Stewart ascribes to this remedy powerful diaphoretic and diuretic effects which he considers are seldom noticed, unless when it is administered for hepatic disease. He details several cases where success has followed its exhibition, first an example of well marked acute hepatitis, then three cases of hepatic abscess, and finally, a case observed by Staff Assistant-Surgeon Alexander, of its beneficial use in chronic hepatitis.

Chloride of ammonia is a substance that appears to have gradually fallen out of use in therapeutics, it still bears some reputation on the Continent, and is prescribed occasionally by a few practitioners in our own countries, in cases where others employ iodide of potassium as an alterative, and in chronic diseases, bronchitis, &c., and for dispersing tumours. The present day demands exact observation and rather strict scrutiny before admitting the claims of some old fashioned remedies to be received in the list of active therapeutic agents, but it appears worth while to examine somewhat the grounds on which so many practitioners have, from time to time, considered chloride of ammonia deserving the rank of an energetic and valuable remedy. Should experience sustain Dr. Stewart's expectations of its usefulness in the treatment of hepatic diseases, its restoration to the list of our reliable remedies will be an advantage of considerable importance.

* Treatment of Hepatitis and Abscess of the Liver with Chloride of Ammonia. By Wm. Stewart, M.D., Surgeon 2nd. Bat. 21st Royal N.B. Fusiliers. Rangoon, 1870.

UPON THE THERAPEUTICAL VALUE OF THE SULPHITES IN PHLEGMONOUS ANGINA.*

Dr. Tyrrell, a former pupil and graduate in our Dublin School of Medicine, contributes to the *Pacific Medical and Surgical Journal* for August 1870, an interesting paper on the above practical subject. He states "on reading Dr. Pollis's discovery of the use of the sulphites, published by Dr. de Ricci in the *Dublin Quarterly Journal*, November 1863, I determined to test the matter for myself. Unfortunately at that time no bisulphites were to be had upon the Pacific coast, and it was not until the Spring of 1866 that I was able to procure a pound of the bisulphite of soda. My notebook then informs me that I tried this salt in several cases of scarlet-fever, giving ten to fifteen grains every three or four hours without any well marked advantage over my former treatment by quinine and iron. Again, I find a case of pyæmia in which I gave my patient twenty grains every four hours without mitigating the disease in any respect, this result I rather anticipated as the case was not seen until several of the joints contained pus. I find myself next employing the sulphites in the treatment of some cases of typhoid fever. Still, I was not aware of any striking result that followed, except that they had the power of diminishing the extreme fœtor of the alvine evacuations."

In 1868 an epidemic of a species of influenza prevailed, accompanied by a remarkable frequency of anginose affections, especially acute tonsillitis, terminating in abscess; this induced Dr. Tyrrell to resume the use of the sulphites, pushing them to saturation as we do other alkalies in the treatment of rheumatic fever. It happened that the doctor became his own first patient for this experiment; he took thirty grains of bisulphite of soda in solution every hour, commencing at noon, and by eight next morning almost all trace of the disease had vanished. Some additional cases illustrating the rapid improvement induced by this line of practice are detailed, and in all Dr. Tyrrell mentions about twenty-two cases, of which only a single attack terminated in abscess, and in this the remedy certainly did not receive a fair trial; of the others "not one exceeded forty-eight hours in duration after the commencement of the treatment by the sulphites."

The experimental trials of the same remedy in diphtheria are less satisfactory, two children recovered and one died, and Dr. Tyrrell who is a good practical physician and reliable observer, admits himself that this is too small a number to base any opinion upon as to the value of the sulphites in this disease, though it appeared to possess a power of speedily removing false membrane in the particular attacks recorded.

The results which Dr. Tyrrell has obtained by his method of giving bisulphite of soda in free repeated doses will, we hope, lead to further research on its alleged properties. Unlike some sensational articles of medical intelligence occasionally met with, the paper now noticed is the work of a practical physician, well known to his former teachers in this city as a most industrious and intelligent pupil.

The late Mr. John Abbott, of Halifax, has, by his will, bequeathed the large sum of £60,000 for various public or charitable objects, including the following sums to medical charities:—£2,000 to the Halifax Infirmary; £1,000 to the Bradford Eye Institution; £1,000 to the Bradford Infirmary; £2,000 to the Leeds Infirmary; £1,000 to the Cancer Hospital, Leeds; and £2,000 to the Manchester Infirmary. Mr. Peter Tharel has bequeathed £500 to St. Vincent's Hospital, Dublin.

* Upon the Therapeutical Value of the Sulphites in Phlegmonous Angina. A Paper read before the Sacramento Society for Medical Improvement. By Gerard Geo. Tyrrell, L.R.C.S.I. and K. and Q.C.P.I.

Correspondence.

A HOLIDAY VISIT TO THE NORTH OF IRELAND.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Making my annual holiday this autumn I took occasion to visit some of the northern county infirmaries, institutions for which I entertain a high respect, and in which much good surgery has been practised, although not as well known as is desirable. The first I visited was that of co. Down. Placed on an elevated position outside the town of Downpatrick, within a handsomely planted enclosure, the approach excited my expectations to a high pitch, but I was sadly disappointed. The ill-ventilated wards were made more offensive by the close proximity of ill kept bad water-closets, while the bedding and furniture was mean in the extreme. It is astonishing to me that, at a period like the present, when the attention of the ladies of the country is so much drawn to the care of the sick and afflicted, that the ladies of the co. Down do not unite to make the co. Infirmary what it should be, a credit to the county, and to see that the injured tradesman, the reduced farmer or shopkeeper, and the respectable, but afflicted domestic servant, should have a refuge where they might expect the greatest amount of comfort and cleanliness with the highest class of professional attendance. I have not the pleasure of the acquaintance of the surgeon of the co. Down Infirmary, but I saw in the hospital one case which alone stamps him as a surgeon of the highest professional capacity, who would not be out of place in a metropolitan institution. What an advantage to have such a man resident in the locality, and what a pity that he should not have under his care an hospital of the most perfect construction and kept in the most approved style.

I then visited the Londonderry Infirmary, and was most courteously received by the house-surgeon. This is a fairly kept hospital, and though old-fashioned in construction, is capable of being brought to much greater perfection than exists at present. It struck me, however, that the presence of the ladies would add greatly to the comfort of the patients, for, to my eye, the nursing is not of the quality I would desire. Here, too, the medical attendance seems to be of a high standard. Passing on I reached Strabane, and thence walked over to see the Lifford or co. Donegal Infirmary. Not meeting any of the medical men I refrained from examining any of the cases, but the nurse pointed out to me nine which had been operated on with great success, but the hospital is a disgrace to the great county. It is the most ramshackle institution I ever put my foot in, and ought to be replaced by a modern structure. Efforts are being made to have the institution of the county removed from Lifford, which would, in my mind, be a great mistake. There is no other town better placed, for, though not central, the position is such that equal radii drawn from it would spread fan-like to all parts of the county bounds, and it is more easy of access from all parts than any other town within this. Here, again, I appeal to the ladies of the county, and will it be in vain? Large fortunes are drawn from the county, and surely, a little attention to the wants of the distressed would be a gracious return. I next visited the Omagh Infirmary, co. Tyrone. The hospital is not well constructed, and is in the centre of the town, forming part of the street. It is kept in a state of admirable cleanliness, and the furniture is neat and respectable. Few hospitals have turned out more creditable cases of surgery than this, particularly under the present able surgeon, and I take it that it is to his energy that the very admirable state in which I found it is due; yet a new hospital is wanted on a better site, and I would have much preferred seeing a larger assemblage in the town, for the purpose of opening such an institution than assembled the day previous to my visit for opening a Protestant Hall. I am not one to deny the value of the latter institution at a proper time and place, but I much prefer those institutions where suffering is relieved, and the bonds of kindliness formed between men of all creeds and parties. Having to hasten home I visited but one more hospital, *my Alma Mater*, where I passed so many happy days of my youth, the Queen's Co. Infirmary, and proud I felt to stand within its walls again, and to find it kept in the same prominent position, which it has maintained for the last half century, a model of comfort and cleanliness, a source of pride to the county, and I blessed the memory of the worthy man* who gave his time, his care, and his money to its erection, to the worthy men and women who, as governors, governesses, have looked after its state, and to the surgeons past and present who have so well maintained its reputation. *Semper Floreats.*

Your obedient servant,

Portlaw. JAMES MARTIN.

ACUTE RHEUMATISM AND GOUT.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In treating acute rheumatism, Dr. Sibson, like Lord John Russell, says "Rest and be thankful" to every joint of the patient.

I don't believe it, and would say in reply, as I have said five thousand times before, that in rheumatism, acute, subacute, or chronic, that rest begets rust, and the joints become stiffened, ankylosed, and probably crippled for life, leaving, perhaps, in after years, merely a bag of bones in deformity, not bare, only shining through a very thin skin, which, if entombed, would relieve the sufferer, but hardly bring the science of medicine up to what I regard to be the proper standard. In treating acute rheumatic fever, in which a single joint, perhaps, at first only aches and is slightly swollen, and is attributed to an ankle sprain,—as in such a case that presented itself to me to-day when I was first called in,—do just as I do. Feel the skin and smell the sweat. Use the litmus to the secretion, and ascertain the preponderance of either lactic or lithic acid, or it may be sebasic acid, by testing skin and kidney. Sp. g. may be left alone, *pro. tem.*, strip the patient from head to foot, place him in bed, and administer a warm water emetic, glass after glass, pint after pint, till the stomach, which will hold at least two quarts, is "quite tight full," as a learned professor of my acquaintance terms it. When a boy, I was told, "what goes up must come down;" when a man, I learnt that, what went down must come up, if given as an emetic, and this I generally see done before my eyes by means of plenty of warm water with a grain or two or more of *very common salt.*

Fill the stomach with simple warm water, tickle the throat, and emesis is almost sure to ensue. If not, add a few grains of *common salt* again, and oh! oh! soon fills the basin with a flood of fluid of various sorts. This simple operation clears and cleanses the stomach, whilst at the same moment it opens the ductus communis choledicus, which lets out the bile, unloads the liver, stimulates the duodenum, and gets the bowels to act of their own accord through their natural purgative, the bile.

This emetic failing, a few grains of ipecac. or zinc will assist.

A brisk purgative follows in the shape of compound jalap and calomel, which soon does its work at the lower part, and the ejecta tells you the course is clear. On receipt of this information from various quarters, the patient is stripped, put into a hot wet blanket or Brady's vapour bath, kept in bed, subjected to the following medication:—

℞. Potassæ bicarb., ℈ij.;
Pot. nit., ʒij.;
Vini. colchici, ʒiij.;
Aq. fout., ʒviij.;
M. fr. mist. cujus capiat, ʒj.;
4tis. horis ex. decoct.

Mordei cyatho.

This goes on till he finishes the bottle, and repeats the blanket sweating every four or six hours during the allotted time. The nitrate is diminished, the bicarbonate is increased, and the colchicum is gradually withdrawn as the motions approach in colour real good pea-soup.

The soup tells me the liver is acting, and that I have the whip and upper hand of my enemy, articular rheumatic fever, and that I need not fear either endocardial or pericardial murmur or whistle; but that on the tenth day, my patient, young or old, provided he is free from serious organic disease, will sit up in his clothes, and enjoy his mutton chop and his bottle of Dublin stout.

Rest and thankfulness means from twenty-three to thirty-three days of bed-riding in acute rheumatism. When I was

* The late Thomas Parnell.

in the Newcastle Infirmary twenty years ago, the average duration was twenty-three days. In the Newcastle Dispensary, when lemon-juice was in vogue, Dr. Humble and the late Dr. Pearce could prove that twenty-one days saw the man, woman, or child about, not on crutches or sticks, but practically and peripatetically cured.

These are naked facts which speak for themselves.

Professor Bennett properly insists on having one hundred and one facts to establish the existence of a single fact in any science ; and with his view I am sure our entire profession accord as regards medicine and surgery.

In times of war we cannot lag,
Yet this, our calling, must not fag.
I am, Sir, yours truly,
JOHN A. BOLTON, M.D.

Leicester, Sept. 6, 1870.

MR. MORGAN ON THE UNITY OF THE SYPHILITIC VIRUS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I have been intensely interested in Mr. Morgan's experiments, which, indeed, only confirm what our friend, Dr. Bœck, showed us in London when he was here, in his inoculations at the Lock Hospital from matter from hard sores, from Christiania "On Syphilitic Women." I trust Mr. Morgan will pursue these most valuable researches. It is, however, remarkable that it is by no means difficult, in the immense majority of cases of syphilitic ulcers in males, to say when they are infecting and when not. I am quite ready to suppose that the vaginal secretion which produced a soft sore on the syphilitic women would have produced a hard sore on most healthy persons.

CHARLES R. DRYSDALE, M.D.

99 Southampton row, W.C., London.

THE FORBIDDEN TOPIC.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Whilst I agree with you in suppressing a religious controversy in your Journal, which, albeit the only thoroughly independent one I know, is nevertheless a medical publication, will you permit me for the satisfaction of all concerned in the late correspondence, and for Dr. Drysdale's instruction, to send you the following extract from a communication published in separate form by one of your gifted correspondents, "Prudentia." The quotation has no direct reference to religion, or the ministers of religion, but it indisputably proves the accuracy of the statements made by Dr. Waring-Curran in the last impression of your valuable periodical.

"An interesting and important, though difficult and rarely discussed point in physiology, is the relation of the generative apparatus to the moral character, and the degree in which the former is subservient to and regulated by the latter. I think it would be found that it is so to a very great extent—greater perhaps than is usually recognised ; and it is desirable that practical men should pause a while upon a question of this sort, and not hastily commit themselves to opinions which may have much influence upon the well-being and happiness of society. There are no organs so much under the control as those of generation. Their functions are neither directly nor indirectly in the least essential to life, scarcely even to the well-being of the body. Indeed, which is more remarkable and unusual, they are scarcely essential to the maintenance of the structure of the organs themselves in perfect integrity. The functions of the testicle, like those of the mammary gland and the uterus in the female, may be suspended for a long period, possibly for life, and yet its structure may be sound and capable of being roused into activity. In this respect its qualities peculiarly adapt it for subserviency to man's moral nature. Not that it always yields a tame and willing submission : by no means. That stern struggle between the moral and the physical is one of man's greatest trials, and it is some satisfaction to know that if the victory be with the moral, it is not necessarily at the expense of the physical, but a positive good to both is achieved !"

Did the above bear upon religion more than science I should not trouble you or ask to break your rule. Let me express a hope that Drs. Drysdale and Curran may be induced to shake hands over this misunderstanding, and that both may agree to attack and exhaust the subject of *New Questions* opened unto them in your excellent journal, for the object is one and the same—advancement.

Your humble servant,
"CANTHARIDES."

P.S.—Being a French fly, with orange, purple, and green blended together in my wings, and loving priest and parson alike—because I hold it a great cruelty that men should suffer insult or wrong, because by a freak of nature, or through the accident of circumstances, they should happen to be born within the pale of a certain church, or that their infant lips should be tutored to lisp a certain form of prayer in preference to another form—I have a right to address you, lest the Anglo-Saxon should repudiate the friendship of his brother, the Irish, or *vice versâ*, neither of which may ever be.

September 22nd, 1870.

NEW QUESTIONS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I heartily concur in the remarks in your issue for September 21st, in the conclusion of the paragraph (New Questions)—That the fearful condition to which the youth of both sexes reduce themselves, by the schoolboys and girls' filthy habit of masturbation. The disgust which is naturally felt by all considerate persons should certainly not prevent medical men from treating a disordered functional condition so entirely destructive of a "sound mind in a sound healthy body." From some cases which have lately come under my observation, but neglected or overlooked by the doctor treating the patient as consumptive, while the seminal effusion continued, though the actual bad habit may have been discontinued. This should have called for more decided efforts to check the flux. In the case I particularly refer to at present, the medical attendant who had cruized with him the previous year, was again called in during the close of his life at an early age. A few years after his majority he confessed at last, that he was aware of the sexual state of matters, but did not think it of sufficient importance to require treatment, and thus a fine youth of twenty-four was allowed to die from inattention. I do not mean that this was the sole cause of death, but it was so destructive to the healthy condition of the system as to hasten the rapidity of the decline.

I fully concur in your hope, "That a day is coming when nothing in medical art shall be considered *common or unclean*."—Yours, &c.,

F.R.C.P.E.

INTRODUCTORY LECTURES.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Most of the introductory lectures will be delivered in the London Schools before the following remarks reach your readers. As I write they, too, are being prepared, not in many instances with the direct object of teaching the future student of medicine more than which hospital and school will produce —the most *récherché* and the greatest lion of an address. But, as upon the commencement of every other session, we shall have the modern Platonist, who quotes Galen, Æsculapius, and Celsus, morals over the theories of Galileo, and is astonished why the discoveries of Harvey and Jenner were not made years before, because of their simplicity. I expect to see a report of the religiously-perfect lecture, with quotations from St. Luke ; extracts from Priestly and Cordorét, with kindly advice to the "Ambitious student in ill-health." Then there will be Dr. Morphia Velvet's observations about the rights of women, and the impracticability and absurdity of admitting Dr. Elizabeth Garratt and Mary Walker into the arena of medicine. He will philosophise over his own successes and ingenious undertakings, while he forgets to inform his audience about the silver spoon, which was born with him, and the *Marinade à la St. Florentin*, upon which his professional distinctions were sustained. Then we get the learned effusion respecting aëriforms, solidiforms, and fluidiforms, and hæmatite and manganese, antimony and gypsum, which, to the verdant pupil, is as valuable and as instructive information as the tragedies of Æschylus, the orations of Isceus, and the speeches of Syrias, delivered in the mother tongue would prove. I had

the satisfaction a few sessions ago of reading—I had not the misfortune of being compelled to listen to—the recital of a very learned introductory discourse, which bore entirely upon botanical subjects, and all pertaining thereto. But "the cypresses of Itchiatuckanee" must have been poor "value" for him who came for the first time into a lecture-theatre, expecting to be instructed in the course he should pursue as a student in learning the details of his Profession with the greatest facility and expedition. I object to those lecturers who assume the authority, and imitate the tone of the parson respecting sage advice. I do not advocate young men being tutored either in religious subjects, on the one hand, by the lecturer, nor, on the other, by the porter where the best beer and tobacco may be procured, as inclination prompts the student to bring to bear his earlier training whether to practise levity or go in for sound sense. He is influenced neither by porter nor lecturer. In the pew of his father's church, words more emphatic and *àpropos* have wafted themselves down to his ears from the pulpit of the preacher. He takes his seat among the throng of youthful, earnest faces for the first time, and expects to be told in simple language what he shall actually do; what subjects he may safely take up and work at; and what he may postpone until further advanced. He wants the mirror to be held up before him, and in clear and distinct language to have reflected and mapped out upon it the path to be followed, and with precision the flowers to be culled; instead of the elevated, sensational, diffusive, and interjectional profundity of aspirants, who aim more at unintelligible flummery, with a spicing of delightful philosophy and metaphysical erudition, than the real lesson which should be simply and emphatically taught—not preached. I am only timid of those long written manuscripts, which hint at everything but assert nothing. I desire to see some representative of one of the schools fearlessly coming forward, who has investigated the subject thoroughly, and who will, *extempore*, teach first principles and rules for early guidance to the men. No reading, no profundity, no metaphysics, say I, at introductory lectures. I stigmatise as vulgar cant ready-made discourses, copies of which are in the printer's hands, or, perhaps, set not only in type, but printed on paper, and circulated, as on a certain occasion last session, before they were read or delivered, for the instruction of those students. Grand excuse to some for fine writing, for "thipped syllabub" and buffoonery, for half a column in the *Times*, and a leading corner in one of the journals.—I am, &c.,

"A Listener."

Gleanings.

The Abuse of the Speculum in America.

The following article from the current number of the *Boston Medical and Surgical Journal*, one of the best conducted organs of the Profession is worthy of attention on this side of the Atlantic:—Our attention has been called by a correspondent to the great frequency with which this instrument is used, often needlessly, and, in far too many cases, in young impressionable females, where only absolute necessity should call for such an investigation. It is especially the young members of our profession against whom our correspondent directs his remarks, for he says, "There are rumours and statements going abroad, which deserves attention, that young unmarried girls, not of doubtful character, but strictly virtuous, are often tampered with, so as to allow the introduction of the vaginal speculum. . . . I am told that visitors in the families of these victims of quackery (?) are often invited and urged to see the evidences of disease, real or imaginary. I do not know how a remedy for these evils can best be applied, but there should be no delay in doing anything possible for this object; and for those guilty of such degradation, language is hardly capable of too severe denunciation."

In these days of poly-speculation, when we seem jumping out of the swaddling clothes which our forefathers left about us, are disposed to submit each organ of the body to every species of investigation which the fertile brain of man can devise, it would be strange indeed if we did not assume too frequently to throw light on regions where light need not go. Grant that we need more knowledge of the diseases of women, as we do of every other branch of disease, and that so many of her ailings are due to pathological conditions of the organs of generation; grant the assertions of those who have come from the schools of Europe in reference to the facilities for observation enjoyed there, and their complaints that the hospitals and dispensaries here do not offer them similar advantages; grant this, and, notwithstanding, we do not hesitate freely to say that vaginal examinations *are* too frequently and unnecessarily made. The glory of a true woman is that shrinking delicacy which dreads exposure, in whatever way it may come; her only shame, its loss. She comes to her physician as a confidant to a friend, and every needless exposure serves only to blunt the sensitive nature which is her sex's heritage, an exposure we have no *right* to ask her to submit to.

Of those who would compare Europe with America in its clinical advantages in this respect, the question might well be asked if, on comparing the mental, moral, and social condition of the peasant class, of Austria, for instance, with that of even the lowest class among our own native population, any friend of humanity would, for the sake of instruction, place our own women on the plane of the European.

This is no new subject; it has been thoroughly discussed at various times; but we cannot refrain from expressing the views which we entertain, and which are suggested by our correspondent. So far as may be *necessary* to ascertain the cause of disease in our patient, so far as may be advisable for the absolute *needs* of clinical instruction, is it our privilege to use the speculum, and even then only in such a manner as may preserve those feelings which are the *right* of woman.

"True clinical teaching like this would meet with full approval from all who wish well to medical education; but to uncover an unfortunate woman in a college amphitheatre in presence of a hundred or more students, is a proceeding the agony of which is not compensated by any adequate advantage to the class."

We find this ulceration on our professional os so well touched up by our contemporary, the senior editor of the *Pacific Medical and Surgical Journal*, that we cannot help giving a quotation from his remarks to close the subject.

"Now let us come home and bring to judgment a sin in the family. Within the profession there is a species of quackery which is advertised, not by the printing press, but by the uterine speculum. There prevails very extensively among our women a singular disorder, of which the most prominent symptom is a passion for uterine explorations. To some extent medical practitioners are responsible for the general prevalence of this malady. It is easy for sensitive females to persuade themselves that their afflictions, from the toothache downwards, are due to falling of the womb, or ulcerations or tumours; and he is the sharpest doctor who first detects the difficulty. Here comes in the charlatan, to exaggerate the disease, if there be any, and to beguile the patient with promises of cure. Henceforth the speculum becomes to the poor woman an essential part of the daily routine of life. Caustic, the knife, and various manipulations, look like work; and she is charmed with the industrious and energetic attentions of the professional mechanic. By and by the bubble bursts; and for all the good that has been done by subjecting the uterus to a course of torture, its proprietor might as well have adopted the treatment accredited to that miracle of scientific skill, Li-potai, namely, the application of a blister to the crown of the head to raise the fallen womb to its place.

"It is to be hoped that the fashion of women to mistrust and slander their wombs and rejoice in having them explored and tinkered, has passed its culmination; and with it the professional mania for persecuting that organ. The highest authorities have taken the back course and condemned their own uterine surgery in some respects. We may, therefore indulge reasonable expectation that the uterus will shortly withdraw from public exposure, and regard the decencies of private life."

Influence of Mercury in Preventing the Death of the Fœtus in Constitutional Syphilis.

In the *Weiner Med. Wochenschrift*, Dr. Julius Löwy reports the results of his observations. Of 99 pregnant females, who were syphilitic, 37 were subjected to inunction with mercurial ointment, and in 33 the child lived. Löwy tabulates his results thus:—"Abortion: In those subjected to treatment, 13·5 per cent.; in those not treated, 29·5 per cent. Living children in those treated, 75·6 per cent.; fœtus macerated in those not treated, 76·4 per cent." He infers that mercury has no injurious influence on mother or child, and that it does not tend to induce premature labour.

Experiments on the Effects of Alcohol (Ethyl Alcohol) on the Human Body. By E. A. Parkes, M.D., F.R.S., Professor of Hygiene in the Army Medical School, and Count Cyprian Wollowicz, M.D., Assistant Surgeon, Army Medical Staff.

(From the *Proceedings of the Royal Society*.)

As a knowledge of the physiological effects of alcohol on the human body is a matter of great importance, and as previous observations leave some points in doubt, we took the opportunity which the willingness and zeal of a very intelligent healthy soldier afforded us of investigating this subject. In order not to lengthen the paper, we have given only our own observations, without referring to those of others.

The plan of observation was as follows:—For twenty-six days the man remained on a diet precisely similar as to food and times of meals in every respect, except that for the first eight days he took only (in the shape of coffee, tea, and simple water); for the next six days he added to this diet rectified spirit, in such proportion that he took, in divided quantities, on the first day one fluid ounce (= 28·4 cub. centims.) of absolute alcohol; on the second day two fluid ounces; on the third day four ounces, and on the fifth and sixth days eight ounces on each day. He then returned to water for six days, and then for three days took on each day half a bottle (= 12 ounces, or 341 c. c.) of fine brandy, containing 48 per cent. of alcohol. Then for three days more he returned to water.

There were thus five periods, viz., of water-drinking, alcohol, water, brandy, water.

Before commencing the experiments, the man, who had been accustomed to take one or two pints of beer daily, abstained altogether from any alcoholic liquid for ten days.

This man, F. B., is twenty-eight years of age, 5 feet 6 inches in height, and his usual weight is 134 or 136 lbs. He is finely formed, with little fat, and with largely developed powerful muscles; he has a clean smooth skin, a clear bright eye, good teeth, and is in all respects in perfect health. He is very intelligent, and assisted us so much that we are quite certain that there has not been a mistake even for a minute in the time of taking the temperatures and passing the urine. As he had always been accustomed to smoke, we thought it proper to allow him half an ounce of tobacco daily, for fear the deprivation of it might disturb his health.

In addition to the experiments recorded in this paper, we tested the accuracy of his vision, and the muscular power before and during the use of alcohol; but as we could not detect any difference, we do not give the experiments.

Our object being to test the dietetic effects of alcohol, we gave it in small and large quantities, but avoided producing any extreme symptoms of narcotism.

General Conclusions.—1. One and two fluid ounces (28·4 c. c. and 56·8 c. c.) of absolute alcohol given in divided quantities in 24 hours to a perfectly healthy man seemed to increase the appetite. Four fluid ounces lessened it considerably, and larger quantities almost entirely destroyed it. On the last day of alcohol the man was three-quarters of an hour eating 8 ounces of bread, and could hardly do so. Had he been left to his own wishes, the amount of food taken would have been much diminished.

It appears, therefore, that in this individual some point near 2 fluid ounces of absolute alcohol is the limit of the useful action on appetite; but it is possible that if the alcohol had been continued, a smaller quantity would have lessened appetite.

In other healthy persons it may be different from the above; in most cases of disease, when digestion is weakened, it seems probable that a much smaller amount of alcohol would destroy appetite.

2. The average number of beats of the heart in 24 hours (as calculated from 8 observations made in 14 hours), during the first or water period, was 106,000; in the alcoholic period it was 127,000, or about 21,000 more; and in the brandy period it was 131,000, or 25 000 more.

The highest of the daily means of the pulse observed during the first or water period was 77·5; but on this day two observations are deficient. The next highest daily mean was 77 beats.

If, instead of the mean of the 8 days or 73·57, we compare the mean of this one day, viz., 77 beats per minute, with the alcoholic days, so as to be sure not to over-estimate the action of the alcohol, we find:—

On the 9th day, with one fluid ounce of alcohol, the heart beat 4,300 times more.
On the 10th day, with 2 fluid ounces, 1,872 times more.
On the 11th day, with 4 fluid ounces, 12,960 times more.
On the 12th day, with 6 fluid ounces, 30,672 times more.
On the 13th day, with 8 fluid ounces, 23,904 times more.
On the 14th day, with 8 fluid ounces, 25,488 times more.

But as there was ephemeral fever on the 12th day, it is right to make a deduction, and to estimate the number of beats in that day as midway between the 11th and 13th days, or 18,432. Adopting this, the mean daily excess of beats during the alcoholic days was 14,492, or an increase of rather more than 13 per cent.

The first day of alcohol gave an excess of 4 per cent., and the last of 23 per cent.; and the mean of these two gives almost the same percentage of excess as the mean of the 6 days.

Admitting that each beat of the heart was as strong during the alcoholic period as in the water period (and it was really more powerful), the heart on the last two days of alcohol was doing one-fifth more work.

Adopting the lowest estimate which has been given of the daily work done by the heart, viz., as equal to 122 tons lifted one foot, the heart during the alcoholic period did daily work in excess equal to lifting 15·8 tons one foot, and in the last two days did extra work to the amount of 24 tons lifted as far.

The period of rest for the heart was shortened, though perhaps not to such an extent as would be inferred from the number of beats, for each contraction was sooner over.

The heart on the fifth and sixth days after alcohol was left off, and apparently at the time when the last traces of alcohol were eliminated, showed in the sphygmographic tracings signs of unusual feebleness; and perhaps in consequence of this, when the brandy quickened the heart again, the tracings show a more rapid contraction of the ventricles, but less power than in the alcoholic period. The brandy acted, in fact, on a heart whose nutrition had not been perfectly restored.

The peripheral circulation was accelerated and the vessels were enlarged; and the effect was so marked as to show that this is an important influence for good or for evil when alcohol is used.

Referring only to this healthy man, it is clear that the amount of alcohol the heart will bear without losing its healthy sphygmographic tracing is small, and it must be supposed that some disease of heart or vessels would eventually follow the overaction produced by large doses of alcohol.

3. Although large doses of alcohol lessened appetite, they did not appear to impede primary digestion, as far as this could be judged of by the sensations of the man; nor did they seem to check the normal chemical changes in the body which end in the elimination of nitrogenous excreta, of phosphoric acid, and of free acidity. In other words, we were unable to trace either the good or the evil ascribed to alcohol in this direction: it neither depressed these chemical changes nor obviously increased them; it neither saved the tissues nor exhausted them; and even in the period of ephemeral fever its effects were negative.

But, of course, in these experiments we were not dealing with diseased tissues, nor with structures altered in composition by long-continued excess of alcohol. The results in such cases might be different; and it may be desirable to repeat that though appetite was lessened, the amount of food taken was the same each day.

4. Neither pure alcohol nor brandy, in the quantities given, lessened the temperature; in other words, they did not arrest the chemical changes which produce animal heat, or lessen the processes which regulate its amount, any more than they influenced nitrogenous tissue-change. Alcohol in no way influenced the rise of temperature during the attack of ephemeral fever; it neither lowered nor increased it. This appears to us conclusive against the proposal to use alcohol as a reducer of febrile heat.

On the other hand, it is not clear that alcohol increased the temperature: it produced subjective feelings of warmth in the stomach, in the face, round the loins, and over the shoulders; but at the same time when these were felt (for about one hour after tolerably large doses) the thermometer in the axilla and rectum showed no rise. This is best seen by comparing the two o'clock observations, which were taken about half an hour after dinner. The feelings result from the enlargement of the vessels and the greater flow of blood through them; so also, the ephemeral fever was decidedly not made worse by it.

5. An effect on the nervous system was not proved by any evidence of increase or decline in the amount of phosphoric acid; but there were marked subjective feelings; and possibly, also, the increased action of the heart was a nervous condition, as the short contractions of the ventricle were like those ascribed to alterations in the nervous currents. The feelings which were produced by four fluid ounces daily, and in a still higher degree by the larger quantities of alcohol, proved that narcotism was produced. There was no exhilaration, but a degree of heaviness, indisposition to exertion, and loss of cheerfulness and alacrity; there was slight headache, and even some torpor and sleepiness. All these effects were more marked with brandy. The commencement of narcotism was therefore produced in this man by some quantity much less than 4 fluid ounces, and probably nearer 2. It was nearly this amount which also commenced to destroy the appetite; and it may also be observed that a considerable rise in the frequency of the pulse occurred on the third day of alcohol, when 4 ounces were taken, whereas on the days with one or two ounces the pulse, though quickened, was so in a much less degree.

Putting, therefore, these points together, viz., that the obvious effect on the nervous system (*i. e.*, narcotism), the loss of appetite and a great rise in the quickness and frequency of the heart's beats occurred at the same time, it seems fair to conclude that there must be a relation between the phenomena, or, in other words, that all were owing to nervous implication.

It appears, then, clear, that any quantity over two ounces of absolute alcohol daily would certainly do harm to this man; but whether this, or even a smaller quantity, might not be hurtful if it were continued day after day, the experiments do not show. It is quite obvious that alcohol is not necessary for him; that is, that every function was perfectly performed without alcohol, and that even one ounce in twenty-four hours produced a decided effect on his heart, which was not necessary for his health, and perhaps, if the effect continued, would eventually lead to alterations in circulation, and to degeneration of tissues. It is not difficult to say what would be excess for him; but it is not easy to decide what would be moderation; it is only certain that it would be something under two fluid ounces of absolute alcohol in twenty-four hours.

It will be seen that the general result of our experiments is to confirm the opinions held by physicians as to what must be the indications of alcohol both in health and disease. The effects on appetite and on circulation are the practical points to seize; and if we are correct in our inferences, the commencement of narcotism marks the point when both appetite and circulation will begin to be damaged. As to the metamorphosis of nitrogenous tissues or to animal heat, it seems improbable that alcohol in quantities that can be properly used in diet has any effect; it appears to us unlikely (in the face of the chemical results) that it can enable the body to perform more work on less food, though by quickening a failing heart it may enable work to be done which otherwise could not be so. It may then act like the spur in the side of a horse, eliciting force, though not supplying it.

The employment of alcohol in health and disease is so great a subject that we should have felt tempted to extend these remarks to some points of medical practice, had it been desirable to do so in this place. We will only say that while we recognise in these experiments the great practical use of alcohol in rousing a failing appetite, exciting a feeble heart, and accelerating a languid capillary circulation, we have been strongly impressed with the necessity for great moderation and caution. In spite of our previous experience in the use of alcohol and brandy, we were hardly prepared for the ease with which appetite may be destroyed, the heart unduly excited, and the capillary circulation improperly increased. Considering its daily and almost universal use, there is no agent which seems to us to require more caution and more skill to obtain the good and to avoid the evil which its use entails.

We wish to guard ourselves against the supposition that in speaking of alcohol and brandy we refer at all to wine and beer, which contain substances, in addition to alcohol, which may make their action in nutrition somewhat different.

Mortality of Lying-in Women in Norway.

According to the *Gazette Hebdomadaire*, the deaths in Norway in 270,000 accouchements were as one to 138. The proportion of twins was not less than one in 83.

Citric Acid in After-Pains.

Dr. J. B. Chagnon, in the *Canada Medical Journal* for May, recommends citric acid for the pains following labour, and declares that it has never failed in his hands. He gives five grains in two or three ounces of water every five hours. It acts as a nervine, and as a preventive of inflammation.

Moulds for Suppositories.

A writer in the *Amer. Jour. of Pharmacy* proposes an extemporized mould for suppositories, made by folding white paper in the form of a cone. He supports the moulds in holes made in the lid of a cigar-box. Such moulds can be used only once.

Chloroform Prepared from Chloral.

A German chemist (*Amer. Jour. of Pharmacy*) says that the best and only rational mode of preparing chloroform for internal use is from chloral hydrate. Thus prepared it has a specific gravity of 1·5, and is not altered by sunlight.

Chloride of Zinc Paste.

Dr. Mayet (*Bull. de Therap.*), states that, he has found a great advantage from adding oxide of zinc to the ordinary mixture of chloride and flour. By using eight parts of chloride, two of oxide, and six of flour, a paste is got which does not deliquesce after it is dried, and yet acts as a caustic with undiminished efficacy.

Action of Roasted Opium.

Dr. Fronmuller (*Deutsche Klinik*), has tried this substance (known under the name of Chandu) in fifty cases. He found that as a hypnotic it is very much the same as ordinary opium; but that it causes less stupor, and less frequently produces giddiness, itching, and other disagreeable sequelæ.

Medical News.

St. Thomas's Hospital.—The following distribution of prizes took place on Saturday last:—*Third Year's Students.*—A. J. Drake, Kingsclere, college prize, 30*l.* and hon certificate; J. S. Slater, Bath, college prize, 20*l.* and hon. certificate; E. Sergeant, Preston, college prize, 10*l.* and hon. certificate; *Second Year's Students.*—B. Addy, West Deeping, college prize, 30*l.* and hon. certificate; W. Garton. St. Helier's, college prize, 20*l.* and hon. certificate; *First Year's Students.*—J. Boulger, Gravesend, Sir Wm. Tite's Scholarship and hon. certificate; A. V. Maybury, Frimley, college prize, 20*l.* and hon. certificate; A. H. Lavers Rayleigh, college prize, 10*l.* and hon. certificate; "*Physical Society's*" *Prizes.*—R. Cory, Carlisle, society's third year's prize, and hon. certificate; S. Osborn, Brixton, society's third year's prize; B. Addy, West Deeping, society's second year's prize, and hon. certificate; W. Garton, St. Helier's, society's second year's prize, and hon. certificate; *Surgery and Surgical Anatomy.*—E. Sergeant, Preston, Cheselden Medal, founded by George Vaughan, Esq.; *For General Proficiency and Good Conduct.*—J. S. Slater, Bath, Treasurer's gold medal.

Death while under the Influence of Chloroform.—On Wednesday evening Dr. Lankester investigated a case at the Royal Free Hospital in which a patient there died whilst under the influence of chloroform. The deceased, who was a stableman, aged thirty-four years, a short time since met with an injury to one of his fingers. He went to University College Hospital, where the limb was dressed, but on Wednesday last complained of his jaw, and went to the Royal Free Hospital in consequence. The surgeons there, perceiving that the man was suffering from tetanus, deemed it advisable to amputate the finger, and upon being taken to the operating theatre he was placed under the influence of chloroform by Mr. Thomas, one of the House-surgeons. After inhaling the drug for three or four minutes he expired. Mr. Thomas stated the duty of chloroformist was undertaken in turns, and that on previous occasions he had administered chloroform to patients. Dr. Lankester observed that a young medical man must have a beginning, and that in the present case everything had been done that was consistent in medical practice. Mr. Dickson, one of the house-surgeons said, that every precaution was taken, and the coroner having re-stated the case to the jury, a verdict of "Death from tetanus, accelerated by chloroform," was recorded.

A Scheme for Purifying a River.—The question of preventing the pollution of rivers by sewage acquires constantly increased importance. We some time ago alluded to the state of the Trent as it flows through the grounds and past the beautiful mansion of the Duke of Sutherland at Trentham, in Staffordshire. It has been changed, within a few years, from a clear to a filthy and offensive stream, by the influx of the sewage of the Pottery towns. Mr. Loch, Q.C., agent of the Duke of Sutherland, has drawn up a bill for the abatement of the nuisance. It proposes to create two distinct bodies, the one active and the other preventive. First a Joint Committee of the several Local Boards in the valleys of the streams forming or flowing into the Upper Trent is to be formed, with power to provide the necessary means of so dealing with the sewage of the towns as that it shall no longer flow into the Trent, or its tributaries, until the water shall have been rendered pure. The cost is to be met by the various Local Boards in proportions to be fixed by the Joint Committee, or failing their agreement, by a paid standing Arbitrator, to be appointed by them. The other body to be appointed is an Upper Trent Conservancy Board, to consist of persons chosen by the landowners in the valley, and their duties will be of a repressive character. First, they are to be empowered, after the 1st of March, 1872, to prevent, by serious penalties, any person making any new drain, or other outlet, to discharge sewage into any sewer, ditch, or stream, &c., which flows into the river. After that date they may give notice for the discontinuance of the flow of sewage by any previously existing channel, and not less than a year, or more than three years, are to elapse before such notice shall expire, and such previously existing sewer be absolutely prevented from being discharged into the river. The result would be that by the date named the flow of any additional sewage into the Trent would not be allowed, and at the most, within three years afterwards, all existing drainage must be dealt with so as to be divested of its noxious matter before reaching the river. The local authorities of the district have not yet considered this bold proposal. Should it be carried out it may become a model for general legislation with a like object. We observe that a meeting of the representatives of the principal Corporations and Local Boards in the valleys of the Aire and Calder was held at Leeds on Monday, to consider this important question, and it was determined that it is desirable to introduce a bill into Parliament next Session, dealing with the whole question of the purification of streams.—*Derby and Chesterfield Reporter.*

NOTICES TO CORRESPONDENTS.

An Ancient Physician's Prophecies realised in the present War.—The author of "The Rosicrucians," in a letter to the editor of the *Standard*, gives, amongst other remarkable predictions said to have been realised in past times, the following, which is a translation from the ancient French:—

"Peace comes on one side—war on the other,
There never was revenge so overwhelming!
But men and women shall bemoan, and innocent blood shall be shed,
And these things shall be in France all round.

"Too great reliance shall betray the monarch.
The end shall begin in France,
With secret omen fatal to One."

The author was Michael Nostradamus, a celebrated physician of Florence, attached to the person of Henry the Second of France. The *Seven centuries* from which the above is a quotation, was published in 1555, eleven years before the writer's death.

A Sufferer.—Don't go near the advertising fellow. Consult the usual attendant in your father's family, and if further advice be needed he will tell you to whom to go.

J. B.—The article is not adapted for a medical paper.

Students.—Messrs. Churchill's are the publishers of the manual. The French work could probably be procured through Baillière and Co.

A. Hind.—The work was forwarded to the address indicated.

J. Paul.—The names of the reporters have not been published. The work done speaks for itself.

T. C. D. asks for a condensed statement of the regulations for the new diploma in State medicine.

Macabio.—Be so kind as to write another letter.

T. B.—The college is one of the most respectable in the kingdom.

L.S.A.—You had better at once register and then take a surgical diploma.

Dr. Macby.—The statement as we said a fortnight ago was too good to be true. We fear it is not at all likely that Government will take any such step. Most people entertain the idea that there is no probability at all of such a loan as was spoken of at the Association being considered.

L. P.—The publication named is utterly worthless.

THE ENGLISH POOR-LAW MEDICAL OFFICERS' SUPERANNUATION ACT.

To the Editor of "The Medical Press and Circular."

Dear Sir,—We thank you for the Abstract and Clauses of this Act; has it been carried out in Ireland as yet!! and with what effect!

Will you in your next publication explain, or as early as you can, agreeable to the point at issue. In Article III., it is expressed that a person must be over sixty years of age: and further, that he must have served as an officer of some union or parish for twenty years at least; rather sharp, should think that there are very few who would reach the mark, but still, will a person who has served eight years in a union within England and Wales, and another term of twelve years and upwards in two different counties, come within the meaning of the Act? or say eight in Somerset and twelve in Devon claim superannuation?

Your obedient servant,
A Constant Reader.

[The Act requires that the recipient of superannuation shall be over sixty years of age, or shall have become disabled by infirmity or ill-health, but it is not necessary that he shall have served for twenty years in the same district.—Ed. Med Press and Cir.]

Accepted Papers acknowledged from Dr. Francis Luther, "On Scarlatina;" Dr. Martin, "On Subcutaneous Injection of Morphia;" Dr. Thos. Hayes, "Removal of a large Naso-pharyngeal Polypus with Wire Ecraseur;" Dr. Kinkead, "On a New Digestive, being a combined solution of Pepsine and Pancreatine."

Literary Criticism in America.—The *San Francisco News-Letter* says, "We have received for review a pamphlet entitled, 'The Discoveries of Prof. R. Leonidas Hamilton, M.D.' We have ourselves made a discovery, and it seems to be this:—Professor R. Leonidas Hamilton is a blockhead, compared with whose intelligence that of a born idiot is transcendent omniscience, and a knave in whose presence a professional thief would blush to the eyes with conscious rectitude."

APPOINTMENTS.

Anderson, J. F., M.D., Medical Officer for the Hampstead South District of the Metropolitan Mutual Medical Aid Society.

Badcock, Dr. L. C., Out-door Medical Officer for the Western District of the Brighton Union.

Barrett, J. J., M.D., Medical Officer for the Lambeth District of the Metropolitan Mutual Medical Aid Society.

Buck, A. H., L.R.C.P.Ed., Medical Officer for the Kentish-town District of the Metropolitan Mutual Medical Aid Society.

Clark, Mr. A., Senior House-Surgeon to the Middlesex Hospital.

Crosse, T. H. B., M.R.C.S., Medical Officer for the Kensington District of the Metropolitan Mutual Medical Aid Society.

Davidson, Dr. A. D., Ophthalmic Surgeon to the Royal Infirmary, Aberdeen.

Gowland, J. E., M.D., Medical Officer for the Holborn District of the Metropolitan Mutual Medical Aid Society.

Lathay, W. H., M.R.C.S., District Surgeon to the Salford and Pendleton Royal Hospital and Dispensary.

Magor, T., L.R.C.P.L., Medical Officer for the Hornsey District of the Metropolitan Mutual Medical Aid Society.

Nicholls, H. H. J., M.R.C.S., Resident House-Surgeon at the Brighton and Hove Lying-in Institution.

Norris, P. J., M.D., Medical Officer for the Southern District of the Lancaster Union.

Pope, Dr. Medical Officer for the Tramore Dispensary District of the Waterford Union.

Robinson, R. B., L.R.C.P.Ed., Medical Officer for District No. 3 of the Southmolton Union, Devon.

Sandford, H. V., M.D., Medical Officer for District No. 2 of the Bodmin Union, Cornwall.

Wallace, F. W., L.R.C.P.L., Medical Officer for the Hoxton District of the Metropolitan Mutual Medical Aid Society.

Wallace, R. U., M.B., Medical Officer for the Dalston District of the Metropolitan Mutual Medical Aid Society.

Waters, J. H., M.B, Medical Officer for the Kingsland District of the Metropolitan Mutual Aid Society.

Watkins, E. T., M.D., Medical Officer for the Bloomsbury District of the Metropolitan Mutual Medical Aid Society.

Welch, R. R., M.R.C.S., Medical Officer for the Clapton District of the Metropolitan Mutual Medical Aid Society.

Young, E. P., M.R.C.S., Medical Officer for the Edgware-road District of the Metropolitan Mutual Medical Aid Society.

VACANCIES.

Queen's Hospital, Birmingham.—Resident House-Surg. Salary £100.

Bodmin Union.—Medical Officer. Salary, inclusive of fees, £30 15s.

Dorset County Hospital.—House-Surgeon. Salary, £80 with board.

Tower Hamlets' Dispensary.—Medical Officer, Salary £100 with residence.

Kells Union.—Medical Officer. Salary £100, exclusive of fees (see advertisement.)

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

Advanced Text Book of Zoology. By Alleyne Nicholson, M.D. Edinburgh: Blackwood and Sons.

The Treatment and Utilization of Sewage. By W. H. Corfield, M.A., M.B. London: Macmillan and Co.

University College, London. Calendar for 1870-71. London: Jas. Walton.

Transactions of the St. Andrew's Medical Graduates' Association.

Diseases of the Heart among Soldiers. By Arthur B. R. Myers, M.R.C.S. London: John Churchill and Sons.

Marriage.

Long—Cooper.—On the 12th ult., at the Parish Church, Cromer, Norfolk, Mark Long, M.D., of Barking road, Canning town, Essex, to Sophia Amelia, eldest daughter of James Cooper, F.R.C.S., of Colne Lodge, Cromer.

Deaths.

Berncastle.—On the 30th of June, at Melbourne, Julius Berncastle, M.D.

Chawner.—On the 13th ult., at Lichfield, Richard Croft Chawner, only surviving son of the late Dr. Rupert Chawner, aged 65.

Gill.—On the 17th ult., at Dover, Nathaniel B. Gill, M.R.C.S., aged 49.

Waters.—On the 14th ult., E. W. Waters, L.K.Q.C.P.I., of Tramore, Co. Waterford.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 12, 1870.

CONTENTS.

Introductory Lecture

DELIVERED AT

THE LONDON HOSPITAL.

BY

H. G. SUTTON, M.D., F.R.C.P.,

Assistant Physician and Lecturer on Physiology.

WHATEVER may be said as to the advisability of doing away with Introductory Lectures, it is, in the opinion of many, a beneficial thing for us to assemble at the opening of the Medical Educational year.

Permit me now to speak not only to the medical student but to the student of medicine; not to those only who are working for a diploma, but to those who never cease working, that every year may make them better fitted for the prevention and cure of disease. The medical student is doing little more than learning how to learn; whilst he is gathering facts he is, or ought to be obtaining a method of study. And what I have most at heart is to point out, imperfectly and obscurely it must be, certain general principles which will I hope show how our several departments of study bear on the one great task of our lives, the cure of the sick. In this Introductory Lecture it is my duty to remember that some of you gentlemen who have honoured the London Hospital Medical School with your presence this day are engaged in the practice of medicine. Some of you gentlemen have almost completed and some are about to commence their medical education.

All who have studied medicine are, I believe, prepared to admit that the education of a medical man is never completed. None of us have completed our education; I therefore venture to think that the subject of medical education concerns all of us.

Some students appear to conclude that they are sufficiently educated when they have attended some lectures and demonstrations; when they have been a few times in the wards and obtained the necessary signatures to their schedules. It should be the ambition, and it certainly is the duty of every student to obtain all the knowledge and skill that lies open to him, in order that he may relieve the sufferings of his fellow creatures. He should also do this for his own happiness, for he will find that comparatively few persons in the medical profession gain large incomes. The student should, therefore, strive to gain the commanding position awarded to knowledge. Medicine is defined to be the science and art of preventing, curing and alleviating the diseases of the human body.

By art is understood the power or skill in the use of knowledge; in our profession it means the practice of medicine. By science, is understood knowledge, or a collection of general principles which are useful as guides to sound medical practice.

It is an accepted opinion, that no person can understand man in disease, who does not study man in health. Therefore, the conditions of the body and mind in health are first studied in the sections—anatomy, physiology, and animal chemistry, and in order that the student may rightly understand the physiology of man himself, he is required to study also the physiology of other members of the animal kingdom under the head of comparative anatomy and physiology, and to study the physiology of the vegetable kingdom in the section on botany. The knowledge included in all these subjects is called the science of physiology.

Afterwards, the condition of the body in disease, are studied in the divisions, morbid anatomy, pathology, and pathological chemistry; and the knowledge included in these divisions form the science of pathology. The art of medicine is taught in the lectures on medicine, surgery, midwifery, therapeutics, and forensic medicine. The art of preserving health, is described in the lectures on hygiene. Each of us, therefore, aims to be a physiologist, a pathologist, and a practitioner.

The student of medicine, in learning physiology begins with the tissues of the body. He studies their structural condition. Having done this, he ascertains in what manner the different tissues are connected with each other and, finally, he observes how they collectively work. After the tissues, he examines the viscera of the body, and by a similar process, endeavours to find out how the several organs of the body act together, to form the one organization, man. In this way, he synthetically, in his own mind, forms man. The physiologist investigates man in still another way. He studies him in his individual condition. He examines his ideas, his sensations, his movements and secretions. He studies the organization in action, and in this manner he endeavours to find out how the vital dynamics of man's system results from the elaborate arrangement of tissues and organs. This analytical examination reveals that the tissues and organs have dynami-

cal properties which could not have been inferred from the minutest investigation of their component cells and fibres.

All the parts of the body are noticed to work independently, but all uniformly and correlatively. Every viscus and every tissue, has its own specific actions, each cell, its own life, and the sum of these make up the life of man.

It is further observed that each man has his own distinguishing peculiarities, dynamically and structurally, and these peculiarities apparently pervade his entire body.

Let us illustrate this:—A man is short, he has small hands and feet, slender bones, his heart's action is irritable, easily disturbed, his muscular system is fairly developed and his movements are somewhat quick and excitable; and we must not neglect to add that his appetite is good, and he enjoys good eating and drinking.

So much for the physical man, and now for the mental peculiarities which go with such a build and temperament. His manner of speaking is decided and abrupt. He is sensitive. His ideas flow quickly, but they are not so well co-ordinated. He has decided views, but not large views of things. He is impulsive in his conduct. He is more dogmatic than logical, and apt to be both obstinate and passionate. When we take into consideration the whole of his peculiarities, mental and bodily, we find that there is one type of action pervading his whole organization.

When man's features are well defined, the novelist delights to portray him, and often does so accurately, but perhaps in an exaggerated form. When I think of a man, such as I have described, the popular hero Mr. Pickwick, appears before my mental view.

The physiologist has to determine how it comes about that one type of action exists throughout the man's body; and what are the conditions which have developed these peculiar actions.

It is observable, as we have just remarked, that a particular conformation of body is associated with certain mental characters. We may conclude therefore, that the very same conditions which created his limbs and viscera, also developed his mental and emotional characters. He has derived his body, and in consequence, his mind from his parents. But as he grows up *external conditions* have a large share in modifying his inherited structures and functions. Internal influences and external conditions have developed this man with his precise build and actions, and, as the whole of his body was exposed to the same general conditions, it follows, that the one type of action is found in every part of the man's system. The physiologist, therefore, endeavours to find out what are the particular agencies which, continually produce the peculiarities in build and temperament of the body. He, like other scientific observers, discovers that a series of events are uniformly followed by a series of other events, and this knowledge is the science of physiology.

Inherited structures and external conditions are the two factors concerned in the growth and development of every living thing. The external conditions which act on man's vegetative life are, to a large extent, the same as those which act on every animal and plant. But many external conditions, and many at one time, are operating on man; but on plants and animals, comparatively few. Therefore, the physiologist, who has to define the influence of *each condition*, may for some things gain *even more information* in his researches from a wise study of animals and plants than from the study of man. I therefore, strongly recommend you to work at comparative anatomy and physiological botany.

Before leaving this part of the subject, I would urge you to pay attention, not only to what we may suppose to be the direct causes of particular diseases, but also to those large general influences which affect for good or evil the whole organization of man. Such influences as those of light, changes in temperature, of varieties in climate—of elevated, dry or low moist localities, and we must not neglect those influences which act still more indirectly, such as religion and politics.

In their anatomical form and as a consequence their physiological state, men obviously differ one from another very much. If we select three men, each of whom is considered to be healthy, we observe that they are unlike each other in their power of hearing, seeing, smelling; in their sensibility to pain, to heat, and cold; their modes of muscular action are very different, the power of their circulation, respiration and digestion vary, and their mental or as we may say their brain states are also very dissimilar. Yet each of these three persons is properly considered to be in good health, because they have not experienced any particular suffering and they have had their individual peculiarities of structure and function from childhood. Physiology for the sake of convenience describes a *typical or ideal man*, but it is only a standard assumed to facilitate teaching. It is most important that every practitioner should appreciate the physiological deviations from this ideal standard. It is necessary to know their deviations to understand pathological varieties. These three men differ from each other in their physiological state, and, they will differ while suffering from what we must call the same disease, notably in rheumatic fever. Their modes of action, sensibilities, and ideas, are different whilst they are in health; and their pains, symptoms, complaints are very different, while each labours under the same disease. In order to know what value is to be attached to their differences in disease, it is necessary that medical men should know the peculiarities of each individual while in health, and to accomplish this, he should study the physiological characters, not of *an ideal standard man*, but *of many varieties of men.*

At first sight it would appear that men are at once so like and so unlike, in so many ways, in so many degrees, that it is extremely difficult for the mind to appreciate individual varieties and next to impossible to systematize them in a manner to be useful in every day practice. But further consideration tends to show that it is to be done by careful study.

We observe that persons differ from the ideal standard of physiologists, yet particular differences are so present in some that a useful classification can be made.

If many men were mixed promiscuously, and if afterwards each man were examined, and his build and physiological characters were well described in writing, they would appear to vary in every degree. Yet a careful analysis would show that there are broad principles of arrangement. They can be classified according to the build of their skeletons; according to the condition of their muscular system; according to the degree of development of their circulatory, respiratory digestive and nervous systems. We should find that, amidst all the seeming confusion there is *order*. An arrangement is possible; men are, I believe, to be naturally classified by their resemblance in structure and vital dynamics, and each class has its own standard of health. The old physicians recognised the importance of classifying man on some such method, and they did so under the names temperaments or constitution. By temperament, is still understood a peculiar organization of the body common to many individuals, which influences their mental operations, bodily processes, and their particular diseases.

Every person who practises medicine must have observed how difficult it is to understand many symptoms which a patient complains of, and the puzzling matter is that, in almost every person, the symptoms differ in intensity and often in kind. These symptoms in no way belong to the disease; but is it not at least as correct to say they belong to the temperament. May not the physician conclude that they are expressive rather of the state of the individual, than of the disease itself. At all events, I am satisfied myself that we shall not be able to give *such symptoms* their *true value*, until we obtain clear ideas of the kind of man who is suffering, as well as of the disease. This kind of knowledge the student of medicine cannot obtain by examining the cells and fibres of the body microscopically and chemically and the organs anatomically. He can only gain it by studying varieties of constitutions in health or in other words differences in temperament.

Besides noting the original temperament which the man inherits, we must for medical purposes, consider not only his histological and physiological development, but *his personal habits*, and the general circumstance of his condition of life. We must ascertain how foul air, improper food, ill controlled passions have affected his organization, even we may say, educated his viscera in order that we may know how his system will act when again submitted to the same conditions.

In investigating temperaments the student should follow the course adopted in all physical investigations; commence with well marked instances of each class. He will soon discover that with temperaments, as with all orders of living things, there are no abrupt boundaries separating one from another. The characters distinguishing one class, merge in particular individuals insensibly, into or are mixed with characters indicating another class. He will in other words, observe that a certain number of persons have mixed constitutions or temperaments.

Having gained an insight into physiology the "science of the normal," the student proceeds to make himself acquainted with pathology, the "science of the abnormal." Pathology

teaches the causes, nature and, as I think it should, the course of diseases also. The pathologist studies his subject in a parallel manner to that of the physiologist. He examines the tissues and organs of the body after death, and observes the altered dynamics during life. As is often said, all pathological changes must be viewed by the light of clinical experience. We, as pathologists, could never understand pneumonia by simply examining the lungs after death, no more than a man could understand a thunder storm by simply examining a tree which had been struck by the lightning.

Observation shows that men with very slender bones, long flat chests, irritable feeble hearts, feeble digestion, ill developed muscular systems—whose brain and nerve actions are incapable of prolonged activity, are very liable to die of consumption. They have the nervous temperament and further they are liable to disease of the mucous tissues, or in other words, they have the mucous diathesis. We therefore observe that, with a peculiar build of body, there is a particular standard of health and a liability to particular pathological changes. The build or formation of body is, as we have already remarked, *dependant partly on inheritance*, and *is largely affected by external conditions*. Therefore the liability to disease or the diathesis, depends also on hereditary and external conditions. The pathologist endeavours to find out, not only what abnormal changes these conditions excite in the body of this build, but also to define what specific conditions are uniformly followed by specific pathological changes. He seeks to discover the relations of facts. The tendency of certain events to be uniformly followed by other events, This knowledge constitutes "science" and on this basis we may have a science of pathology.

Daily experience shows that some persons are constructed in a manner so as to withstand strongly, some so as to withstand feebly, the influence of external conditions. Observation teaches that each man has his own degree of power of resistance, or in other words, each specific temperament is associated with a specific diathesis. The nervous temperament with a mucous diathesis ; the sanguine temperament with the vascular diathesis ; and the fibrous temperament with the mucous fibrous diathesis.

Therefore, we study diathesis in order to know a man's power of resisting external conditions ; to know what man may live in a foul atmosphere ; what man may drink alcohol ; what man may expose himself to cold or heat without his health being injured. Diathesis teach us the way in which it is likely that a man may become diseased. It does not tell us what particular diseases he may have, but to what class of pathological changes he is liable.

History has stated that physiologists have immeasurably outstripped pathologists in the comprehensiveness of their views, and, therefore in the value of their results. For the physiologists have distinctly recognized that the basis of their science must include not only the whole animal, but the entire vegetable kingdom. The pathologist, however, rarely includes disease of lower animals in his teaching, and diseases of plants are almost entirely neglected. In the "History of Civilization" (page 411, vol. iii.), Buckle further states that until the diseases of animals and plants are included in our studies, the pathologist's conclusions will be little better than empirical, on account of the narrowness of the field from which his facts have been gathered. And I believe a similar decision would be given by most pathologists. I am every day more and more convinced of the truth of this view, and the Medical Press has done good service lately in calling attention to this defect. I believe that the practice of medicine will gain vastly by the study of comparative pathology. The great duty of the pathologist is to determine the causes of disease. It is for this purpose especially that a knowledge of diseases of animals and plants will be valuable. The inferior animals are exposed to comparatively few and to very general conditions ; man is exposed to these but also to numerous highly special influences all of which are capable of exciting disease. It is in man a most difficult task to decide *which of these many and different influences is the cause*, or the chief cause of the malady with which we have to deal ; for instance, a man whilst exposed to cold may be taking a large quantity of alcohol, and may be undergoing a great amount of fatigue, he is, perhaps, at the same time, suffering much mental anxiety : What share any one of these several very different conditions has had in bringing about his disease it is next to impossible to determine. Whereas, the problems presented by diseases of animals are far more simple, for they are exposed to fewer and to simpler conditions. There is yet another way in which we gain help from comparative pathology. Substances and changes which are pathological in man are sometimes physiological in lower animals and plants. A knowledge of healthy processes in the animal and vegetable kingdom may indicate how some pathological products are formed in man, and may show the conditions or causes which lead to their formation. In man it is often exceedingly difficult, even impossible, to observe the morbid changes in every stage of the disease, for at some periods of the complaints, persons rarely or never die. Animals, however, can be killed at any stage of their disease. The tissues in lower animals and plants are much simpler in their structure and arrangement, and, in consequence, a more satisfactory anatomical, microscopical, and chemical examination of them could be made. These are some of the advantages which the student of medicine may hope to gain by investigating the diseases of animals and plants. I will now briefly illustrate how much we may be assisted in this way.

In 1866, I examined the bodies of a number of persons who died of cholera, and I observed that with the exception of the morbid changes attributable to that disease, almost all of the bodies were healthy. This appeared to show that cholera attacks healthy persons much more frequently than diseased persons, and the same thing is observed in lower animals. During the Abyssinian war you will remember that an epidemic disease prevailed very extensively amongst the cavalry horses, and it was recorded that the healthy, strong, vigorous horses were those most frequently attacked. Further, the similarity in the action of disease in man and animal was further shown in this campaign when the horses were removed from the low lands, lying near the sea-shore of Abyssinia, to the high hills the epidemic rapidly disappeared. And experience has amply shown that man is, to a great extent, protected from cholera and yellow fever while he lives on greatly elevated positions.

It is well known that if a person's health becomes very much impaired, that ridges are sometimes formed across the nails of his fingers ; and Mr. John Hancock, a distinguished naturalist in the North of England tells me that if a hawk be badly fed and falls into bad health, his wings appear to stop growing, and a ridge is formed round the bone at the end of the wing, The same thing (that is a temporary arrest of growth), is evidenced by the circular markings which show the yearly growth in our exogenous trees.

The evil effects attending domestication are witnessed in plants and animals as well as in man. Statistics have demonstrated that persons living in large towns, working in doors, are very much more liable to become consumptive than persons living in the open country. And horses and other animals appear to be almost exempt from consumption while living in the fields, but they very frequently suffer from phthisis when they live in stables. Horticulturists have informed me that their plants living in hot houses are more liable to disease than the plants growing in the open air. Dermatologists know that if a debilitated person contracts scabies, the attack is often severe, and sometimes very much more difficult to cure than scabies occurring in a healthy person.

A similar thing is observed when badly nourished animals and plants are the subject of parasites. After these brief illustrations, I return to my main topic.

You are required to study the changes which go on in health in the tissues, in order to understand the nature of pathological transformations. You will examine how new cells are formed in healthy mucous membrane in order to understand how they are produced when that mucous membrane is inflamed. You learn how bone is developed in order to appreciate how an osteoid tumour is formed. And you will perceive that in inflammation of a mucous membrane the crowds of new cells are formed by a similar process to that which is observed in the production of new cells in healthy mucous membrane. Some differences are observed. They are differences of degree ; they are due to the disorderly and successive and rapid growth of the cells in inflammation ; and their orderly growth and slower succession in health. Pathological changes are modified physiological processes.

Pathology also includes a study of the order to be witnessed in the succession of the phenomena of diseases. The presumption is that all morbid processes run a defined course, and in some we can say what that course is. Many diseases continue a definite time, their outset, their exacerbation, and their termination are marked by distinct periods ; and, although a large number of diseases have no definite period of duration,

many of them present a determinate order in what I may call their great events. The diseased action may go on week after week, and the length of time that it lasts may be very uncertain; but each of the differing morbid processes that constitutes that disease has its own place in the series. In phthisis some pneumonia or so-called tubercle may occur in the upper parts of the lungs. There is a local increased cell growth, and a consequent accumulation of cells. These morbid processes may cease, and the products formed or effused, may undergo degeneration and remain lifeless matter in the body. Afterwards there may be a period during which the patient gains flesh, recovers appetite, and keeps well. Health may continue for a few weeks, a few months, or many years, and then the morbid processes may recommence. Periods of ingravescence, and of health, may alternate for many years.

Mr. Paget, speaking of granulated wounds, says that blood gradually ceasing to flow from the surface of the wound, one may still see some thin tinged fluid oozing from it slowly. As this fluid becomes paler, some of it collects like a whitish film, or glazing, on the surface. This glazing increases, and it is the prelude to the formation of the granulations; and while it is going on, and for some days afterwards, there is a period of calm which may continue from one day to ten days or longer.

Order in sequence is evidenced in each of these diseases. It is most readily detected in acute diseases, but it may also be observed in chronic affections. If a number of persons suffering from chronic Bright's disease are carefully watched, the rule is that we observe cerebral phenomena prevail at one stage of the disease, gastro-intestinal, cardiac pulmonary, or hæmorrhagic phenomena, at other periods. This succession of events is characteristic of chronic Bright's disease, and it occurs in hundreds of persons, every year, and in many countries. These facts clearly show that *there is a definite series* of changes—*an order* which is distinctive of the disease. Such an order is known as the "natural course of disease." It is desirable that every practitioner of medicine should be familiar with the course that every disease follows. He should accurately know the order in which the phenomena may occur for, if he does not, he will not be able to judge of the progress of his patient nor to foresee the possible emergencies. Without this knowledge, he will be unable to be sure whether the treament adopted has benefited or has injured his patient.

By studying morbid anatomy and pathology the student knows how persons die and how diseases are to be cured. Pathology reveals that during restoration to health there is a gradual substitution of physiological for pathological processes. An abandonment of pathological order for physiological order. To this rule I know of no exception. An organ diseased may never regain its original structure or dynamical condition, because a part of it has been altogether destroyed; but all the living tissues will return more or less closely to their normal life. If mucous membrane is injured, we observe that new cells grow from the parent cells to replace those which had been destroyed. Albumen is taken from the blood to supply nutrition to the newly-growing cells. And the same kind of processes go on, no matter what is the nature of the injury, provided that the membrane be not destroyed. The truth of this observation is shown also by what takes place after inflammation of serous membranes. If we examine the adhesions which are the remains of inflammation, we find that they contain the tissue elements of normal serous membrane. There is defective development and some parts have undergone degenerative changes, or, in other words, they are dead. The inferiority of these new structures to those proper to the body is due to the adhesions being rapidly developed. We know that all things which are developed quickly are apt to die proportionately easily. Durability and slow growth go together. In fractured bone the injury is repaired by physiological fibrous tissue or by cartilage. Similar evidence might be derived from disease in every part of the body. *In giving drugs, therefore, for the cure of disease, all we can hope to do is to promote physiological actions.* The pathologist knows that remedies will not, and cannot, excite any process unlike any normal operation of the body, unless it diminishes or destroys the life of the tissue. Seeing, therefore, that injuries and diseases are cured by actions physiological, the practitioner of medicine employs those conditions which promote the required physiological processes. Drugs, therefore, are only some of the many conditions which the practitioner must summon to his assistance when treating disease. The body both in health and disease requires new matter from without to keep up the forces within. Force may be given by heat, by light, by air, food, or by physic; and observation is teaching every year that persons may, when thus supplied, recover from very severe diseases without the aid of medicine.

It is admitted that a person may be a pathologist and yet not be a skilful physician, but I do not think that any person can know how to properly treat disease if he is ignorant of pathology. For the treatment of disease is determined by a knowledge of the direct and indirect causes. This has long been recognised. Cullen wrote*—"The cure of diseases is chiefly and almost unavoidably founded in the knowledge of their proximate causes." Pathology teaches which are the causes, and the manner in which the body remedies the evil.

The student of medicine has also to learn how to recognise disease. He gains the knowledge by observing the symptoms of disease. I strongly recommend you to labour to observe things accurately. An uncultivated person is very apt to think that it is an easy thing to make a correct observation. It is, however, extremely difficult. Observation requires great attention, and so many things have to be considered, and there are so many sources of fallacy, that few men are capable of making accurate observations; and but few complete observations have at any time been collected. Every student, therefore, should educate his senses; and, if he be a careful man, he will soon admit that it is not easy to observe correctly with untrained eyes. Two distinguished dermatologists may examine the skin of a patient, and be unable to agree as to whether there is too little or too much pigment in it. It is equally as difficult to judge a thing with the fingers. Two skilful surgeons may differ in opinion as to whether a tumour is a sac full of fluid, or an elastic solid substance. Clinical instruments are great aids in the diagnosis of disease, and they become of more importance day by day. I therefore recommend you strongly to learn how to use skilfully the thermometer, the laryngoscope, the microscope, the ophthalmoscope, stethoscope, and others. The student should, above all things, train himself to think—to draw his conclusions logically. Remember, it is the great thinkers who are the real benefactors of the world.

In examining a patient, try your utmost to be earnest, sincere, and very painstaking; I have heard persons remark Mr. So-and-so is exceedingly clever, he is very sharp, and at once sees what is the matter with a man. However much this may impress an uneducated mind you will soon discover that it is mostly impossible to make an accurate diagnosis, unless the patient is very carefully examined, to discover the whole of the existing facts. Often a medical man diagnoses a particular disease by satisfying himself, after systematic examination, that no other disease is present to account for the phenomena.

There is another branch of medicine which has made great advance during the last few years—the art of preserving health—that is, of preventing diseases. It has gained greatly in popular estimation. Public opinion realizes that it is more economical to prevent disease than to cure it. The medical mind recognizes that a large proportion of contagious or infectious diseases are avoidable. Many acute pathological changes are preceded by degeneration in the tissues of the body.

Chronic diseases are very often the result of decay in the tissues which can no more be cured than an old oak tree can be made young again. The cells and vessels of the tree and the fibres and cells of the man have exhausted their life. All these things teach the medical man that a large number of diseases are incurable, because the diseased tissues are more or less molecularly dead. He is required, therefore, to find out the earliest indication of failing health, and to instruct the patient how he is to live in order that he may arrest or retard the decline. To preserve health we must obviate the causes of disease. And here pathology comes to our assistance. It assists us in determining the conditions which are acting and exciting disease. In guiding a person how to prevent his health failing, a medical man's knowledge and skill is most severely tested. For we are bound not to cause the patient any needless anxiety and suffering, and we must not allow him to fall into incurable disease and death without pointing out to him how it is to be avoided. The physician should try to detect the slightest failure in function and the earliest indications of tissue decay. Many patients come for advice complaining of wandering pains, of slight indigestion, or some other apparently trivial affection, and we find that these ill-defined symptoms are the earliest indications of tissue degeneration. Many

* Works of William Cullen. P. 475. Vol. 1.

agitated nervous ill-regulated children are the future victims of hysteria, epilepsy, or some other mental brain disease. This is a section of medicine which must amply repay any amount of labour in research, and, as it progresses, mankind will become conscious that the advance of medical knowledge is contemporaneous with the world's improved development.

Vast numbers of children living in our large towns are the offspring of degenerate parents and grow up sickly. They are but natural products of the noxious influences which surround them. And no Education Bill can accomplish what all education should do, that is, develop the man unless it is accompanied or preceded by the enforcement of sanitary laws. Brain function, mind and brain, are inseparable, and to raise the qualities of one, we must take proper care of the nutrition of the other.

I have endeavoured to show how important it is that every student should examine the influences which man inherits from his parents and the influence of the conditions which surround him. They are the two factors of health and disease, and the cure, alleviation, and the prevention of disease is to be regulated by attention to each of these. The phenomena of health and disease are the certain results of antecedent conditions. When we observe what is passing around us how the agriculturist by taking advantage of inherited influences and of the actions of external objects develops and rears animals to serve the purposes of man; how the horticulturist by similar means, develops and modifies the colour, the shape, and beauty of his plants and flowers to educate and gratify the mind of man. We perceive great principles which the medical practitioner may some day use to prevent and relieve the sufferings of his fellow beings.

We see that the physical sciences are making great progress, and it is our duty not to allow medicine to lag behind. We must avail ourselves of every kind of knowledge which tends to disclose to us physiological and pathological truths.

Abstracts of Lectures.

UNIVERSITY COLLEGE.

The Introductory Lecture at this hospital was delivered by Mr. Berkeley Hill, who, having lately returned from the Seat of War, devoted much of his lecture to that subject. Having described the nature of the receptacles for the sick, the Lecturer proceeded to discuss the question of transport, which, since the American war, had made, through the addition of volunteer aid, such marvellous progress in its organization. As late as the wars of the first Republic, the only means for the sick and wounded were the baggage-carts and the services of soldiers from the ranks when they could be spared. The first Baron Larrey, while attending the Republican armies on the Rhine, was the first to devise a system of special carts, the wounded being in the front, for at that time the moveable field hospitals were one league in rear of the attack, consequently twenty hours always elapsed before the wounded were got into hospitals. This was the commencement of the system of ambulances which are now employed by the French army, and had, with many modifications, been adopted by all other military nations. It would perhaps be as well to explain the different meanings attached to the word ambulance. Abroad it signified a moving hospital, that was, a corps of surgeons, attendants, stores, waggons, horses, &c. In England the term was frequently but erroneously applied to the waggons for conveying the sick from place to place. In his remarks he should use the word in the continental signification. In the hands of the French the ambulance system frequently broke down. The direction and supply of the material, waggons, horses, stores, &c., were entrusted to the Intendance, a department that managed the commissariat, transport of supplies of all kinds, even the convoy of ammunition, and consequently had far too much to do to allow it to meet sudden emergencies in the medical requirements of the army. Again, an invariable consequence of this centralization was a general breakdown when the army to which it was attached suffered defeat, as in the present war. The French Intendance had been utterly unable to assist in the conveyance of their wounded, who had been left entirely in the hands of the Germans, and of the few volunteer French and foreign ambulances that had been able to get to the battle-fields. Nay, even when the army was in a friendly country, or victorious in a hostile one, the Intendance had been unable to meet even trifling demands, when of an unexpected kind. For example, the Emperor Napoleon III., at the outset of the Italian campaign of 1859, decreed that the baggage of the officers should be carried for them by the Intendance. This could only be done by taking the cattle for that purpose, which were attached to the hospital field waggons. It was therefore not surprising that a few days later than the date of this decree, they learnt that for four days after the battle of Montebello, May 20, 1859, 800 wounded were fed entirely by the charity of the inhabitants, the Intendance having failed to bring supplies and surgical necessities of all kinds. In short, had the French been fighting in a thinly-inhabited or hostile country, their loss from sickness, even great as it was, 193,186 men having been sent to hospital during the short stay of the French army in Italy, would have been largely increased. But far more disastrous than this was the condition of the English army in the beginning of the American war, and of the Americans in the beginning of their last war. The English army landed in the Crimea with a means of transport for the sick of one pony per regiment, and ten canvas stretchers; yet the principal medical officer of the Crimean army stated in evidence before the sanitary commission that he had before the campaign asked for 42 waggons, 336 canvas stretchers, and 672 men for his hospital corps. He received in return three waggons, without harness, horses, or drivers. In consequence of this neglect our army was delayed two days after the battle of the Alma, collecting and carrying the wounded down to the shore, and many lives would have been lost had not the French lent their litters and mules to transmit our sick and wounded to the shore, where the crews of the men-of-war conveyed them to the hospital ships. Again, after the battle of Inkerman, the French lent the English 500 mules to bring in the wounded, and to their aid the English owed it that the wounded English were on that occasion in bed and attended to by six o'clock of the evening of the battle. But the want of a pre-arranged system of transport and machinery for receiving the sick and wounded was most grievously felt in the early battles of the American war. Mr. Hammond, afterwards the American surgeon-general, writing eight days after the battle of Bull's Run, told his superiors that 600 wounded remained on the battle-field, where many poor fellows had already died of starvation. Again, Dr. Agnew, a member of the American Sanatory Commission, estimated that 500 lives were lost after the battle of Antietam, Sept. 17, 1862, for want of proper transport; also after the battle of Manassas, Sept. 7, 1862, 2,000 wounded lay from Saturday to Wednesday on the field without food or water; the surgeons even were starving with their wretched patients. The news of these and similar horrible mischances acted upon the Americans of the Northern States as thoroughly as the news of the Crimean disasters acted upon Englishmen. A volunteer association was formed by the Government, endowed with abundant means for the succour of their sick and wounded soldiers from the contributions of all classes of their fellow countrymen. From the foundation of this leading volunteer association and its satellites, order and plenty were quickly provided for the soldiers and the sick and wounded. The volunteer aid and transport was so perfectly organised that on many occasions, notably on that of the battle of Fredericksburg, Dec. 13, 1862, the carts and agents of the volunteer aid societies were in the field of battle under fire several hours before the ambulance carts of the regular forces reached the scene of action. These volunteers carried off the wounded as they fell to hospital tents, where their injuries were dressed and their wants were supplied. Again at Gettysburg, in July, 1863, one of the battles which decided the war, where 20,000 Federals fell in the three days of the battle, and at least as many Confederates, the agents of the Sanatory Commission were again so close to the moving columns with their supplies and assistants, that by the day after the fighting ended, every wounded man was in hospital and his clothes changed. The transport and aid of the sick and wounded was developed to a higher perfection by the Americans in their war than by any other nation. In the present war many of their expedients had been copied, notably that of the arrangements of hospitals for reception of the wounded away from the scene of war, and again with regard to the hospital trains, &c., which formed part of the means of transport, which he would describe. The German system of transport was two-fold—

that organised by the military department, and the volunteer transport, which, though recognised and aided by Government, was for its funds entirely dependent upon the contributions of individuals. With regard to the military system of transport, each army corps was considered a complete army, and was supplied with equipments of every kind to enable it to act independently or in concert with other army corps, as might be advisable. Therefore each army corps had its medical staff of twenty head-surgeons, with proper proportion of assistants, dressers, carriers for the wounded, drivers, horses, litters, stores, waggons, some to convey the wounded, others to convey surgical stores, water, &c. The wounded received attention to their most urgent wants without delay, for each soldier carried on his person a bandage and a piece of lint, which the sick bearers were taught to apply, as well as put in force means of stopping loss of blood should that be necessary, before the wounded man was raised from the ground. The sick bearers were likewise instructed in the best way of carrying the man according to the nature of his wound. With these precautions the wounded were taken to the surgeon, who was close to the scene of action; he examined the wound, applied splints or what dressing was necessary to enable the man to reach the field hospital, and inscribed on a piece of paper provided for that purpose, the nature of the injury and what had been done to relieve it; thus when the man reached hospital needless examination was saved. All these officials were, in time of peace, carefully drilled in their duties, and had as their sole charge the collection and attendance of the wounded in battle, or the sick who fell out in the march. Thus the combatants not only fought with better heart, knowing that if disabled a body of skilled persons would come at once to their rescue, but they had no excuse to leave their ranks at the critical moment of a fight to carry a wounded comrade to the rear. The wounded or sick being safely disposed of in the field hospital, the next step was to restore them to such a condition that they could be despatched to the permanent hospitals in Germany which were ready to receive them. This was also most advisable, because the field hospitals were rarely, if ever, supplied with the best means of repairing injuries, nor were they salubrious hospitals. It was also necessary to clear out these primary hospitals to make room for fresh cases constantly coming from the front. Indeed, the heavy slaughter of the recent battles was far greater than the field hospitals could meet, and thus the neighbourhoods of the battles had been crowded with wounded and dying in a condition almost as bad as if no provision whatever had been made beforehand. Again, the necessities of the campaign required the staff of surgeons, with their assistants, to leave their wounded and follow the marching columns to be ready for the next engagement. When all was ready the patients were fed, the wounds were dressed, and their wants supplied as well as the resources of the field ambulance they were about to quit would allow; and they were placed too often in carts of the rudest description, in which they travelled, whatever might be the weather, to the railway station. Here a corps of the volunteer assso-ciation was ready to receive them, to lift each man from his waggon, to carry him to the sheds were the surgeons and dressers quickly changed his dressings—often sorely in need of it. In this way enormous numbers of wounded and sick had reached their Fatherland. Besides railway hospitals, sixteen trains of the Rhine steamboats had been fitted up as hospitals, and had conveyed many thousands down the river to cities on its banks in the easiet manner possible. The Lecturer having alluded to other organisations, proceeded to say that the Crimean struggle was the occasion for the noble efforts of this country, and the generous devotion of Miss Nightingale, but no organised society sprung up in that national crisis, and the need for volunteer aid having passed away the nation no longer interested itself in the matter. In the late struggle in the United States, a volunteer aid association—the American Sanatory Commission—grew up, which had a career of the utmost success. In the three years of its existence it collected no less than two and three-quarter millions sterling, and saved, it was said, 100,000 lives. The progress of surgery during the last twenty-five years had not been without effect in modifying the treatment of injuries received in warfare. During that period most important changes in the art and practice of surgery had been established. The general use of anæsthetics was perhaps the most striking change. When the Crimean war commenced, the opinion of military surgeons was divided on the expediency of using it in very severe injuries, it being supposed by some that the chloroform diminished the chances of recovery when the patient was prostrated by the shock of a severe injury; while, on the other hand, the sharp agency of the amputating knife was deemed useful to rouse the sufferer from his exhausted condition. This belief was rapidly exploded, and in the English camp at least the use of chloroform became universal in all operations of any magnitude. In the present war the bounteous supplies contributed by charitable persons had also enabled the use of chloroform to be very general, and the cases where it was not used were very few. The Lecturer gave some practical advice in reference to overcrowding in hospitals, and spoke in high terms of praise of the improvement which the English Government had made in this respect since the Crimean war. Addressing the younger students, he expressed a hope that by attention to work they would succeed in obtaining a prosperous career.

ST. GEORGE'S HOSPITAL.

The Introductory Lecture at this hospital was delivered by Mr. B. E. Brodhurst, F.R.C.S. Having offered a hearty welcome to those who were entering upon their studies, and to those who had returned to commence another session of earnest work, he congratulated the first, not only that their time had fallen so auspiciously as at the present moment, when great and important and most advantageous changes were taking place in the profession, but that they had selected St. George's Hospital as the place where their student life should be passed. He had no hesitation in saying that no hospital and medical school in this country could offer the student so many and great advantages as St. George's did at the present moment, and he said it the more freely not having himself been a student at St. George's Hospital. Not only were there great advantages of which they would partake, but they would become part of a body, he might say, to which belonged some of the names most famous in medical science, such as Cheselden, Baillie, Heberden, John Hunter, Cæsar Hawkins, Everard Home, Robert Keate, Benjamin Brodie, Frederick Chambers, Thomas Young, George Babington, James Hope, Robert Lee, besides a host of others whom he would not then mention, but who would soon become familiar to them as household words. Great changes were taking place in the medical profession. A medical bill was introduced during the last session of Parliament by the Government, which, having passed through the House of Lords, was subsequently withdrawn in the House of Commons that a new and amended bill might be introduced during the next session. This bill would require that every medical practitioner should obtain a licence to practise both in medicine and surgery. Thus a new qualification would be required. At the present time there were no fewer than 19 licensing bodies for the profession in the United Kingdom. Some of them conferred the licence to practise after very severe examinations, and again, there were others by whom a licence was conferred without examination. But what could the public know of the relative value of these several licences? It was known that the candidate had obtained a licence to practise, but it was not known what test had been applied to ascertain the amount of his knowledge, and whether the licence had been obtained in London, Oxford, Cambridge, Edinburgh, Dublin, Lambeth, or elsewhere. It was alone known that a qualification had been obtained, but it was not known what were the respective merits of these various diplomas. Further it was found that a certain number of students were educated in one division of the kingdom, and that they obtained their qualification in another division. This happened especially in the English and the Irish schools. It was obviously unfair that the same privileges should be extended to the idle as to the diligent student—that he who fitted himself only to pass an inferior examination should be placed by the public on a similar footing with him who had perhaps competed for and gained honours in the highest examination. It was the object of the Bill he had referred to to compel every student to obtain a licence in medicine and surgery, by submitting himself to examinations which should be of a precisely similar character in each division of the

kingdom. Everyone who desired to practise under the English law must obtain this licence, for without it registration would be impossible; but no one would be allowed to practise who was not registered, and thus there would be one portal only to the profession. Having obtained his licence to practise the licentiate would proceed to accumulate honours, or he might remain content with his licence. One thing alone would be made imperative, namely, the licence to practise. This would enable the holder to compete for Government appointments, or to enter upon private practice. The examination for the licence would be a severe test of knowledge, and would include, after an examination in common preliminary education had been passed, chemistry, physics, anatomy, physiology, materia medica, medical and surgical anatomy, pathology, state medicine, and the several departments of practice. In quoting the example of the First Napoleon, he reminded every student that by dint of hard work he might do what Napoleon did for himself. It was not genius that was required to insure success so much as honest hard work, such constant and continued work as left the subject indelibly stamped upon the mind—unalterably possessed by its owner. He advised those who had determined to throw in their lot with the medical profession to pursue their calling with brave and earnest hearts for the more difficult the task the more noble it would be to overcome it.

CHARING-CROSS HOSPITAL.

The Introductory Address at this hospital was delivered by Mr. Henry Hancock, Vice-president of the Royal College of Surgeons, who commenced by alluding to the late Dr. Chowne in the following words:—The grave has just closed over one of the most respected members of our profession—the oldest medical officer of our hospital: the late consulting physician, Dr. Chowne. Attached to the hospital almost from its foundation he was always a painstaking, kind-hearted colleague, a firm and stedfast friend, and a high-minded honourable man. May those who hereafter may have to allude to our deaths be able conscientiously to say the same of us.

Having alluded to the war and welcomed back old students, he said to the new ones: Let me also offer a welcome to those about to enter our profession—a profession of extreme responsibility, anxious thought, and unceasing labour. Mr. Abernethy, upon a similar occasion as the present, welcomed his commencing students with "God help you all!—what will become of you?" The answer to this question depends upon yourselves, and is comprised in the single work, "Work." If you will work you will do well; but rest assured to no other class of men does the parable of the ten talents apply more directly than it does to students of medicine. If you are content to idle away your time, to fold your single talent in a napkin, depend upon it it will be taken away from you, and you will terminate your career in disappointment and disgrace.

Passing to a subject that has been fully discussed in our columns, he said, I need scarcely remind you that the present year, 1870, has been a very eventful one in the annals of medicine. Measures of a most revolutionary character have been considered and discussed, and although in abeyance at present, will in all probability be sooner or later adopted.

During the early spring the College of Physicians, the College of Surgeons, and the Society of Apothecaries, inaugurated a scheme for conjoint examination, having for its object the diminution of the number of examinations as at present required, and the substitution of a single portal of admission into the profession; the diploma of having passed this examination to confer the right of practising and registering upon the holder, as well as the right of selecting one of the three corporations of which to become a member. When this scheme was so far matured as to be almost ready for submission to the Secretary of State for confirmation, it was unceremoniously set aside by the Government, who, ignoring the corporations altogether, introduced a Medical Bill of their own, by which the several corporations were deprived of their powers of granting diplomas to practise, and all power of regulating the course of study as heretofore; in fact, transferring some 20,000 of the most thoughtful and intellectual men in her Majesty's dominions to the caprice and control of the Privy Council, or, in other words, to its irresponsible medical adviser for the time being. This Bill, which unsettled everything and satisfied no one, after being twisted and distorted to meet contending interests, has been withdrawn; but there is no doubt that important changes will take places, and it is my duty to consider how far these changes will influence your future course of study.

You, or at least the majority of those present, have already broken ground by passing what is termed the Preliminary Examination. Here again the year 1870 has proved most eventful. The last examination at the College of Surgeons was most disastrous. Of 229 who went up, only 106 passed, and 123 were deficient in the amount of knowledge required and were rejected, being thrown back in their professional studies for above six months, and subjected to no slight addition to the expense of their education. This result appeared to me so lamentable and unsatisfactory that I have taken some little pains to ascertain the cause, in the hope that, by pointing out the subjects in which these gentlemen failed, I should do good service by directing the attention of those engaged in tuition to the matter, that they might take measures that an occurrence so unfortunate, and redounding so little to their credit, should be prevented for the future. The subjects examined upon are arranged in two classes: compulsory and optional. The compulsory class embraces Reading, Dictation, Arithmetic, Geography, Grammar and Composition, History, Euclid, Algebra, and Latin. Of the 123 who failed, 71 failed in Algebra; 52 in Latin; 31 in Euclid; 21 in History; 17 in Grammar and Composition; 12 in Arithmetic; 6 in Geography; 1 in Dictation; 1 in Reading. The class of optional subjects comprises: Greek, French, Mechanics, Chemistry, Botany, Zoology, and German. In Greek, 2 failed out of 69; in French, 15 out of 84; in Mechanics, 11 out of 28. In Chemistry, Botany, Zoology, and German, there were no rejections; although 93 went in for Chemistry, 5 for Botany and Zoology, and 5 for German. Undoubtedly, several among those unfortunates may have been idle and neglectful; but, on the other hand, when we find so large a proportion as 54 per cent. rejected, we can scarcely arrive at any other conclusion than that the existing system of education in many parts of the country is below the requirements of the age, and that in neglecting to make themselves acquainted with what is required from pupils at these examinations, teachers are guilty of dereliction of duty, and of great injustice to those entrusted to their care.

As may readily be imagined, every attempt to raise the standard of education has been followed by a diminution in the number of medical students, and, consequently, of medical practitioners. From the year 1831 there has been a regular increase in the population of England and Wales, say in round numbers, of 2,000,000 every ten years. Thus, in the ten years from 1831 to 1841, the increase was 1,983,000; from 1841 to 1851, 2,019,000; from 1851 to 1861, 2,174,000; and it will not be unfair to calculate a similar proportion of increase for the ten years between 1861—1871. It may not be uninteresting to inquire how far the profession of surgery has kept pace with this increase; and for this purpose I propose to take the average number of diplomas issued by the College of Surgeons during each of these decades. To begin with the decade 1831—1841, the average was 520 per annum. In the next, or between 1841—1851, although the population had increased 2,000,000, the average of diplomas issued by the College fell from 520 to 430 per annum. In the next decade, between 1851—1861, the average rose from 430 to 501; whilst in the decade about to close it has fallen as low as 371. So that, notwithstanding an increase in the population of 8,000,000, and taking the College of Surgeons as the standard, the average of men entering our profession is 149, or nearly one-third less per annum at the present time than it was forty years ago. Undoubtedly the development of railroads, the still greater development of engineering in all its branches, and the state of the mercantile world during this period, have greatly influenced this result; but there is no denying that it has also been influenced in a great measure by the higher standard of education required by the examining bodies.

The lecturer then passed in review the subject of study that first engage the student—referred to the improvements lately made at the hospital, and the changes in the school—and closed by urging all so to work as to add lustre to *Alma Mater*.

MIDDLESEX HOSPITAL.

Dr. Cayley delivered the Introductory Address at this hospital. He stated that Mr. Paget, of St. Bartholomew's Hospital, had lately published some statistics which might be taken to afford a fair general average of medical students. He had been enabled to pursue the career of one thousand medical students, and the results thus brought out were both interesting and instructive. In the first place, ninety-six, or nearly ten per cent., left the profession. With those they had nothing further to do; but it might serve to remind them that if so many retired from it on the threshold, the task they had taken in hand who had remained in the profession was no light one. Next, 128 died either during their pupilage or shortly after commencing practice, twenty-five of whom succumbed to diseases incurred in the discharge of their duties. The next class on the list was one still more gloomy, for it was found that fifty-six out of the thousand entirely failed, some from unavoidable misfortunes, most, it was to be feared, from their own misconduct. Turning to the brighter side, they found that twenty-three achieved distinguished success, and sixty-six considerable success. These, he need hardly say, were very large proportions, for distinguished success could never be the lot of more than very few. Those who achieved a fair amount of success included 507, or upwards of half the whole number; and this degree of success was probably in the power of almost all to attain to. Lastly, they found that 124 attained to a very limited success. The lecturer then passed on to consider the nature of the profession upon which the students were about to enter, and strongly urged that a knowledge of physics and chemistry was an essential part of the science of medicine. In these respects a great reform had doubtless now begun, and it would not be long before that would cease to be considered a finished liberal education which left a man ignorant of the nature of the air which he breathed, of the water he drank, of the food he ate, of the earth on which he trod, and of the structure and functions of his own body. Though placing a great stress upon the importance of studying subjects practically, nothing was farther from his intention than to underrate the value of systematic lectures. Unfortunately, there was always a small minority of students who were incapable of raising their minds to any higher idea of their profession than as a means of earning a livelihood with as little trouble as might be, and who therefore would confine their efforts to obtaining a minimum of the necessary qualifications, or whose wills and normal purposes were too feeble to resist any passing gratification for the sake of those higher objects which were alone worth striving for, and who, as they were insensible to higher motives, could only be induced to work by the low one of fear—who studied, in fact, a liberal profession in the spirit of slaves. Dr. Cayley proceeded to refer to the modern objectors against the utility of the medical art, and who had arisen chiefly in their own ranks. These urged that apart from mere surgical or mechanical appliances the power of controlling disease by the use of remedies was almost null, and that by attempting to interfere they really did more harm than good. Hence had arisen what was called the expectant school of medicine, in which the physician looked on as an intelligent spectator at the contest between the disease and the constitution of the patient, but without departing from a position of benevolent neutrality. He concluded by counselling the students that when their period of training in the hospital was over they might indeed be well armed and equipped for the contest with disease and death.

ST. MARY'S HOSPITAL.

Mr. Gascoyen delivered the Introductory Address, taking for his subject the present system of Medical Education. Whilst admitting that great improvements had been made in the course of medical instruction, and in the examinations, during the last few years, the lecturer thought that much more was needed in both before they were made as perfect as they might easily be. He congratulated the Profession that at last there seemed to be a prospect of obtaining a similar course of instruction, an equal examination, and an uniform fee, for students throughout the three divisions of the Kingdom; and stated his opinion that examining boards chosen from the present licensing bodies, to conduct examinations and grant diplomas, would be preferable to a board appointed by the Privy Council. Although strongly advocating this change, he believed that many of the present examinations were fairly conducted, and were not only fully up to the capacity of those examined, but even beyond them; and that the students, as at present prepared, were incapable of passing a higher test of proficiency. He thought that the students as a body were not so well prepared for their examinations, or for their exigencies of practice, as formerly, and attributed this to three main causes.

The *first* of these was the deficient general education of so many of the students; and the habit, which was acquired at school, of neglecting elementary instruction, for the sake of varied and superficial attainments, created an indisposition to master the ground work of medical science, and operated most injuriously upon the students.

The *second* reason was the very insufficient time allotted to the study of medicine, whilst the number of collateral subjects and the excessive detail crowded into this limited period, still further prevent adequate attention being paid to the most important.

The *third* reason was to be found in the scepticism in all matters medical which now pervades the Profession, and which questions the treatment of the student as it does that of the patient. It has unsettled the student by questioning the utility of everything connected with our present system of teaching, and caused him to slacken in his work. Whilst casting doubt upon the curative value of drugs, he has come to regard the medicinal treatment of patients as a secondary matter, and to act as if fully impressed with the truth of the doctrine, that all will come right with waiting. It has brought about a state of mind similar to that expressed by one of Dickens's characters, that "There is nothing new, and nothing true, and it don't matter," which is anything but an incentive to work.

To meet these difficulties the lecturer proposed that the preliminary examination in arts should be made at least equal to the matriculation examination of the London University, as anything short of this would be insufficient to obtain an educational superiority on the part of the Profession. To require every student to pass an examination in chemistry, botany, comparative anatomy, and natural philosophy, before he joins a medical school; and that he be at least eighteen years of age. To demand four full years' attendance at the school and hospital, and at the expiration of these to pass one other year in active professional work as assistant to a practitioner, house surgeon at a hospital, &c., before he be allowed to register his diplomas, and practise on his own account. A clinical examination was also insisted upon as a *sine qua non*.

The waste of time, money, and energy, caused by the support of so many schools of medicine, was commented upon; and their amalgamation advocated into *two* medical colleges, where the professors should be paid such incomes as would insure the best available teaching power, and attach them permanently to their chairs; whilst the several hospitals could be used for clinical purposes as is now done.

The system of double examinations was then considered, but although acknowledged to be far superior to the former plan of single examinations, the lecturer doubted whether as yet they had been of much real service, in consequence of the tendency they have to split up the student's time into short periods, during which everything is sacrificed to those subjects in which he is about to be examined, so that when the Primary Examinations have been passed, the time remaining is far too short to gain more than a hasty shallow knowledge of disease and its treatment.

The speaker expressed his strong belief in the value of lectures, and in the importance of retaining an official curriculum as essential to the welfare of the student, his friends, and his teachers; and gave reasons why he thought the practice of requiring certificates of attendance should be continued.

The aims of medicine were briefly touched upon, and a judicious use of drugs advocated, instead of the purely expectant and stimulant treatment; and the address was concluded by offering encouragement and advice to the students, and pointing out to them certain faults which seem to be handed down from one generation to another.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

The Introductory Address at this School, was delivered by J. C. Brown, D.Sc. (London), F.C.S., lecturer on chemistry and toxicology. Having welcomed new and old students, and those who, though not students, showed by their presence that they took an interest in medical education, he referred to the practical tendency of reform in medical education, and urged the students to pay careful attention to all the systematic courses of lectures, with the view of seizing upon the principles and laws of each branch of science which they studied rather than make themselves profoundly acquainted with all the details of one particular science. Their knowledge must be acquired with a view to the cure of disease. They must not only know but act, and they must know in order that they may act. Therefore, if they had any concern for the welfare of those who would be committed to their charge, they must gain all the knowledge they could and store it up not merely for the day of examination, but for life-long use. The students were advised to aim at the highest degrees in medicine and surgery, not so much on account of the honour and position which they would bring, but rather on account of the stimulus which they gave to the acquisition of a sound and liberal education. The great facilities which the Liverpool school afforded for gaining a high class education, both in practical and theoretical subjects, were pointed out, and the improvements which had been made during the last year enumerated, The Materia Medica museum had been entirely renewed, the Library had received a large number of new books, and the Pathological museum had been increased by the transfer to it of the collection which belonged to the Liverpool Medical Institution. A catalogue had been drawn up and printed in order to facilitate reference and increase the usefulness of the museum. A new room had been built to increase the Laboratory accommodation, and new apparatus was continually being added to the chemical department. In connection with the Chair of Physiology, a Demonstrator of Practical Physiology had been appointed, and it was to be hoped that ere long a physiological laboratory would be provided. Other towns had their universities and their richly endowed schools, while in Liverpool a comparatively small body of men, with very little assistance from without, had been doing all the work of a university, so far as the facilities of medicine and science were concerned; and he though that the merchants and moneyed men in the neighbourhood should aid, with their money and their influence, in fostering an institution which would be of incalculable service, not merely to the present, but to future generations.

At the conclusion of the lecture the prizes were distributed, and in the evening, the Annual Dinner went off with its usual success.

THE MANCHESTER ROYAL SCHOOL OF MEDICINE.

The lecture introductory to the Session 1870-1 of this school was delivered to the students, on Monday week by Mr. Leo. H. Grindon, the lecturer on Botany.

Mr. Grindon, in the course of his lecture, said that the popular superstition regarding the medical man was that he was a species of conjuror, armed with an antidote to every possible form of malady, and that his province in the world's community was simply to wage war with disease. Not of this kind was the truth. His high and essential duty was to preserve things in the condition nature intended for them; to do his utmost to vindicate the grand idea of vigour; aiming, without doubt, on the lower ground, to mitigate suffering *per se*, but holding at the same time to his first and highest principle, which was, to give no opportunity for disease and suffering to enter. It was in the abiding by this great and fundamental law, preserving from within, rather than assuaging on the outside, that the men of vigour showed themselves symmetrical with nature, and to be the exponents and exemplars of all true and noble medical science. The *beau ideal* of medicine was the perfecting of vitality; so ordering the household, that was to say, that disease should find no point of entrance. That he was right in his estimate of the true design of medicine was proved by the immense change that had of late years supervened on old methods of practice. Every day was more strongly manifested the conviction of thinking men that to drench with conventional mixtures, to bombard with pills, and to drain away whole pints of the crimson sap, was really only calling upon nature to get over an additional difficulty—the difficulty imposed on her by those druggey barbarisms, and by the vampire of blood-letting; and that the true future of medicine would be found, not so much in the cure of disease, as in its prevention. They might congratulate themselves that the day had gone by when it could be said in grim pleasantry, at the close of a coroner's inquest, that the verdict, instead of being "Died by visitation of God," should have been "Died of two physicians and a surgeon." Heroic remedies would never again be heard of. Rightly regarded, there was no more a "cure" for disease, simply through the instrumentality of drugs or venesection, than there would be hope of educing a new limb, as a lizard spouted a new tail, through lubrication of the stump with a secret ointment or pomatum. He did not wish to undervalue drugs, but simply to contend that if every drug in the pharmacopœia were taken away the medical man would still be powerful for good, falling back, perforce, on man's primitive relations with benignant nature, and sustaining the glorious vigour which was his birthright, through the medium of nature's own simple regimen. How exhilarating it would be to hear the townsfolk shouting less for the ballot, or for female suffrage, according as their fancy led them, and more for laws that, through the agency of the doctor, should give them unbroken health. If he mistook not, nature was nowadays helped to regain her sovereignty not unfrequently through the adoption of formulas of treatment quite independent of the use of what was popularly styled "medicine." The specific action of drugs, moreover, was better understood than formerly, and the tendency now was to simple prescriptions, as opposed to their by-gone composite character.

The lecturer than maintained the right of botany to a place in the medical curriculum, objecting to Professor Huxley's view on this point, and proceeded to advocate the claims of science generally to the attention of the Profession, and to recognition by the State—concluding as follows:—

They could hardly hope to see the day when science would be legitimately endowed, or rather when its ancient and original endowment would be honourably and honestly revived. Science in its early days was amply endowed. That was when science and religion were united in the same persons, the endowments being given to the holders because they were men of science or learning as much as teachers of religion. When science found another home, the endowments remained with religion, though originally intended for both. Had the two things existed primarily in separate establishments, no doubt there would have been separate endowments; and it would mark an era in the history of justice and common sense when science was restored to her ancient footing as to deserts. When that millennium arrived, the medical man's title to a share would be recognized, for medicine was in itself a science, and, though not one of the exact sciences, it partook of the improved complexion of science in general.—To the student this should be specially encouraging. From being the most conservative of sciences medicine, indeed, had become the most liberal. The time was when it consisted in little more than blind reverence for the traditions of the past. Now they had exchanged speculation for observation, rising from facts to principles, instead of looking for facts to substantiate dogmas laid down in the dark. In conclusion, he would strongly recommend the students to qualify themselves by diligent study for the positions which they hoped to fill. He hoped they would sustain the dignity of their profession. Rendering services to mankind was the justifying cause of all dignified position. In whatever else they might imperfectly succeed, that, at least, was their own.

PROGRESS OF PHYSICAL SCIENCE.

At Owen's College, Manchester, Dr. Balfour Stewart, the newly appointed Professor of Natural Philosophy, opened the session with an Inaugural Address, "On the Recent Developments of Physical Science." He contended that the world was undergoing a physical deterioration of a remarkable character. A process of degradation was at work which apparently had no limit, and which would only end when the universe, or at least our part of it, had become entirely unfit as a residence for organised beings. The sun, as many familiar illustrations showed, was the great source of our material well-being. It prepared the food which supplied our frames with energy, as well as with that delicately-constructed tissue which was essential to animated existence. But the sun was

only a great fire, and it was apparently a fire that had long since ceased to be fed. Indeed, the solar orb, with all its wealth of energy, yet resembled a man whose expenditure exceeded his income. There was only one issue, unless we could see an end to the process of waste; but we failed with our present knowledge to see any prospect of such a change. We were thus lead to contemplate the degradation of the universe, or, at least, of our own part of it, ending in a total absence of all useful energy and of all life. These were issues upon which the man of science might speculate with advantage; but it should always be borne in mind that our present intellectual stand-point was very low, and our knowledge of nature's laws very incomplete. Scarcely less important than our increased knowledge of late concerning the laws of nature was the advance we had made in our knowledge of the great bodies of nature—in which branch investigations had been greatly aided during the last ten years by the use of the spectroscope. Descending to our own earth, there was some reason to suppose that we were knit to our luminary, and possibly through him to the other members of our system, by some other bond besides that usually recognised, General Sir E. Sabine appeared to have proved that disturbances of the earth's magnetism took place most frequently in those years in which there were most sun spots. This was confirmed by the experience of the present year, during which we had a great number of sun spots, and frequent and large disturbances of the earth's magnetism—accompanied ten days ago, as usual, by bright appearances of aurora borealis. In connection with the meteorology of our globe, it had not yet been traced whether the earth's climate and atmosphere were influenced in any way by the changes taking place in the atmosphere of the sun; but this connection, important though the question was, had hardly yet been sought for in a proper manner. Recent observations discussed by Mr. Baxendale led us to think there might be some connection between the daily changes in the earth's magnetism and the daily motions of the air. Coupling this with the fact that the frequency of terrestrial magnetic disturbances would appear to be connected with the appearance of sun spots, we were led to contemplate at least the possibility of some connection between meteorology and sun spots. If these remarks were of any value, they tended to indicate the probable union of the various branches of observational inquiry into one great cosmical research, and pointed to the wisdom of a very close union between the workers in the cognate fields of meteorology, terrestial magnetism, and celestial physics. Unfortunately, this prospect was delayed somewhat by our extremely limited knowledge of the various components of the earth's atmosphere—by the backward state of physical meteorology. They were all aware that at the present moment a Royal Commission was inquiring as to the relation between science and the State; and perhaps, therefore, they would permit him the opportunity of stating his views as to the manner in which this very necessary assistance might best be given. He thought that those branches of science which demand for their extension experiments not requiring very great time might be furthered with much advantage in institutions such as Owen's College. He believed it to be advantageous to bring the highest class of physical teaching into contact with research. If Goverment were disposed to grant pecuniary aid to such researches, an extension of the allowance made annually to the Government Grant Committee of the Royal Society would appear to be a very legitimate way of accomplishing this object.

THE ROYAL VETERINARY COLLEGE.

Professor Tuson delivered the Inaugural Address. He remarked that the institution had been established for more than two-thirds of a century, but during the greater portion of that period no proof was required of the possession of a scholastic education by those desirous of becoming its pupils. Five years ago the governors, inspired by the educational spirit of the times, passed a regulation by which it was rendered compulsory for everyone, prior to being admitted on the roll of students, to give evidence of their proficiency in dictation, reading aloud, and the first four rules of arithmetic. For five years this examination had been conducted by the professors, and so satisfied had they been of the good effects resulting from the new regulation, that it had recently been suggested to the governors that it would be desirable to gradually increase the extent and stringency of the matriculation examination, and that the responsibility of conducting it should be transferred from the professors to the members of some independent body. Such suggestions had been adopted, and it was now the pleasure and satisfaction of his colleagues and himself to know that previous to the opening of the present session the matriculation examination had been, and that it henceforth would be, entrusted to the College of Preceptors.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

REPORT AND DISCUSSION ON THE UTILIZATION OF SEWAGE.

A report, which was a very elaborate history of the experiments of the committee, had already been submitted to the mechanical section, where the subject was discussed from an engineering point of view, and it was understood that in section B the question would be treated scientifically.

Professor Corfield then gave a sketch of the contents of a work to be issued by the committee, and which is intended to explain the present position of the sewage question. The subject was treated under the two heads of treatment and utilization, by treatment being meant the removal of all refuse matter from human habitations. In compiling the work he had followed a kind of natural history order, beginning with the simplest methods that had been proposed for the treatment of refuse matter. The first chapter was on the early systems of middens and cesspools. This was followed by a chapter on the sanitary aspects of the question. The third chapter was on improved midden heaps and cesspools, and then the dry earth system was discussed. The information in these chapters was mainly derived from the report of the Government medical officer and the Indian report on the earth closet system. Then there was a chapter on the public health aspect of the sewage question, and a chapter on the different methods of precipitation. He had come to the natural conclusion that it was impossible to precipitate effectually, the only process which seemed to have any *raison d'etre* at all was Blythe's. The work then dealt with the treatment of sewage by filtration and irrigation, and lastly, the question of irrigation was viewed from a sanitary point of view. On the last point it was shown that sewage farms could be made a nuisance, but that they need not be a nuisance, especially if the solid matters were separated and mixed with town ashes or street sweepings. It was shown conclusively that where sewage farming had been carried on worst, viz., at Milan, where the farms were stagnant marshes, intermittent fevers were caused; but it was equally clearly shown that the fevers were caused by the irrigation of land with water containing no sewage whatever. There was nothing to show that the water containing sewage was more favourable to the development of fever than water without it. Where there were not marshes there was no evidence of intermittent fevers. With regard to typhoid fever and cholera the evidence even from the marsh farms was that when cholera and fever had been rampant in Milan, there had not been a single case on the farms. Professor Corfield then read a report on Dr. Russell's analysis of a number of samples of London sewage, the general results of which were to show that the proportion of carbonic acid gas was ten times the amount contained in ordinary air; that there was no sulphuretted hydrogen; and, with regard to ammonia and albuminoid ammonia, four gallons of the air contained only a slight trace of ammonia. The conclusion was that the air was much purer than could have been supposed, taken, as the specimens were, in the month of August. The Professor then described an experiment which the committee had undertaken, with a view to test whether endozoic diseases could be propagated by sewage. The committee purchased three families of guinea-pigs, each of four members. One member of each family was examined, and it was reported that no sign of the disease was to be found. The three surviving members of one family were now being fed with sewage produce only, one with unsewage produce, and one with unsewage produce known to contain larvæ. When the experiment was completed the animals would be killed and examined, and the committee intended to prosecute experiments of this kind on a larger scale.

Mr. GRANTHAM said that several roots and grasses which had been manured in this way were also submitted to Dr. Cook for examination, and he found nothing which was at all injurious.

The PRESIDENT congratulated the section on the attention they had given to this important subject. They had now for the first time a committee formed of engineers and chemists to work out the subject scientifically, and he thought that in the short time they had been at work the results were most interesting, and justified them in looking forward next year to a still further enumeration of most important results.

Dr. PAUL protested against the idea that the report was issued with the authority of the association, or even of the whole of the committee. Three out of the six members of the committee appointed last year had taken no part in its production. For himself, he disclaimed all responsibility, and he believed he represented the feeling of half the committee. He entirely disapproved of the course taven by the committee in the inquiry. It was inconsistent, first, with the engagements and pledges into which they voluntarily entered when they applied to various towns for grants of money for the inquiry, and in the next place it did not promise any kind of authoritative result. (Applause.)

Mr. DAVID FORBES, F.R.S, then read a paper on "The Utilisation of Sewage, with special reference to a phosphate process." The professor, after describing the processes, mechanical and chemical, by which sewage has been dealt with, alluded to irrigation, and said that while fully admitting the advantage of sewage irrigation applied to certain localities, he believed they would agree as to the importance of searching out for some chemical process by which the sewage might be at once deodorised to such an extent that the liquid could be run off into rivers or the sea without danger to health, and thus obviate the necessity of erecting costly works for its utilisation at a distance. In 1845 works were erected in Edinburgh in which the sewage was treated with lime. This had proved a complete failure both in a sanitary and chemical point of view. The next system was the treatment of sewage with lime and chloride of iron. That was an improvement, but it had also failed. The next system was founded on the principle that alum had a very purifying effect upon water from the tendency of alumina and its compounds to combine with organic matter. Then came the A B C process, which was effected by an extraordinary combination of substances, consisting of clay, alum, and blood; but this also the River Pollution Commissioners had declared to have failed in the purification of the water. Mr. Forbes then called attention to what he said was an entirely novel process, brought forward by Dr. Price and himself. It was founded on the fact that certain mineral phosphates, especially those containing alumina, eagerly combine with the organic matter of sewage. A solution of the phosphates and milk of lime was added to the sewage, and the ammonia was precipitated in the shape of a double phosphate. Mr. Forbes illustrated the process with a bottle of Liverpool sewage, and the result was that in a few minutes the precipitate was seen falling to the bottom, leaving the water perfectly clear and free from smell. In another experiment he added ink to the sewage, which gave it a black colour, but the colouring matter was at once removed by the addition of the solution of phosphates and the lime water. In fact, he contended that the sewage water so purified could be drunk without offence, and he caused some amusement by drinking a wine-glass of the water clarified from the London sewage. Before recommending the process he said they must be prepared to answer two questions—first, whether the water was sufficiently pure to be permitted to flow into rivers; and, secondly, whether the valuable constituents of the sewage had been precipitated. He proceeded to show that the answers to both questions were satisfactory, and in conclusion he expressed an opinion that his process would be extremely valuable in such localities as were found unsuitable for sewage irrigation.

The PRESIDENT thought it quite likely that the system would succeed in those cases in which irrigation could not be successfully applied. They required all the help both of engineers and chemists before they could hope for a solution of this most difficult question.

Mr. HOPE trusted the scheme would succeed. The difficulties in the past had arisen from the fact that chemists had too much disregarded the engineers' point of view, and engineers had disregarded the chemists' point of view.

Dr. VOELCKER thought that both chemists and engineers were apt to take no notice of the poor agriculturist who had to use his valuable material. Valuable it was when in its right place, but he was afraid that in many cases sewage was a great nuisance, which ought to be converted by every available means into a harmless substance. The question was, What were those means? His opinion was that the land was the only proper medium which would effect, speaking practically, the complete deodorisation of sewage. But that land ought to be in a condition fit to receive the sewage, one essential condition being that the sewage should not go over the land but through it. It was in the soil itself that the process of purification, oxidation, and the removal of what was really useful in the liquid must take place. Unfortunately, there were few soils in a condition at present to receive sewage without allowing it to flow over the land. Of that nature were badly drained soils, particularly clay soils. Hence there were in many cases great difficulties. If all the land of England were in a high state of cultivation, he was sure we could do with one-third or one-fourth the quantity of land we must now take in most places to effect the complete purification of sewage. In some localities the difficulties of effecting the purification of sewage on account of the impenetrability of the stiff clay soils was very great, so much so, that he believed means would have to be adopted before the sewage was put on the land to remove, at any rate, the suspended matters, which were a great source of inconvenience and caused disagreeable smells. We had not looked sufficiently in the face all the inconvenience which this suspended matter in sewage presented. In the case of light, gravelly soils the inconvenience was not so great, but in dealing with soils the particles of which in wet weather ran together then the removal of the suspended matter was absolutely necessary. Something he was perfectly sure would have to be done in most cases, or else a nuisance would again be created on the land, and we would not gain that practical benefit for which the farmer had been looking for so long. He cautioned corporations in dealing with this question against looking too much for remuneration in dealing with sewage, and thought they should take an interest in the question apart altogether from its pecuniary aspect. As a means of separating the suspended matter from the sewage, he was in favour of artificially prepared filter beds.

Dr. GILBERT pointed out some sources of error in calculating the results of sewage applied to land. It was sometimes forgotten that the sewage had to be applied all the year, when available, as well as when not, and the question of purification must be considered when crops did not grow as well when they did. He agreed with the opinion expressed by Professor Williamson in another section, that no process was yet known by which the offensive matter could be removed from sewage and leave manure which would pay the cost of production. The result of ten years' close consideration of this subject led him more and more to the conclusion that with large populations water was the only mode of cleansing, and if they had water, irrigation was the only mode of utilisation and cleansing.

In the course of the discussion which followed an opinion was expressed that the endozoa egg, even if deposited in the root of a plant, could not be found in the leaves.

Professor HUXLEY remarked that there was necessity for great caution in drawing conclusions upon this subject. It would certainly be an extraordinary circumstance if the egg could creep from roots to foliage, but what had not been taken into account was the extraordinary changes of form which the insects which lived in cattle were capable of undergoing. It was not simply the egg that had to be dealt with, but the egg plus a number of stages and conditions which made it capable of living in different circumstances from the parasitic worm. In illustration of this he mentioned the disease called the "staggers" in sheep. These were caused by the presence of a large endozoon developed in the brain of the sheep, which became a bladder-like substance, and ultimately caused death by apoplexy. The history of that creature was one of the most astonishing in the world. The abominable animal existed in other conditions. If they took the brain of a sheep which had died of this disease and fed a dog with it, it would eat it with great rapidity and delight, not being aware of the percentage he had to pay. (Laughter.) The dog took in the bladder-worm, which in his stomach became metamorphosed—it became a tapeworm, developed rapidly and gave rise to joints containing the ova of the creature, which it never would do in the brain of the sheep, and eventually it was passed out with the refuse of the dog, and scattered upon the pastures on which the sheep were feeding. Some of the insects would be dispersed, but some would remain, and it was

certain that by one or other of these channels the ova got back to the sheep. They then took a different course, and bored through the alimentary canal, were carried to the brain by the circulation of the blood, and there give rise to the staggers. So that it was found the best way of keeping the staggers under was to look very sharp after the dogs.

Alderman RUMNEY, of Manchester, said he thought the committee had shown a bias to the wet system, and had not done justice to the dry system. He thought this unfair to those towns that had subscribed in the expectation that the committee would obtain all the information they could with regard to both systems. No allusion had been made to Hull, where the dry system had most successfully worked, so much so that the death-rate had decreased from thirty-three to twenty-two per thousand.

One or two other speakers also expressed an opinion that the committee had too much confined their investigations to the wet system, and the speakers expressed a wish that more members should be added to the committee.

The PRESIDENT said it appeared to him that while the irrigation question was one of chemistry the dry system was not, or, at any rate, it required less investigation. Whether one or the other came to be generally employed, it was important for chemists to have a clear idea of irrigation. That appeared to him the reason why the committee had given their attention so much to this subject.

This closed the discussion, but a general wish was expressed that it should be continued, and the President remarked that the subject would come up again in the Statistical Section.

There was not time for the reading of any of the other papers set down, and the majority of them were left over until to-day. Mr. E. C. Stanford stated briefly the result of his experiments on the retention of nitrogen in charcoal. Dr. Bischoff exhibited a new filter he has invented for the purification of potable waters, and Mr. James Hargrave explained his mode of separating phosphoric acid from iron furnace cinder.

The section then adjourned.

19TH SEPTEMBER, 1870.

MR. ALFRED HAVILAND read a paper on

A PROPOSED RE-ARRANGEMENT OF THE REGISTRATION DISTRICTS OF ENGLAND AND WALES, FOR THE PURPOSE OF FACILITATING SCIENTIFIC INQUIRY.

The author commenced his discourse by stating that the registration districts of England and Wales were formed for the general purposes of the Poor-law Administration, and therefore it could not be expected that they were planned with any view of assisting science; they had, however, done so when in their present crude and artificial form, and it was generally believed among scientific men that if their boundaries were determined on a natural system, the advantages to meteorology, climatology, and other branches of science would be incalculable, and the expense and confusion of constant alterations avoided. Messrs. Keith Johnston had lately been much engaged by him in the rectification and completion of the registration maps of England and Wales, for the purpose of insuring extreme accuracy in his basis map of the geographical distribution of disease in England and Wales. This had involved him in a considerable extra outlay, but through the recommendation of the Registrar-General, the Treasury, seeing the necessity of the work, had expressed their approval of a grant being paid to Mr. Haviland for the extra expenses incurred. He urged that the artificial system adopted in defining the boundaries of the registration districts had been the cause of all this extra work and expense, and that it had nothing whatever to recommend its continuance; on the contrary, it was the fruitful source of repeated alterations, and would continue to be so whilst it was persevered in. On the other hand, the author showed that were a natural system substituted for the present one, and our country divided into districts regulated by its watershed and river system, we should then have in every district a focus of scientific inquiry, whether it be as to the rainfall, temperature, prevalence or strength of winds, agricultural statistics, the produce of our fields, our mines, or our rivers, or for the purpose of registering the occupations, the diseases or the deaths of the people. Moreover, such a system would form the best basis map for every future census, and being once established upon a well considered and natural plan, would do away with the necessity of those eternal alterations which are now year by year going on, to the utter confusion of the scientific student. In France the watershed system is adopted in defining and naming the departments, it is vastly superior to our own, and although its deficiencies are numerous, yet they will act as beacons to us. The author was well aware that such a revolution could not be accomplished under ten years, therefore he urged the necessity of commencing it at once. Should the natural system be adopted before 1881, it would be ready for the census of that year, by which time the Registrar-General will have completed two more decades of mortuary records under the present system, and, with the one (1851-60) which Mr. Haviland had geographised, will form a most important foundation for all future enquiry. Mr. Haviland proposed that a committee should be formed to take the whole matter into consideration, and report thereon, first to the British Association, and then to Her Majesty's Government.

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the MEDICAL PRESS.)

No. VIII.

THE CRAIGENTINNY SEWAGE MEADOWS, NEAR EDINBURGH.

THESE meadows have long been notorious, as the most filthy and offensive plots of cultivated ground in Great Britain. They are also remarkable for their so-called extreme fertility in producing the largest produce of a coarse, rank, and washy grass, which, like brewer's grains, is only fit for the food of milch cows, pent up in the close sheds of a town dairy, where quantity and not quality of milk is the desideratum.

They are situated about two miles to the east of Edinburgh, upon the sandy shore of the Frith of Forth, and they have an area of about 250 acres. The sewage is poured upon them from an open sewer called the "*Foul Burn*," which drains a district in Edinburgh with about 80,000 inhabitants, where water-closets are not in general use. The *Burn* runs eastward and northward from the city, and passes through a small sewage farm of about thirty acres (the Lochend farm), twenty of which are in permanent grass, and the rest in Italian rye grass. The tenant of this farm takes the sewage when he likes, and he also takes as much of it as he likes, and the rest of it runs eastward in the open *Burn* to the Craigentinny meadows, and thence, if not wanted, to the sea. As it passes through the meadows it is distributed upon them in the most profuse manner, rendering the ground a swampy sewage morass; in fact, the effluent water which runs off by many channels, and trickles away to the sea-shore, is as foul as it can well be. The smell from the open *Burn* and the swampy meadow is so powerful that it is offensive to the whole neighbourhood. The soldiers at the neighbouring cavalry barracks at Piershill complain of it as a serious nuisance, and say that at times is quite sickening. Dr. Ligertwood, the surgeon of the 8th Hussars, attributes the absence of disease among the soldiers while stationed there, in 1868, to the fact that the site of the barracks is open, and well exposed to the sea breeze, which counteracts any evil influence from proximity to such fields, and thus, he says, they maintained their health "in spite" of the nuisance.

But although the quantity of sewage thus put upon the land is enormous, yet a large amount of it is still per-

mitted to flow into the sea unutilized, notwithstanding that there is plenty of land at a slightly higher level upon which it might be distributed. Looking at the fact, as set forth in the constantly reiterated statements of those who speak of the large profits of the Craigentinny farm, that from £24 to £36 an acre are realized from the use of sewage upon a barren waste, it is remarkable, at first sight, that any of the sewage should be allowed to run to waste while there is an acre of land to utilize it. The paradox, however, is easily explained, for as there is but a limited demand for Italian rye grass, which is the only crop that can be profitably cultivated, it would be folly to produce more of it than can be sold. At the time of our visit to the meadows, in 1866, there were acres upon acres of the grass rotting upon the ground, because the cattle plague had killed the cows, and the demand for such fodder had ceased. The sewage, therefore, was running away to sea by its natural channel, and the ground was almost entirely abandoned. We had great difficulty in finding the man who had charge of it, and he told us that they would gladly give the grass to anybody who would cut it and carry it away, and that during the year they had not realized above £7 an acre for even the best plots of the ground.

The soil of the meadows at the lower part is almost entirely sand, reclaimed from the sea-shore, but at higher levels it is good arable land. A little of the higher land (about eight acres) is irrigated by means of a steam pump, but as we have already said, there is no inclination to utilize any more of this land, although it is not more than ten or fifteen feet above the level of the burn, because of the limited demand for the succulent produce; the sewage, therefore, is allowed to run to waste, and the land is cultivated with ordinary manures.

It will be evident from this that the Craigentinny meadows are not examples of what *should* be done with sewage, but rather of what *can* be done with it, when all sanitary considerations are out of the question, and when, at the will of the tenant, the sewage can be utilized or not. But how would it be if there was no neighbouring sea-shore for the reception of the sewage, and the purification of it by proper irrigation were an imperative necessity? The answer is self-evident, for the rank grass would have to be sold in an overstocked market for what it would fetch.

Summary of Pharmacy.

Specially edited for the Medical Press and Circular.

By Chas. R. C. TICHBORNE, F.C.S.,

Chemist to the Apothecaries' Hall of Ireland, Corresponding Member of the Philadelphia College of Pharmacy, &c.

OINTMENT OF NITRATE OF MERCURY.

Mr. R. Rottur in the *Chicago Pharmacist* gives the following formula:—

Take of Mercury, 1½ oz.;
Nitric acid (sp. grav. 1·420), 3½ oz.;
Lard, 16½ oz.

The directions are, that the mercury should be dissolved in 900 grains of the nitric acid with the aid of heat, and that the solution should be kept gently warm so that crystallization should not take place. The lard is melted in a suitable vessel, and when moderately warm the remainder of the nitric acid is added without stirring as long as moderate effervescence continues, if this effervescence becomes too violent it is removed from the fire, and replaced when the action begins to slacken; it is again removed from the fire and when it begins to stiffen the mercurial solution is added and mixed thoroughly. The object of the writer is to produce uniformity of result by conducting the two stages of the operation separately, he therefore uses part of his acid to make the mercuric nitrate and oxidizes the fatty acid by the remainder of the nitric acid in a separate operation. The process is certainly more "chemical" in its character, and is likely to lead to better results in the hands of inexperienced operators than the pharmacopœiacal one. We have tried the process and find that it gives fair results. It should be borne in mind that the American ounce is an ounce troy.

COLLYRIUM OF ATROPIA.

M. Sichel gives the following in the *Journal de Pharmacie* for August:—

Neutral sulphate of atropia	·01	of a gramme	1	part.
Distilled water	10·	,,	1000	,,
Glycerine	5·	,,	500	,,

This preparation may be used for dropping into the eye, or smearing round it. For the latter purpose it possesses no advantage over that proposed by the Editor of this "Summary" many years since, the following is his formula: one decigramme (1·543 grains) of atropia are dissolved in a few drops of spirit and added to 20 grammes (268·63 grains) of distilled glycerine without stirring, and the mixture is then subjected to a gentle heat for half-an-hour to evaporate the alcohol. This will contain about two grains to the ounce of the atropia. It may be diluted for dropping into the eye with three parts of water. It should be borne in mind that the glycerine used in connection with eye lotions, should not only be distilled and therefore give no precipitate with nitrate of silver, but it should be perfectly sweet to the nose. Distilled glycerine may, and frequently does, contain volatile products of an irritating nature.

GLYCERINE AND TANNIN.

The same journal gives a formula for the above preparation, which is used extensively in Paris as a remedy for sore nipples. It differs from the *glycerium acidi tannii* of the Pharmacopœia in containing 50 per cent. of tannic acid instead of 20 per cent.

Take of tannic acid, 5 grammes;
Pure glycerine, 5 grammes.
Dissolve with the aid of heat.

BLISTERING TISSUE.

MM. Delpech and Guichard publish the following formula:

Take of Gelatine, 30 grs.;
Water, 150 grs.;
Alcohol, 150 grs.;
Cantharidate of potash, 6 grs.;
Glycerine, 9s.

Thin gutta-percha is covered with this material so that about four millimetre square should receive 1-8 to 1-7 of cantharidate of potash.

The advantage claimed is the non-volatility of cantharidate of potash compared with cantharidine.

Cantharidine, as mentioned in our "Summary of Science" some time ago seems to act as a fatty acid, and forms well defined and crystallizable salts, which possess the vesicating property of cantharidine itself.

As regards the merits of MM. Delpech and Guichard's preparation we cannot say anything, not having had an opportunity of trying it, but one important objection to it is, the enormous expense of cantharidine, and until this is reduced we do not think that any preparation in which this substance is used can come into use.

There is another point which requires correction; cantharidine is not practically volatile at ordinary temperatures.

The Editor determined this point by placing one grain of cantharidine upon a watch-glass and putting this in a large glass case, where light and air, but no dust had access to it. At the expiration of six years it showed no signs of loss, nor were even the edges of the crystals rounded as they would be if volatilization had taken place.

LIQUOR CARBONIS DETERGENS.

The following formula appeared in an obscure corner of one of the numbers of the *Pharmaceutical Journal*. We are assured that it is the original formula for the above preparation which has been used to some extent in the Profession:—

Take of Bruised bark of Quillaya saponaria, 4 lbs.;
Sp. Wine (methylated 65 per cent.), 5 gals.

Heat to ebullition and macerate for some days in a sand or water-bath. This tincture is then used for the preparation of saponified coal-tar in the following manner :—

Take of Coal Tar ℥xxxij.;
" Tinct. of Saponaria, ℥ixxvj.

Digest eight days in a water or sand-bath at a moderate temperature. occasionally stirring the mixture and then filtering for use.

The Quilla saponaria is now a well-known bark which produces a saponaceous decoction of a detergent nature, an account of this bark which is indigenous to Mexico will be found in the *Pharmaceutical Journal* some years back.

It belongs to the *Rosaceæ*, and is a hardy evergreen shrub. The chief chemical characteristic is the large amount of saponine (C_{12} H_{20} O_7), a white non crystallizable powder, also found in senega root, saponariæ and many other well known plants. It produces in water a frothy solution, and the powder excites violent sneezing. It forms a precipitate with neutral acetate of lead, it also contains crystals of oxalate and tartrate of calcium, which are so interwoven amongst the structure of the bark that a thin section of that substance forms one of the most beautiful microscopic sections of its class known.

MISCELLANEOUS.

Coating pills.—Mr. Ebert, in the *Chicago Pharmacist* recommends the use of an etherial solution of resin for coating pills.

Substitute for lint.—Mr. Pownall says that finely picked oakum has been used successfully as a substitute for lint.

Cantharides.—The young insect is said to contain no cantharidine, and to be destitute of blistering properties.

Registered for Transmission Abroad.

THE
MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
" If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London.
Moffat and Co., 6. D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mionard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 12, 1870.

REDUCTION IN THE SUBSCRIPTION OF OUR JOURNAL.

THE NEW POSTAL REGULATIONS.

The course which the Medical Press and Circular shall pursue in reference to the new postal arrangements has been a subject of anxious consideration with us. On the one hand we have felt bound to give our subscribers the entire benefit of the reduction in our expenditure, and the question has been only in what way that could best be done. On the other hand, the postal authorities interposed so many disabilities and obstructions to the carrying out of our intention that we have found it difficult to do so. In fact, the Postal Act appears to have been carefully framed to prevent the introduction of improvements in such periodicals as the Medical Press and Circular, and to confine the benefits of the halfpenny postage to ordinary newspapers, and we have been obliged, therefore, to submit to the penalty imposed by the Post Office.

It is right that our subscribers should be aware of the exact circumstances. Our expenditure is reduced by one farthing per copy, or 1s. 1d. for each annual subscriber. We have felt that the remission of the sum would be insignificant, and would make our subscription accounts complicated in the working, and we have resolved, therefore, to reduce the rate for advanced payment with the new year to £1, and thus add one-half more to the *bonus* which the postal authorities offer our readers.

We have said that the postal authorities have desired to prevent journals like ours from availing themselves of the new arrangements, and they have attempted to do so by enacting that no periodical shall pass for the halfpenny which is stitched. While we feel that it is a narrow-minded and illiberal policy in a professedly Liberal Government to throw difficulties in the way of publishers making their periodicals as perfect as possible, we are compelled to obey, and in future our Journal will be delivered carefully cut, but not stitched. It likewise deprives us of the privilege of re-transmission.

The Medical Press and Circular will in future be the cheapest medical Journal in the United Kingdom, and we pledge ourselves, that if our efforts can avail, its value as a professional and scientific record shall increase as its price decreases. As the success of any publication depends primarily upon the efforts of its subscribers to obtain additional supporters amongst friends at home or at a distance, we appeal to those who know the independence and impartiality of the conductors of this Journal to further extend its influence and promote the best interests of our common profession.

OPENING OF THE MEDICAL SESSION, 1870-71.

After our usual custom, we this week present our readers with abstracts of the Opening Addresses, or Introductory Lectures, as they are more properly called, delivered on the 1st and 3rd of the month at the various Metropolitan and Provincial Schools of Medicine.

The dreadful war, now so bitterly waged on the Continent, was made by several of the lecturers a text, from which good and wholesome lessons were drawn; at University College, indeed the chief part of Mr. Berkeley Hill's most interesting lecture related to military surgery and hygiene, and came well from one who had so recently returned from a visit to the hospitals of Saarbrück and Sedan. We may congratulate Mr. Hill on his perfect coolness, under the occasional uproarious outburst of applause from the upper regions of the theatre, which might indeed have been overwhelming, we will not say to a modest man, but certainly to a nervous one.

Westminster Hospital was happy in selecting Dr. Sturges as its introductory orator, and it was most pleasing to observe there the marked attention paid, not only by the students and visitors, but also by the staff of the hospital, who mustered in very full attendance. Dr.

Sturges set himself, with good effect, to teach men how to learn the profession of medicine, and how to practice it for a livelihood in a way that would be straightforward, honest, and elevating both to themselves and their patients. The doctor was to be, in the true sense of the word, a healer, and not a dealer in drugs professing to have a physic for every mortal ache and pain, and likely to succeed only as he managed to hitch the lever on which he sought to raise himself to fame securely on the fulcrum of human credulity. The words of a good physician were aptly quoted by Dr. Sturges as follows: "When I began my career I had for every disease twenty medicines, and now, at the close of my career, I may say there are twenty diseases for which I have not one remedy." This may seem to the student a discouraging piece of experience, but we believe the words were those of Radcliffe, the greatest practical physician that the two past centuries ever saw. A man who observed closely, quickly guaged and made available the merits of the inventions of his day, was faithful and honest even to madness, and left, as the results of wealth amassed in high and honourable work, the infirmary and library at Oxford, both of which bear his name. We would gladly dwell at length on many other of the excellent lectures with which this session has commenced; a most commendable feature, in our opinion is, that the lecturers devoted themselves generally to giving good and plain advice to the students as to how they were to learn the profession of physic and fit themselves for its practice. The criticisms of some of the teachers on the examining boards could not be said to be out of place, and we recommend the Senate of the University of London to glance over Dr. Cayley's address at Middlesex Hospital. We entirely agree with Dr. Cayley, and do not think the sole object of student life is to pass examinations. Looking back to men who have carried off high university honours, it is painful to see how many of them have been utter failures as practical physicians and surgeons. A story is told of an M.B. in high honours entering upon office as house physician, and prescribing a very scientific and complex pill, which, when made, had to be placed in a drawer, as no pill box could be found big enough to contain it.

The address of Dr. Sutton will be found given *in extenso* in our journal, and we trust will be read from first to last. We would earnestly say to students mind what Dr. Sutton says, and be known as painstaking physicians and surgeons, don't seek to cultivate a habit of "seeing at a glance" too early. To some this faculty comes as they gain experience, and a valuable faculty it is when it thus grows by degrees, and almost unconsciously, in one who has begun as a plodding painstaking man, but for a man to aim at such a method as likely to give his patients confidence, is a delusion and a snare, likely to lead to ridiculous, if not serious, blunders and irreparable loss of confidence on the part of the patient.

We know that it is one thing to preach and another to practice, and that it is an easy thing to give good advice or even to manufacture eloquent well-turned phrases, but we feel sure we may affirm of one and all of the lecturers who have this year opened our medical schools, that the students will find that as they say so they do. As the session progresses the new student will become more familiar with his lecturers, he will see them during their work in the theatre, the wards, or the out-patient room of the hospital; he will there see with what laborious and patient toil the hospital physician or surgeon gathers that learning and experience which enables him at the Opening of the Session to address to the students words of valuable counsel and advice, and to speak as one with the authority of experience.

In conclusion, we would say to all students, set yourselves to the one object of thoroughly learning your profession in all its branches, so that when a few years hence you may be engaged in practice either for yourselves, or as assistants, you may not have on meeting with a rather unusual case of surgery or midwifery, at once to run for the aid of those better taught than yourselves, and see them do with ease that which you ought to have been able to do with equal facility had you but made good use of your opportunities while at the hospital.

The chances you have of learning while at the hospital will not come again; in the case just propounded you learn doubtless, but it is probably at a considerable loss of standing and repute, and it will avail you little to display gold medals and certificates of honour before your patients if they find that when you meet with a case of broken bone, or encounter a breech presentation, or a head descending a little out of accordance with the teaching of your book, you are at once obliged to send for the assistance of another practitioner, who may by his doing, if courtesy restrains his tongue, convince people that the case was most simple and perfectly easy of management.

If, in the course of your learning, medals and prizes befall you, well and good, but don't go away from the beaten path to gather such flowers as these; remember, you who are gifted with high and brilliant talent, that the lame man who keeps on in the road will outstrip him, who, though fleet of foot, strays from the path after dazzling trifles.

CROYDON SEWAGE AND THE TOWN WELL.

Our worthy contemporary, *The Croydon Chronicle*, is very wrath with us for saying, in our Special Report of the Croydon Sewage Farm which was published last week, that "the whole of the subsoil water of the locality (of Beddington) is so tainted as to be unfit for drinking purposes, and that every well is polluted; in fact, according to the analytical enquiries of Dr. Frankland, as stated by Dr. Carpenter, the chalk well in Croydon, from which the water supply for the town is obtained, is charged to a large extent with nitrates and the other oxydised products of sewage." This statement, according to our contemporary, is a pure invention, for he says, "we are quite convinced that Dr. Carpenter never stated anything of the kind, even in the loftiest flights of his conjectural imaginings." That there may have been very lofty flights in Dr. Carpenter's conjectural imaginings, even with so prosaic a subject as Croydon sewage, is most probable, and we are ready to admit as much if it would in any degree calm the wrath of our contemporary, who is the Doctor's near neighbour, and who is, no doubt, a reliable authority in this matter. But, for all this, we cannot go so far as to allow that our statement is a pure invention, and "that Dr. Carpenter never stated anything of the kind;" for if our contemporary will turn to a note on page 16 of a little pamphlet—which was published at the close of last year by Mr. Warren, of the High street, Croydon—entitled "Some Points in the Physiological and Medical Aspects of Sewage Irrigation, a paper read at the Social Science Congress at Bristol, Oct. 2, 1869; to which is also appended a paper on the Influence of Sewer Gas on the Public Health. By

Alfred Carpenter, M.D.; price one shilling," he will there find that Dr. Carpenter makes the following statement:—"This subject (the presence of nitrates, &c., in water) was discussed at a meeting of the Association of Medical Officers of Health in London some time since, and I asked Dr. Frankland to explain this anomaly (the existence, we presume, of nitrates in the Croydon well). *He did so by stating that he believed that the Croydon well was contaminated with sewage elements by percolation from the irrigated fields at Beddington.*" The italics are ours, and they show the ground on which we rested our statement, "that according to the analytical enquiries of Dr. Frankland, as stated by Dr. Carpenter, the chalk well in Croydon, from which the water supply for the town is obtained, is charged to a large extent with nitrates and the other oxydised products of sewage." We know, of course, that Dr. Carpenter will not admit this to be the case, for, on the one hand, he declares the water to be magnificent, and, on the other, he proclaims the total absence of danger from sewage irrigation. As to the other wells of the locality, and the general condition of the subsoil water of the sewage farm, we beg to assure our esteemed contemporary that the charges we have brought against their purity are derived from our own personal knowledge of them, and from many analytical investigations. Lastly, we beg to say that if our contemporary should feel inclined to continue this discussion, we should, in common with others who take a large interest in the sewage question, be much obliged if he would inform us of the exact condition of the scheme for forming a company to rent and manage the sewage farms of Croydon, and how many of the townspeople, who have heard, and perhaps seen, so much of the valuable results of sewage farming, have taken shares in the project; for, after all, as, no doubt, he will admit, the most practical and reliable test of the value of sewage is the money confidence reposed in it by those who have really had experience of its profitable results,—who have seen, for example, that at all times, and in all seasons, the most magnificent crops of milk-producing and flesh-forming succulent grass are obtained, and that in such a dry season as the present the experimental crop of mangold "is estimated at forty tons an acre."

THE MILK OF DISEASED COWS.

In our impression of the 21st ultimo we referred to the subject of the influence which the milk of diseased cows was likely to exercise upon the health of those who consumed it. Since we wrote, the Annual Report (for 1869) of Mr. Simon, Medical Officer of the Privy Council, has been published; and we find in it a report from Dr. Thorne "On the effects produced on the human subject by consumption of milk from cows having foot-and-mouth disease." Dr. Thorne's inquiries were conducted in several small towns in Sussex, Norfolk, and Hertford, where large numbers of dairy cows affected with the disease were located. The investigations were carried out with great care, but the results were not so satisfactory, either negatively, or affirmatively, as could have been desired. However Dr. Thorne concludes from them:—

"1st. That a disease appears sometimes to have been produced in the human subject when the milk of cows suffering from the foot-and-mouth disease has been freely used without being boiled, there is no evidence to show whether this affection is of a specific nature or not; but it seems to consist in a derangement of the alimentary canal, accompanied by febrile disturbance, the presence of vesicles on the mucous membrane of the mouth and tongue, which having ruptured leave superficial ulcerations, and, at times, a perpetic eruption about the exterior of the lips.

"2nd. That in a very large number of cases the milk of cows, undoubtedly affected, has been used without producing any noticeable morbid effects. The absence of this result may, though only to an inconsiderable extent, have been due to the smallness of consumption, and the boiling of the milk."

Commenting upon Dr. Thorne's report, Mr. Simon says, "that whilst admitting the poisonous nature of milk derived from cows affected with pleuro-pneumonia, there may be circumstances affecting it before its actual consumption, which might modify or destroy its noxious properties, and, on the whole, he concludes that he is clearly of opinion that such milk should not be unrestrictedly sold for human consumption."

Dr. Thorne states that this kind of milk was found to produce fatal effect when drank by young pigs. More than a year ago a Government Veterinary Inspector made a similar observation.

We learn from Dr. Cameron, Analyst to the City of Dublin, and under whose direction the supervision of the sale of all kinds of food in that City is conducted, that there was recently an outbreak of foot-and-mouth disease in Dublin. The malady appears to have been extremely weak, whole herds becoming ill and recovering therefrom in less than a week. The deaths were very few, though there were thousands of cases. The milk was repeatedly examined, but, except in a few hard cases, it did not present an abnormal appearance.

Dr. Cameron made minute inquiries relative to the effect which the milk of the affected animals produced upon those who consumed it, but the results of his inquiries were generally of a very negative character. He gave some milk obtained from a very sick cow to a cat, which immediately after became ill with diarrhœa, and affected with extensive superficial ulcers on the tongue and inside part of the lips. The only decided case amongst man, which came under Dr. Cameron's notice was that of a whole family of children who simultaneously became affected with severe vesicular eruptions on the tongue, lips (inside), and palate. It was found that the cows which supplied the milk (which formed in an uncooked state a large part of their food) were severely affected with foot-and-mouth disease. These children suffered for some days from pyrexia and had diarrhœa, which, Dr. Cameron was forced to conclude, were produced by the use of the milk of the diseased cows.

In Dublin, every effort was made to prevent the sale of the milk of cattle suffering from foot-and-mouth disease; and should the malady re-appear, we believe that the most stringent measures will be adopted to prevent the consumption of the milk of any cows that may become affected—however slightly—with the disease.

SCOTLAND.

Several of the female medical students have availed themselves of the permission granted to them by the lecturers in Surgeon's Hall, and are engaged in dissecting in Dr. Handyside's rooms.

Dr. Allman's resignation has been accepted by the Edinburgh University Court.

Notes on Current Topics.

About the War and Wounded

Our readers will remember the Birmingham Fund, raised by our indefatigable and worthy *confrère*, Mr. Sampson Gamgee. Here is some account of it by Mr. Gamgee:—

The large stock of clothing, wrappers, blankets, bandages, lint, and other materials contributed have been forwarded in assorted parcels never less than twice, often four times, weekly, so that contributors may comfort themselves

in the thought that their help was made available, as rapidly as possible, for the beneficent purpose to which it was destined.

It has not been such an easy matter to forward the surgical instruments, for the simple reason that the makers held but a very small stock, altogether unequal to the sudden and extensive demand; and that the trade being a comparatively small one, the means of production did not admit of rapid expansion. At one moment, the stock of suitable surgical needles in Redditch was quite exhausted, and a person specially commissioned to buy artery forceps in Sheffield did not succeed in obtaining a single good pair, after two days' persevering search. There would have been no difficulty in spending one, two, or three thousand pounds in an indiscriminate collection of surgical appliances, but the difficulty was to select just those instruments which were most needed on the field, to arrest bleeding, and by stemming the out-flow of life's stream, render possible the employment of soothing agents, food, and other comforts of slower operation. Acting on this principle, we have sent out 588 tourniquets to strap round limbs in which the main vessels have been wounded; of artery forceps 307 pairs had been despatched, with 285 little bull-dog forceps to hold on faithfully to those bleeding points in the absence of trained assistants. Our numerous parcels have collectively inclosed 282 dozen assorted surgical needles, 231 reels of suture silk, and 292 reels of metallic suture; 40 bullet extractors, 191 pairs of scissors, 35 amputating cases, and 8 trephining cases, 2,000 yards of adhesive plaister, 360 pairs of blankets, 600 perfectly cleansed sponges, 19,200 doses (two grains each) of quinine, 14,000 doses of morphia (each ¼ grain), chloroform enough for 7,640 operations, on an average of half-an-ounce for each; 2,000 quarts of assorted antiseptics and styptics for checking hæmorrhage and cleansing wounds; 150 water pillows, 2,000 yards of fine gutta percha, 400 yards of waterproof sheeting, 600 bottles of Preston salts, 1,538 yards of Christian's elastic bandages, and nearly 10,000 flannel and calico bandages, rolled by the patients in the General and Queen's Hospitals, under the valued superintendence of the resident officers of these institutions. The whole stock has been so subdivided and arranged as to be easily distributed on the spot; and the packing material has been chosen so as not to be wasted, but directly useful to the surgeons and nurses in their work. The bottles of disinfectants are packed in picked oakum; the chloroform, quinine, and cases of morphia in fine cotton wool; every package being labelled in English, French, and German, on the decimal system. The contributors have been informed, through Mr. Berkley Hill's published letter, that the help sent to Sedan proved most useful. Mr. Priestley Smith reports from Bingen, that the instruments I confided to him were just what was wanted. The Berlin Committee has also approved the Birmingham selection; and I know that valuable cases have for the last five weeks been forwarded by my direction, through various channels, into France, though as yet no news has been received of their delivery; but as they all bear the red cross, and a printed inscription stating object and contents, it is resonable to hope that the poor fellows for whom they are intended will derive the benefit.

***

Amongst the victims of the war, we regret to announce the decease of Dr. Rigaud, resulting from over-fatigue in attending on the wounded. M. Rigaud was well-known in the south of France, and his untimely death will be deplored by all who knew him. He went, on the outbreak of the war, to serve his wounded countrymen, and laboured among them with such devotion as to sacrifice his own life. He was as great a hero as any of the combatants.

***

We had the pleasure of an interview with Mr. Monod, whose ambulance left London for France last week. He had been in service with the Red Cross all through the war, and freely gave us such information as we wished. He is a son of Adolphe Monod, the great preacher, whose name will be dear to many of our readers, is himself an *avocat*, but is now heart and soul in the work of human kindness he has undertaken. That his work is appreciated we may see by our National Society giving him £600 as a subscription. The French Committee will receive subscription destined for his ambulance.

***

Dr. Thomas Guy, Deputy Inspector-General of Hospitals, has translated the pamphlet of Professor Esmarch, of Kiel, "On Bandaging on the Battle-field." Esmarch recommends that every soldier taking part in war should be provided with a new form of bandage, which he could use himself, if wounded, as the first dressing on the battle-field. After great battles thousands of wounded often lie for days without help, and their wounds are exposed to dust, damp, dirt, insects, the sun's glare, or, it may be, to prolonged hæmorrhage, from the shaking to which they are subjected in removal, or the unskilful use of bandages. Professor Esmarch recommends the use of a triangular cloth of linen or cotton, available for application to wounds, however serious, in every part of the body. It is in the form of an isosceles triangle, the longer side, the base, being 4 feet, and the others about 30 to 36 inches. The great and obvious merit of this bandage is its shape. It is surprising in how many forms a soldier, without any previous training, could make a convenient wrapper for wounds with a triangular piece of cloth, whereas experience has shown that only long practice gives the dexterity necessary to apply a long roll to a wound. There is much to be said in favour of Esmarch's plan.

***

Strasbourg has been the scene of many a noble deed, and we rejoice to know that her renowned Faculty of Medicine has been equal to the occasion. The exertions of both professors and students have been worthy of the brave defence, and to those exertions was, no doubt, due the absence of many additional miseries. The awful trial has been passed through with much less sickness than might have been anticipated. Sick and wounded appear to have been thoroughly attended to and well cared-for. We remember, naturally, that the Strasbourg Faculty was one of the most renowned in Europe. Alas! that it should have been tried to such an extent. All honour to it that when tried so severely it was not found wanting.

***

It is said that at Sedan 500 surgeons fought in the ranks, and left 200 of their number dead on the field. Sublime as was their courage, it availed nothing. Would not their skill have been more precious to their countrymen than the little service they could render in the ranks?

***

A *confrère* who reached London at the end of last week, tells us that the ambulances near Sedan were centres of pyæmia, and that this disease had also largely prevailed outside Metz. Of the inside he had been able to learn nothing. He also confirms other observers respecting fever and dysentery. It seems quite possible, after all, that disease may do more than the sword this month and next.

***

We hear glorious news of our *confrère*, Dr. McCor-

mack, who seems to be acquiring extensive experience in military surgery, and whose hospital is reported to be in excellent condition. We expected as much, and are very glad that British surgery is so well represented.

***

The National Society proposes to place a sum of £20,000 at the service of the leaders of each of the hostile armies, of course to be exclusively used for the sick and wounded. Is not this subsidising governments, and helping them to make war? Nothing but the urgent needs of the sufferers could justify it.

***

We learn from correspondents that, besides the diseases already named, "sporadic" cholera has occurred among the German troops. Who can say they are not in danger of a fearful epidemic of this dreaded scourge?

***

Professor Longmore will not be able to accompany the English ambulance. His place will be taken by Dr. Guy, Deputy Inspector-General of Hospitals, aided by twelve surgeons and more than a hundred other persons.

***

A gentleman who has just arrived, assures us that our predictions of disease have been fully verified, that fever and dysentery are rife in the invading army, and that much suffering is still to be expected. He thinks that, unless the campaign can be speedily closed, the mortality will be fearful, and that the Germans may have great cause to regret that their leaders have not secured the fruits of their early triumphs.

The Fall of the Leaf.

THERE is great truth in the observation of many invalids who pull through the summer, dying, unless great precaution be adopted during the sober, ashen, grey weather of October. This withering month is peculiarly trying to phthisical patients scattered throughout the country. All who can afford it, of course, will prepare for wintering in some salubrious climate, either in the south of England or abroad. Each place has its advocate and peculiar advantages. To the great majority whose circumstances and position in life will not permit of change it is that we specially address ourselves. We most strongly urge upon all suffering from chest affections, or who are prone to returns of thoracic complications at this season to prepare either to resist or subdue the attacks. Chest preservers made from hare-skin and lined with chamois will be found efficacious, and a simply-made cotton-wool respirator equally beneficial to be worn, particularly by those whose duties force them out in the early morning or late evening air of October. Some months ago we gave particulars of a very simple and cheap form of respirator devised by Dr. Waring-Curran, which consists of two concavo-convex pieces of porous zinc plate; between the two portions a layer of cotton-wool may be placed, and all kept in apposition by a couple of side springs. A ring at either corner permits the fastening of a silken ribbon for going round the neck. The entire cost of such a respirator is calculated at only a few pence, and Professor Tyndall tells us that in using the cotton-wool the atmosphere of the highest mountain may be breathed in the sick-room of the invalid, so far as purity goes. Dr. Mapother, of Dublin, has devised a somewhat similar kind of respirator to that previously invented and made by Dr. Curran, but it is more complicated and expensive. The great object is having the air coming through the cotton-wool for breathing purposes. And as prevention is better than cure, we particularly recommend during the present and approaching season not only the wearing of respirators, but of chest-preservers also.

Hiccup.

SOME time ago, under the title of "Sneezing," we published a very simple method of controlling it, by pressure upon the upper lip. We are glad to learn from so many different sources the success attendant upon our annotation. A correspondent directs our attention to the subject of hiccup—a most distressing and obstinate complaint to those in whom it occurs. We do not refer, of course, to the hiccup attendant upon great prostration of the system, and met in connection with *delirium*, or convulsions, or to hiccup the effect of debauchery, but to those instances, very frequent indeed, of a simple spasmodic condition of stomach and œsophagus which assails the individual without any other symptom of disease, and in the treatment of which anti-spasmodics prove inert. Our correspondent tells us that for a long term of years he has been invariably successful in affording relief to his patients by directing them to hold their arms straight above the head, and to keep inspiring as long as is feasible, so as to retain the air in the lungs for as long a period as possible. He considers the oxygen of the air acts as a stimulus in provoking the paroxysms, and that the carbonic acid in the unexpired air acts as a sedative in warding off the hiccup.

The Vaccination Grievance.—Apathy of the Privy Council.

OWING to several communications received by us by way of reply to certain remarks of ours upon the apathy of the Privy Council in enforcing Boards of Guardians to comply with the last Vaccination Act, we were assured that in some instances they had actually done so. However, we observe this week that Nottingham is behind. We cannot do better than reproduce the letter of the public vaccinators for the two districts of the city, which tells its own tale:—

To the Nottingham Board of Guardians.

Mr. Chairman and Gentlemen,—We feel it our duty to call your attention to a matter of vital importance to the sanitary condition of the town. We allude to the fact that a large number of the children in this town—especially among the working classes—are entirely unprotected from small-pox. We do not wish to trouble you with statistics in favour of the immense benefits to be derived from vaccination—all intelligent men of the present day are convinced of its absolute necessity. Hitherto it has been most unsatisfactory to find that the intentions of the Legislature have been very imperfectly fulfilled, and the measures taken to prevent the ravages of small-pox insufficient and delusive. It is to be hoped that this slur on our national character will no longer be allowed to exist. Of course, by an appeal to the Privy Council, the very necessary provisions of the Act of 1867 could be enforced, but before taking so decided a step, we thought it our duty to lay the matter before your Board.

The fact that the fatal ravages of small-pox have been devastating Paris is sufficient to justify us feeling anxious about our own immediate neighbourhood.

The large number of French refugees now in England is an additional element of danger. As no eruptive fever is more contagious than small-pox, the mortality among the unpro-

tected infant population of Nottingham would be fearful, and the greatest blame would be attached to those who, having the advantage of education, in addition to their responsible position of Guardians of the Poor, neglect to see that the Act relating to vaccination is enforced. Taking as your motto, "*Salus populi suprema lex*," we appeal to you, gentlemen, as Guardians of the Poor, to protect the unfortunate offspring of ignorant and prejudiced parents, who, instead of showing any gratitude for the immunity now enjoyed, industriously endeavour to restore to us this loathsome disease with all its original force.

A public inspector has recently been appointed, but persuasion only has been tried.

It is now time that he should be called upon to discharge those duties for which he was appointed, and for which he receives a salary derived from the pockets of the ratepayers.

We are of opinion that if an example were made of one or two of the worst offenders, the remainder would speedily avail themselves of the opportunities they have of protecting their children, and so ward off the impending danger.

We have the honour to be, Gentlemen, your obedient servants,

W. Frederick Lill, M.R.C.S. Eng.,
C. J. O. Smith, M.R.C.S. Eng.,
Public Vaccinators for the two districts of the town of Nottingham.

Since Boards of Guardians won't perform the rules laid down for their guidance by the Act of Parliament, and since the Privy Council remain in a state of lethargy, we must only have the question ventilated next session in the House of Commons, when, perhaps, some hidden light may be thrown on the topic.

The Late Dr. Matthiesson.

"Suicide while in a state of temporary insanity" was the verdict of the coroner's jury last Friday evening on the enquiry into the death of the Professor of Chemistry at St. Bartholomew's Hospital. Could there be a sadder opening of the Session at the great hospital of London? Dr. Matthiesson was only thirty-nine years of age, and had attained a splendid position. Only last year the Royal Society awarded to him its Royal medal for his researches in chemistry, and he seems to be greatly beloved by those who knew him. Our readers will probably have noted the details in the daily papers. A false charge had been made against him, he wrote in a letter he left in his private drawer, and "although innocent, yet it blights all my future prospects, and therefore I have resolved to resign all." Then he shut himself in his room, was heard to walk about some time as if in an excited state, and then—was found dead some hours after, sitting as if asleep in his chair, but poisoned by prussic acid. Thus is lost to us in his prime a hard worker in science—a professor in one of our great metropolitan medical schools—who had given an earnest of future fame such as few at his age have done. 'Tis very sad.

Suburban London.

No one can traverse the suburbs of the great metropolis without being struck by the rapid extension of its limits in every direction; and if he has the time to examine further, he will be horrified by the neglect of the commonest principles of sanitary science, and the gross carelessness with regard to the health of the inhabitants of the new buildings. Nature has done much to make London the healthiest city in the world, *man* does his utmost to render it pestiferous. In a soil formed from the accumulation of the refuse of the nearest dust yard deposited in excavations made for brickmaking or a gravel pit, the foundations of the drains are laid, literally, for little more is done than to deposit the bricks and pipes in the channels roughly dug for them; the timbers and flooring are put in within a few inches, if not actually upon, the ground, and the house run up of the cheapest material, and in the most expeditious manner; the object of the builder being in most cases to build for sale and not for investment. In a short time the ground settles, the drain pipes break, and the walls crack. It is not surprising that these buildings prove nests of fever, disease, and death. We could point to rows of houses in some of the naturally healthiest suburbs from which fever is never absent, and we may say never will be, and we are disposed to regret that act. District surveyors have enforced attention to the provisions of the Building Acts. Can nothing be done to stay this? The law precludes them from building within a certain distance, but it does not prevent them from extending the outbuildings, nor preclude the use of porous bricks, rotten timber, nor mortar made from the scrapings of the adjacent road. As a result we have houses which are filled with the exhalations from the sewers, walls which neither keep out rain nor wind—indeed some, we are assured, are only held together by the moisture retained in the brickwork. We have ourselves lifted the bricks from walls built seven years before without the slightest particle of mortar adhering to them. Yet it is such buildings as these we see inhabited in the suburbs, the creation of which is encouraged by the building societies, and not restrained by the provisions of any Act of Parliament. Until rows of them fall or are blown down we fear nothing will be done, and we shall continue to read in the Registrar-General's report the deaths of hundreds of victims of fever propagated by the gross carelessness and cupidity of those who are described as interested in the building trades.

Royal College of Surgeons of England.

The year of revolution, as Mr. Hancock seemed to think 1870, in his Introductory Address, has nearly passed away, but many a reform of the College of which he is Vice-president remains to be accomplished. In August it was resolved by the Council of the College "that not less than half of the members of the Court of Examiners shall be Fellows who are not, and have not within twelve months, been members of the Council, and that this resolution be carried out *as soon as possible*." The italics are our own.

Now it is generally feared that the resolution is in danger of being ignored—that the change will not be effected "as soon as possible." We have no wish to use hard words. Last year a very esteemed member of the Council took us to task—privately of course!—for the severe tone and harsh expressions of one of our staff in reference to this College. Nothing can be further from the intentions of the chief editor of this journal than to speak with disrespect of any gentleman in the Profession who has secured by his worth the suffrages of a great body of his brethren, and we do not unfrequently soften down the tone of articles supplied by those who feel indignation as they write. On the other hand the Medical Press prefers to call a spade a spade, and we shall not hesitate to stigmatise in strong terms what may appear to us disgraceful conduct, even though it be enacted by those in high places.

There are plenty of "good men and true" outside the magic circle. The vacancies will soon have to be filled up. We do hope members of Council will consider the force of their own resolution and the strong feeling of the Profession, and will show how unjust are those who are already prophesying that another great job is about to be perpetrated.

There is another question that should come forward. Are the Fellows at large—aye, the Fellows and Members too—to be suffered to elect the representative of the College in the General Medical Council? This has long been desired. Every true medical reformer has admitted that in this particular College the scheme of Dr. Prosser James could not fail to work well. We have fairly supported that gentleman on all occasions when it seemed likely to assist, and we were glad to see that at the meeting of Fellows and Members in the College, in reference to the late Government Bill, there was almost entire unanimity on this point. The question is once more cropping up. Men who have lagged behind are stepping forward to take credit for a plan he has advocated for years, as they now see that in that plan lies the chief hope of collegiate reform. They seem anxious to make what they can of it, and we as journalists may be glad of any assistance they can give it, though we shall not imitate them in grasping at the honour due to another. Nothing can rob a true reformer of satisfaction at the ultimate success of his plans, although it not unfrequently happens that those who have borne the burden and heat of the day quietly retire when they find those who were long apathetic, if not hostile, rushing forward at the moment of victory and noisily claiming the honours of the contest. Alas! that even our Profession should abound in injustice and self-seeking, and that those who set the best example of unobtrusiveness and self-sacrifice should find years of labour rewarded by the consciousness of having contributed something to the common good,—to be remembered when death has removed them from the scene, or when new toils, or worse, declining health, may render them indifferent to gratitude.

The Autumn Weather and the Wounded.

We understand that the wounded in France already evince symptoms of sympathy with the decrease in the temperature of the nights, for, notwithstanding the mildness and genial nature of the day-time weather, the nights are cold and ungenial to the wounded. We believe the authorities are deficient in those essentials which have for their object the artificial generation of warmth, as vapour baths, hot air apparatus, earthern water jar appliances, *et hoc genus omne*. No country is richer than England in these, so that we recommend an order to be given at once to one of our pottery agents for the immediate manufacture and direct exportation of a sufficient quantity of hot-water jars for the feet, &c. These are much less expensive than bed-pans and metallic warm water appliances, and equally efficacious. For the want of these rough and comparatively inexpensive requisites we hope the poor wounded men will not be permitted to suffer; but, on the other hand, may be freely supplied with what is at once a luxury and a requisite by generous-hearted Englishmen.

Vesuvius is threatening another eruption.

Royal College of Surgeons, Ireland.

We regret to learn that a temporary indisposition has induced Mr. James Barker to resign his seat on the Council of that body which he has so long and faithfully filled. Dr. Mapother, Professor of Physiology, seeks the vacancy, for which an election will be held on the 3rd November.

The Poor-law Board and St. Pancras.

At the weekly meeting of the Board of Guardians, a communication was received in reference to the proposed special inquiry into the charges which have been preferred against Dr. Hill, the medical officer of the workhouse, in which the Secretary of the Poor-law Board says, "I am directed to state that the Board are not aware of any legal power which the Guardians have to authorize the committee to summon witnesses so as to compel their attendance before the committee, and that the Board are only enabled to sanction the payment of the expenses of witnesses who may attend to give evidences at an inquiry instituted by the Board or conducted by their inspectors, for which special provision is made by the Acts 4 and 5 William IV., cap. 76 sec. 14, and 10 and 11 Victoria, cap. 109, sec. 21.—I am, Sir, your obedient servant, Francis Fletcher, Assistant Secretary." Mr. Parson informed the Board that the committee had held a preliminary meeting on the previous day, but declined to proceed until they ascertained if they could pay witnesses. After this communication, he thought the functions of the committee must cease, and an official inquiry be held. Mr. Watkins considered at first an official inquiry would be best. He could not call five medical men to give evidence unless their fees as witnesses were guaranteed. Mr. Salter remarked that if Mr. Watkin's witnesses, as medical men, came forward in the interests of the public, they could do so without making a market out of the parish. After some personal observations, the question that the Poor-law Board be requested to hold an official inquiry was put, and negatived by a majority of eight to six.

Leave of Absence for Medical Officers.

Paragraph 682 of the "Queen's Regulations and Orders for the Army" is to be amended as follows:—

"682. Applications for leave of absence for medical officers are to be made in the following manner:—I. Medical officers not attached to regiments are first to obtain the permission of the military authorities of the district in which they are serving, and are then to apply, through the principal medical officer, to the Director-General of the Army Medical Department, who will forward the application to the Adjutant-General, by whom the grant of such leave will be notified to the district authorities, and to the Director-General, who will inform the officer (through the principal medical officer). II. Medical officers attached to regiments are first to obtain the permission of the principal medical officer, and are then to apply to their commanding officers, who will forward the application to the district military authorities for transmission to the Adjutant-General, by whom the grant of such leave will be notified, through the district authorities, to the regimental medical officer. Officers commanding, in recommending medical officers for leave of absence on private affairs, will be careful to ascertain that the distribution and state of health of their corps, as well as the arragements for the carrying on of all the regimental medical duties, are such as to justify their recommendation. All applications are to be on W.-O. Form 1,119."

Ochlesis in France.

We regret to learn that our brethren engaged at the French hospitals are troubled with a form of erysipelas, which exists amongst their patients depending on the miasmatic generated out of the effluvia arising from the skin and breath of so many crowded together—a form of erysipelas which was called by Dr Gregory *Ochletic* (from ὄχλος a crowd) *Erysipelas.* There is little chance for patients with sores or open wounds where this exists. Surely convalescent homes might be obtained for those able to leave the hospital, or rooms set apart for what we have no hesitation in calling *Ochlesis,* for the information kindly given to us indisputably proves that such a form of erysipelas, as that we mentioned, will never yield to treatment, but be sure to extend its ravages by propagating its influence even to the most healthy of the men who may have the evil fortune of occupying the same ward. It behoves those of our philanthropic brethren, who not only interest themselves in the care of the wounded, but take upon them the superintendence of everything pertaining to the comfort and welfare of the injured and diseased, to influence the authorities at once in rectifying overcrowding and the occurrence of *ochlesis.*

Queen's University of Ireland.

The clinical examinations have been conducted in the South Workhouse Hospital, the medical officers of which most courteously aided the Examiners in Medicine and Surgery. Thirty-two candidates sought the degree of M.D., and twenty that of M. Ch.

The Eyeless Fish of Kentucky.

The Dublin Zoological Gardens have several of these remarkable creatures living in their aquarium. It is hoped that they may breed, and that eyes may become developed as the animals enjoy the light. The etiolation and transparency of their bodies are very well marked.

Clinical Examination in Dublin.

The Queen's University in Ireland has been engaged last week in the carrying out, as a part of its examination for medical degrees, the clinical, or bed-side test, and, while we give the University the highest credit for having been the first to introduce this form of examination into Ireland, we cannot but think that the system adopted for the purpose is very imperfect. The medical clinical examination is held at the South Dublin Union Workhouse, while the surgical cases are selected from some of the metropolitan hospitals, and are brought to the examination hall for the purpose. It is plain that a workhouse hospital cannot supply suitable subjects for examination. The fact that sick persons are within the walls of a Dublin workhouse is sufficient proof that they are too chronic for the wards of any of the numerous hospitals. In the same way, the cases which it is possible to convey across town to the place of examination are obviously not those on which the skill of a candidate can be satisfactorily proved, and we, therefore, are of opinion that a clinical inquiry restricted to such cases is not, in the real sense of the words, a bed-side examination at all.

The new ophthalmic wards at St. Bartholomew's are now in working order.

An Irish Double Diploma.

A few weeks since we had occasion, in reviewing Sir John Gray's Return of the number of degrees granted by licensing bodies, to point out the intimate dependence of the Colleges of Physicians and Surgeons in Ireland upon each other, and the circumstances which have constituted them natural allies in the licensing of a majority of Irish practitioners.

We were enabled to show from the official statistics that the greatest proportion of the licences in medicine granted by the College of Physicians were held by candidates who had already become Licentiates of the College of Surgeons, and, therefore, if the College of Surgeons were to cease to exist, or if for any cause its Licentiates should be induced to seek their medical qualification elsewhere, the College of Physicians could look with no hope to other Irish licensing bodies for a supply of candidates for its degrees.

We recapitulate these facts as a cogent hint to the authorities of both Colleges, that their mutual interest lies obviously and vitally in co-operation for the purpose of providing a joint diploma capable of maintaining, in their own country, the numerical superiority in licensing, which is, under the influence of disunion, in danger of being lost. It is hardly necessary for us to point out that each of the Irish Universities now grants what amounts to a double diploma, and that the attraction of a single examination for both diplomas has had the effect of increasing the number of degrees granted within five years by nearly 100 per cent., and the Colleges must be sanguine if, with those statistics before their eyes, they adhere to the view that students will be content to undergo two separate and distinct examinations, and to pay double fees for the satisfaction of writing L.R.C.S., L.K.Q.C.P. after their names.

If the question of the creation of an Irish double diploma be approached in a liberal and unprejudiced spirit by both Colleges, there appears to us to be little subject for dispute between them. It is no slight to the College of Physicians to say that it cannot hope to meet the College of Surgeons on absolutely equal financial terms. The College of Surgeons has been for more than half a century, and, despite of increased competition, still remains, the Surgical Licensing Body of Ireland. Its museums and libraries are the recognised centres of reference of the Irish profession, and candidates for a place in our ranks have been ready to pay for its *imprimatur* a higher fee than for the seal of any other body. It is obviously entitled to expect that its public establishment shall not be put on short allowance for the purpose of co-operation with other bodies, and, this principle being admitted, we believe that no insuperable difficulty need interpose in the settlement of a question which the profession looks upon as vital to the future of medicine in Ireland.

The late musical festival at Birmingham raised £6,000 for the General Hospital.

Mr. Hammond has resigned his office of Surgeon to Addenbrooke's Hospital, Cambridge.

Dr. Maudsley is to preside at the next annual meeting of the Medico-Psychological Society.

The Medical Society of London will meet on the 17th. The Clinical on the 14th.

The fever at Liverpool continues. An inspector has been sent by the Privy Council. There were 326 new cases admitted into the hospital last week.

We hear sad accounts of what is called yellow fever on the Spanish coast. Cholera does not decrease at Kertch. What with war and pestilence, Europe is now suffering sadly.

The Southern Hospital at Liverpool is in want of £1,700 or £1,800 to complete its new buildings, and the Northern Hospital is about £1,800 in debt. We hope an effort will be made to raise the whole of these sums quickly. We hear that the Bishop of Chester is ready to take up the cause, and that something is likely to be done. Liverpool is not poor, and her medical charities deserve support.

Correspondence.

QUEEN'S UNIVERSITY DEGREES.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In the article which appears in The Press of September 7th, you state the number of degrees conferred by the different licensing bodies in Ireland. The Queen's University granted fifty-one in 1869, and thirty-one in 1865.

In October, 1867, there were, I believe, at least eighty candidates for the first half, and nearly the same number for the June examination. In October, 1869, there were only thirty candidates for the second half, one of whom was a surgeon in in the Indian Army, and two others were previously qualtfied.

What became of the fifty other candidates for the first half in 1867, and who should have gone in 1869, and whose services go to Edinburgh for their surgical diplomas, merely on account of the examination—practical surgery?

You appear to scoff at the £5 degree; we really thought at the present day education was not valued at what it cost, but of its real merit. I, for one, should be very sorry to give the Dublin College of Surgeons £28 for its diploma, besides having to attend three courses of surgery—two being quite sufficient.

I am glad to find that the Queen's University was the first to institute an examination in practical surgery, also in anatomy. The next (a fact of which I am fully aware), to come of the other licensing bodies, where the examination in chemistry and natural history is merely nominal, in fact, are never asked a question on these subjects. Physics and the examination in practical anatomy by dissection appears to be a very sore point with those accustomed to the "grinding" system and "tips." With regard to the M. Ch., the candidates were really afraid of the practical examination, which is required as a test since the degree was first conferred by the Queen's University, and is not merely nominal, as at some of the purely surgical bodies, and I knew some men who got good places at the board of dissection, and in clinical medicine. Perhaps these are the blandishments of which you speak.

I forgot to mention that there were between eighty and ninety candidates for the first half in October, 1869.—Yours, &c.,

"M.D."

"UPON MATTERS PROFESSIONAL AND GENERAL."

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—It does an Englishman good to shake hands now and then with an Irishman. On physical grounds I base my argument with a hope of averting pathological phenomena, having to be recorded in the way of autopsy.

The Irish shillaleigh, an out spoken token of tender regard, when properly shown, is one I can assure you regarded with proper respect and esteem on this side of the Irish channel.

It is known in our metropolis, and is now well appreciated in our provinces, that an Irish doctor after all is no bad fellow. I remember the time when I read many years ago in the Medical Circular, at the foot of an advertisement, for an assistant or *locum tenens*, "no Irishman need apply." Is it so now? Is Ireland ashamed of its masters in the art and mystery of medicine or surgery; or on the other hand, is England abashed at receiving, adopting and baptising into brotherly fellowship, men who have carefully studied in Erin's Isle? To both questions and to both hypotheses I say emphatically, no! I repeat my axiom by saying it does an Englishman good to shake hands with an Irishman. Now about the "Roasted Apple Association" of which company I happen to be a shareholder, under the limited liability act, fortunately perhaps for you as well as myself. Inasmuch, that a civil action at law will not lie, and that assessed damages will not weigh heavy. The British Medical Association number in its ranks upwards of four thousand able bodied hard-headed medical men, who love their profession for its own sake, and who were grafted into the craft, not only in England, Ireland, and Scotland, but in lands far across the seas. I think almost every clime owns an indigenous medical or surgical plant nurtured and potted out in good loamy British soil, after having been kept by us during the winter frosts of its infancy. Now, why should not England and Ireland continue to work, hand in hand, as nursery men or nursery maids, to educate skilled surgeons and physicians? The main object of the British Medical Association is to embody medical men from all parts of the globe into one central mass, and to do this it must necessarily have a speaking trumpet of its own, an organ I ought to have said, which organ is called simply and purely *The British Medical Journal*, a journal which should be a credit to England, Ireland, and Scotland. Now about postages and I cease.

The Postmaster-General is laying down hard lines if he prevents you from stitching your paper before you post it. I have had many times to congratulate you on sending your Medical Press and Circular out with its pages already cut and ready for reading, which never has been the case with the *Lancet, Medical Times and Gazette, or British Medical Journal*, but now the Postmaster-General pops in and forbids an interchange of medical journals, with my two medical brothers who happen to live two hundred miles away from me, I find in earnest I have a real *casus belli* against him, which I doubt not *you* and *I* will be able with time and patience to combat, overcome, and conquer.

I am Sir, yours respectfully,

John A. Bolton, M.D.

Leicester.

SCARLATINA—IMPORTANCE OF ATTENDING TO THE FUNCTIONS OF THE SKIN AS A MEANS OF LESSENING ITS MORTALITY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR

Sir,—I am almost of opinion that a copious eruption is as little to be desired in scarlatina as in small-pox. An epidemic of that disease, has prevailed in Cappoquin for some months past, and, with the exception of one child that died with it of diphtheritic croup, there was no fatal case. Most of the children got well in four or five days. There were no sequelæ. This I attribute to the fact, that the rash was a mere blush, often barely discoverable by drawing the finger over the skin, and observing the white line track it left. There was little heat of skin, and scarce any desquamation, what there was being a minute brawny scaling away of the epidermis, more like that of measles than scarlatina. In previous fatal epidemics of scarlatina, the skin, I noticed to be of a fiery redness and heat, and that the cuticle all over the body became coriaceous, as if tanned. We know that we can produce albuminuria and its concomitant ills in an animal, by glazing over half or three fourths of the surface of its skin. To do so completely, would cause speedy death from asphyxia. This consideration shows that, to preserve the integrity of the epidermis should be our main object in the treatment of scarlatina. Cold affusions or sponging do something. Inunction with fats does both good and harm. The wet-pack of the hydro-therapist more completely attains the object in view.

F. M. Luther, M.D.

Cappoquin, 26th Sept., 1870.

THE MEDICO-SURGICAL PROFESSION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—It is perfectly correct that the professors of the medico-surgical profession, should buoy up the hopes and prospects of student at this commencing period of study at the various hospitals. Now a little truth is necessary. Does a student enter on his study for ultimate living, or science; many doubtless do for either or both. I have watched the career of over a dozen youths during the last quarter of a ceutury. Half went in for medical "business" some call it trade, and all did well in a pecuniary point of view; agreed with everybody and everything, physic at a discount. The others went into the "science" of the profession, high noble science, supposed to lead to immense results, emoluments and everlasting fame: two only out of the "great talent" made any stir in the world, but all succeeded in poverty. Now sir, which is which, physic-trade, or physic-science. In my experience no student should enter the portals of the medical profession for science sake, extended as I grant it is over divinity or law, except he starts on £500 a year at least, clear income.

Yours respectfully,

A QUARTER OF A CENTURY MEDICAL KNOWLEDGE.

4th Oct. 1870.

P. S. Your medical journal never burks the truth, is my reason for addressing the students through it.

CHLORAL HYDRATE IN TETANUS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—The history of the following case conveys a practical lesson of the inutility of an over-estimated drug, in the treatment of a very distressing complaint—traumatic tetanus. Time after time there have appeared in the Medical journals, records of the most wonderful cures perfected by this comparatively new preparation—chloral hydrate. Pictures only too highly coloured and calculated to provoke the question, whether some other drug of the same sedative order might not have been equally efficacious in overcoming the paroxysms of tetanus.

On the 17th September, I was requested to visit a man, whom it was stated, was suffering from quinsy. When I got to the house, I found my patient, a man of three and thirty years of age, lock-jawed, from himself I could learn little, the paroxysms of tetanus were frequent and severe, the head was drawn back and the chest directed forwards, so that to relieve him, the occiput had to be pressed forwards and the chest backwards. Upon examining the spinal region, I discovered the seat of mischief which existed at the lower dorsal region. It appeared when at work in a colliery pit, he sustained a punctured wound of the spine, no attention was paid to it, since little pain was suffered from it, until the commencement of the tetanic symptoms.

The wound was probed and dressed, and belladonna extract rubbed around the wound and along the spinal column; the bowels were well cleared out, and I gave him full doses of bromide of potassium, tincture of belladonna, and camphor julep in mixture, under this treatment, the paroxysms became subdued in character and diminished in number, as he did not sleep at night I exhibited two drachms of Ferris's syrup of chloral, which is equivalent to twenty grains by weight of the drug. The man was in a "Field Club," and to his friends appeared improving, so that when they went to give notice of his illness they were informed they must have a certificate from the field doctor. This gentleman, a person named Stanford, came, took charge of my unfinished case, and held it two days, until the symptoms returned so alarmingly, that I was again requested to renew my treatment. The paroxysms were now frequent, and the sufferings of the unfortunate man truly great. I gave him two drachm doses of the syrup of hydrate of chloral every two hours, increasing it to four drachms, but without the slightest effect, one way or the other. A strong belladonna enema appeared to arrest the paroxysms for a time, but they only returned with renewed and aggravated severity, *I now exhibited the chloral every hour, narrowly watching its action, but it produced no more therapeutic effect, than so much simple syrup might be expected to produce.*

The unfortunate man died on the seventh day. A *post-mortem* examination was denied me. My case proves two things. 1st. That in traumatic tetanus, hydrate of chloral must not be depended upon. 2ndly. It teaches the imprudence and danger of medical men presuming to undertake the management of unfinished cases, without a consultation or some understanding given by the man first in attendance. Although unjustifiably superseded because of some paltry club arrangement, I was only annoyed and grieved to think my patient, who clung to me with that strange mixture of freshly-lighted affection and confidence so encouraging to the practitioner, for I never saw the man before, should have been injured by a change in treatment, for in tetanus forty-eight hours is a serious loss of time.

In an editorial article, you, sir, suggested an important arrangement which should exist in the rules of every club, that the men should select, in time of illness, their own doctor. My present communication proves the necessity of such an arrangement—the absurdity of forcing a man on the people, *à la mode* the Duke of Buccleuch, is simply disastrous.

I am Sir, yours truly,

J. WARING-CURRAN.

September 28th, 1870.

WILL-MAKING.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I consider every medical man, if required, should be sufficiently skilled in legal matters to be able to draw out a document, and have it properly executed, as a will, that shall stand good as such in the eye of the law. I believe it should fall to the lot of every lecturer on medical jurisprudence to teach his class this important essential; for the ignorance of the Profession on this subject is truly great, and, comparatively, very few indeed are competent to make a will; this we have exemplified every week in our Law Courts One time we have wills made with witnesses to the signature or mark, as the case may be, legatees as well; again, I have seen wills without the appointment of executors or an executrix; I have heard of the testator signing the instrument, or affixing his mark, without the document being previously read over and explained to him, and the witnesses to it not signing in the presence of each other. Wills thus illegally drawn and executed have been the means of preventing probate being obtained, and much injustice thereby done to the survivors, and the last wishes of the deceased frustrated, owing to the incapacity and ignorance of the man who took upon himself the responsibility to prepare it. When there is time, the duty belongs to the solicitor; but when danger is imminent, and a dying person desires either to make a will, or revoke a former one, and solicits his attendant to perfect the matter forthwith, at least he should be competent; yet how few are able to do it. There is one point I earnestly direct attention to, and I beg our brethren will adhere to it, that is, never to take instructions respecting the disposal of property from any other than the testator himself or herself; to carefully pencil down their intentions, and after re writing in proper form, to read it over word for word, carefully explaining every item as bequeathed to each legatee, and making the document thoroughly comprehended in simple language by the testator. To draw up a will upon the suggestions of others; read it over to a dying man, only too ready, perhaps, to be spared worry and bother, to give assent, is cruel and criminal. There are few medical men who will not, in the course of practice, be appealed to, to perform this simple duty; yet, however simple, many remain in happy ignorance of the method of doing it, and when they attempt it, only baulk their best intentions, whilst they injure those whom they hoped to benefit. I am, Sir, your obedient servant,

NEPENTHE.

Sept. 28th, 1870.

Substitute for the Forceps.

A BRITISH medical officer travelling in India, met with a case of labour requiring the forceps. Not having any instruments at hand, he sent for some dancing-girls, and selecting the one with the smallest hands, caused her to introduce them after the manner of forceps, and so to effect delivery.

Medical News.

Metropolitan Poor Law.—Mr. Goschen, the president of the Poor-law Board, has addressed a circular to the guardians of the London unions, drawing attention to the Metropolitan Poor Amendment Act of last session, which provides for the equal distribution over the metropolis of a further portion of the charge for the relief of the poor, by making a large part of the cost of maintenance of the in-door poor a charge upon the metropolitan common poor fund, from the 29th of September last. In this letter the intent and meaning of the act, and the mode of carrying its provisions into effect, are set forth at length as a guide to the official bodies and other persons upon whom devolves the duty of administering the law.

Madras Medical Retiring Fund.—The following official notification has been made:—"The managers of the Madras Medical Retiring Fund having formally made over to the Right Hon. the Secretary of State for India in Council the assets, records, and other property, liabilities, and management of the fund, in terms of Act 29 Vict., cap. 18, with effect from Sept. 1, 1870, it is hereby notified that the Government of India has been pleased, on the part of the Right Hon. the Secretary of State for India in Council, to accept the transfer in terms of the aforesaid Act, and with effect from the date above specified. The Government of Fort St. George will be pleased to issue the necessary subsidiary orders on the subject."

Cambridge University.—The Downing Professor of Medicine or his Deputy will deliver a course of lectures on Materia Medica, Pharmacy, and Therapeutics during the ensuing Michaelmas and Lent Terms. The lectures will be delivered in Downing College, on Tuesdays, Thursdays, and Saturdays, at nine a.m., commencing on Tuesday, Oct. 25. Fee for the course 3*l.* 3s. The museum of Materia Medica at Downing College is open daily to all students of medicine.

Army Medical Department.—Staff Surg. Holahan has been ordered for duty at Linenhall Barracks, Dublin. Staff Assist-Surg. Kearney has been granted leave of absence, pending embarkation for foreign service. Staff Assist-Surg. Coney has been ordered from Dublin to Ballina, and Staff Assist-Surg. from Ballina to Boyle.

Aid to the Sick and Wounded.—Intelligence received by letters brought by the American general, Burnside, to Versailles, and from thence sent forward to London, announces that the American International Ambulance is perfectly organised, and in working order; large numbers of the American gentlemen and ladies remaining in Paris are enlisted in the service of this the only American ambulance organised in France. This ambulance has as its surgical chief a most distinguished surgeon of New York, Dr. Swinburne, and a large staff of medical and surgical officers. Dr. Thos. W. Evans, Dr. Edward A. Crane, Secretary.

NOTICES TO CORRESPONDENTS.

A Member of the Medical Club.—The Annual General Meeting takes place this afternoon (Wednesday 12th.) at three o'clock. As you live in town you can easily attend, and will then obtain all the information you want.

University College.—We have received the Calendar of this hospital, a most useful volume to which we have referred some parents and guardians. We wish all our institutions would send us such a calendar. It does not go into the waste-paper basket like a prospectus.

L.S.A.—Such a diploma would be of no value. As for ornamental purposes it might provoke unpleasantness. Go in for the College of Surgeons.

Salas.—The journal in question took up the subject after the Medical Press. It has often imitated us in this way. The boast to you was of about the same value as many of the editorial paragraphs that adorn our "tradesmanlike contemporary," but we do not care to notice it, and, as a rule, have no desire to trouble ourselves about the conduct of other journals. We have lately refused several articles exposing our contemporaries or reflecting on their staff. We do not know if the gentleman who has offended you still writes for the paper. The writer of the leaders in the Medical Press which you so much admired, has done nothing for us since, but he will soon rejoin our staff.

F.L.S.—Oliver's "Outlines of Botany" published by Macmillan and Co.

PATENT SURGICAL SILK CORD.

We have received a sample of this substance made [by] Messrs. Arnold and Sons, and can strongly recommend it. We hope some of it may be sent out to the French at the Seat of War. It is made of pure silk, without colouring or any of what is called dressing, and when used it does not twist or curl up like ordinary silk. A very convenient way for surgeons who only want small quantities, is to order one of the small tablets in a case which gives thus four sizes.

J. S. T.—We are sorry to be unable to comply with your request. The proceedings were too lengthy to enable us to do more.

F. B.—Our columns are freely open to fair discussion, but we must ask you to let your letters be brief. We cannot admit the personal attack contemplated.

POST OFFICE REGULATIONS.

We are restrained by post officials from stitching the journal, and must, therefore, ask those numerous subscribers who write about this to make their complaints to the Postmaster-General. It seems quite absurd to prevent proprietors turning out their journals in the neatest possible form. But red-tape stops the way. It is just the same with the new halfpenny post cards. Some correspondents have posted plain cards to us with a halfpenny adhesive stamp affixed. In every case we have had to pay one penny fine. Others sent us some newspapers with the old impressed stamp on the first of October, we had to pay twopence each. The Post office seems bent on doing all it can to neutralise the benefit gained, and yet is behaving most shabbily to the letter-carriers. When will common sense find admission to official circles? Oh! for another Rowland Hill.

Cucumber.—The annotation appeared in our columns last July to which you refer. The verses referring to our article in *Punch* are, as you say, "well done."

Glitter.—We meant all we said. It is vulgar this professional trading in the horrible events taking place in France. Whom the cap fits, &c.

Podalirius.—The paper is beneath our notice. Write to the Council of Management, and lodge your complaint with that body.

Cantharides.—Your letter is simply libellous. We must not print it, but we sympathise with your honest intention.

Medicus.—See Professional Calendar.

J. L. D.—Many thanks for your kind interest in the matter of new subscribers. We have inserted the name upon our list, and the journal will go regularly to the address given.

LONDON MEDICAL AND SCIENTIFIC SOCIETIES.

The first meeting of some of the Societies takes place during the present week. At the Royal Microscopical Society, this evening at 8 P.M, Dr. G. W. Royston Pigott will read papers "On Aplanatic Illumination," and "On Aplanatic Definition, with Optical Illustrations." On Friday, at the Clinical Society of London, at 8½ P.M., Dr. John Harley, "On a Case of Injury to the Liver." Mr. Spencer Watson. "Four Cases of Parenchymatous Keratitis, associated with Acute Rheumatism." Dr. John Ogle, "On a Case of Tetanus treated with Ice and Belladonna." And other papers.

On Saturday, the Medical Officers of Health Association meet at 7½, when an Address by the President Dr. Druitt, will be given "On the Sanitary Topics of the day."

BABY-FARMING.

Our esteemed correspondent "Dr. J. Waring-Curran" in striking at the root of this great social evil, advises that the *seducer* should be made amenable to legislation, and be punished according to the nature and strength of the evidence adduced at the trial. While seduction is condoned for by the payment of 2/6 weekly, infanticide and baby-farming will exist.

THE HOOK TO CATCH FISH.

To the Editor of "The Medical Press and Circular."

Sir,—I have been frequently asked by lady patients in an interesting condition about a book which is frequently advertised *Parturition without Pain or Loss of Consciousness*, published by Robert Hardwicke, 192 Piccadilly, and I have had to shake my head in ignorance of some hidden discovery, for the writer is of us.

The lady superintendent of a large school writes to me to-day for information respecting a book entitled, *Scarlatina, its Prevention by Belladonna and Carbolic Acid*, published by James Epps, of Piccadilly. Can I recommend it? I should like to see a review of either or both in your columns, because I fear they are hooks to catch fish. I hope I am wrong for the sake of the author's character, and those who may be lured to purchase what may be trash. Pardon the suspicion of an old practitioner, whose conscience age has rendered very scrupulous.

Your obedient Servant,

Chesterfield, Oct. 8th, 1870. Dum Spiro Spero.

SPLENIC APOPLEXY (?)

To the Editor of "The Medical Press and Circular."

Sir,—I read in common with some of my friends, simple, ignorant, country folk, a little sensational blank shot fired off on the subject of a *very fatal, most disastrous* and *much to be deplored* disease—splenic apoplexy—attacking cattle fed upon sewage-irrigated (not *irritated*) land. In this year 1870! Above all other years, when was this rank, rich, poisonous grass grown so abundantly? The writer makes an error, he meant *splenic atrophy*, for the poor beasts suffered enough for the want of pasture, and there is no use slandering them in saying that they had too much. "Here is a halfpenny," said the charitable-disposed to the errand-boy, "and don't buy sweetmeats to make yourself ill." Well might the poor oxen who have been half starved all the summer, retort—*Sic vos non vobis fertis aratra boves.*

Your humble Servant,

Oct. 5th, 1870. A Country Doctor who hates nonsense.

INDECENT MEDICAL ADVERTISEMENTS.

We are glad to find the *Nottingham Journal* directing public attention to the abominable character of certain filthy [medical advertisements published in the columns of its local contemporaries. "Paterfamilias," in a clever letter addressed to the Editor of the *Nottingham Journal* informs us that the papers engaged in the nefarious trade infringe a bye-law of the Corporation, rendering them liable to fine or imprisonment. The bye-law to which the writer refers runs as follows:

"Every person who shall deliver to any inhabitant or passenger in or near any thoroughfare in the borough, any posting bill or printed or written paper of an obscene, indecent, or offensive nature, or referring to any disease of a loathsome or secret kind, or to any secret cure for any disease, shall forfeit and pay for every such offence a penalty not exceeding the sum of twenty shillings."

We wish all corporations possessed the same judicious law. We heartily endorse the following remark of "Paterfamilias," which are quite *apropos* to the subject.

"The Sanitary Committee keep a strict watch that putrid or diseased meat shall not be sold in the Shambles as sound food, and that nuisances affecting the physical health of the people shall be at once abated. They cannot refuse when their attention is directed to the subject to exert their authority to put down this dreadful moral pestilence, and if they persist in continuing the publication, punish those who encourage it for their own pecuniary profit."

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 19, 1870.

CONTENTS.

Original Communications.

FEIGNED INSANITY.

By J. H. Balfour-Browne, Esq., Barrister-at-Law.

If the law has been slow to adapt itself to what may be regarded as the results of modern science, those persons who are the exponents of what the results of modern science are have themselves to blame. If the definition of legal irresponsibility is such that it is calculated to suffer the punishment of many who ought to be exempted from the consequences of their criminal acts, it is so in consequence of the thorough incompetence of many medical witnesses to distinguish between real and feigned insanity. To demand that the law should sail close to the wind of science, which seems at best to be a wavering draught or squall, is to demand too much. The judges very properly decided, as it seems to us, that it was better to have too narrow than too broad a definition of legal insanity; that it was better for the interests of the community that some persons who might not in strictness be responsible for their acts, should suffer punishment for their misdemeanours, than that many, who were really responsible to the laws, should, through too wide a definition of insanity and the incompetence of those, who in individual cases were summoned to say whether insanity was real or counterfeit, escape the merited punishment of their crimes. And the judges were right. Until very recent times medical men were not in any way trained to a knowledge of insanity; and where members of the Profession who might have obtained some reputation in other branches of the profession, were placed in the witness box to give evidence, as to the mental condition of a person accused of a crime, it can be easily understood that their evidence was most unsatisfactory. Even at the present day the precaution taken by medical educational institutions and examining boards, that those to whom they give degrees and licenses should know something of insanity, are most defective. We are glad, however, that one or two of our largest and best conducted hospitals for the insane now give opportunities to medical men to become practically acquainted with the symptoms and treatment of mental disease. And a day may come when the word "expert," as applied to those who profess to be informed as to the important questions of medical-psychology, may lose that tinge of irony which, in the eyes of lawyers, at present, attaches to it. That the law has been slow to adapt itself to recent scientific knowledge in relation to mental disease, is due to the fact that the medical profession has not, as a whole, adopted the results of those investigations, and that at the present time the knowledge of insanity diffused among the ordinary ranks of the Profession is thoroughly inadequate. Any one who has taken the trouble to examine the medical certificates, upon which, under the present law, lunatics are confined in asylums, must have been struck with the slovenliness and ignorance of those who filled up the printed form. In the first place, those medical gentlemen, in many cases, seem either to ignore the existence of a rubric—which directs them what to do—or to be unable, if they do read it, to understand its perfectly intelligible requisites; and, in the second place, the statement of the "facts indicating insanity observed by myself," or communicated by others is generally most unsatisfactory. One medical man gave as the only fact indicating insanity, observed by himself—"Called me a fool," while another, evidently ignorant that "to drive unicorn" means to drive a team of horses, in a particular way, stated that the individual "believed he had driven a unicorn." Can it be a matter for wonder then that many members of the medical profession have found much difficulty in distinguishing between insanity which is real and insanity which is assumed, or that lawyers have been in general very suspicious as to medical testimony, and unwilling to take it for what in some cases might be its real worth. When there are many false coins going about, a good shilling may now and again be refused; and one is not to be blamed if they give every sixpence a "ring" on the counter. The way to remove the stigma is, in the first place, to remove the justice of it! The best way for the medical profession to begin

the reform is not to alter the law, but to see that it is in future better educated!

But how are we to detect feigned insanity? 1. In idiocy; 2. In imbecility; 3. In dementia; 4. In mania; 5. In partial intellectual mania, monomania, and melancholia.

1. *In Idiocy.*—It is well to remember that the greatest difficulty in the decision of the question as to whether an individual is feigning insanity or not, arises in consequence of the fact that many insane persons will, under similar circumstances, resort to precisely the same expedients as those who are sane. If a person who really is under the influence of an insane delusion sees that it is for his advantage that he should be thought insane; if he is aware that the belief in his insanity will exempt him from the consequence of some foredone act, the mere existence of an insane delusion does not preclude the possibility of his feigning an insanity under which he does not labour. This fact seems to have been overlooked by almost all writers on the medical jurisprudence of insanity. That this circumstance complicates the question is evident. Many of the tests which are in ordinary circumstances applied to decide the question—as the enquiry respecting the beginning of the insanity (the early symptoms of the disease being those in which feigners usually fail), the questions as to hereditary tendencies, as to previous attacks and the like—are, to a great extent, rendered useless. That the delusions of many persons are modified by motives, much less powerful than the above-mentioned, as, for example, by the questions and laughter of a little knot of listeners, we have often observed, and have found, that even to enjoy the pleasure of being laughed at, the pleasure of attracting notice, persons with many extravagant delusions would upon occasion exaggerate and vary the statement of their unhealthy impressions. In most cases, however, in which a healthy mind, or one which looked at in reference to the ordinary minds of mankind, may be looked upon as healthy, undertakes the task of feigning insanity, the difficulty of detection is not great. Two things are necessary to ensure a correct conclusion—care and time. Time fights for truth! Idiocy, then, is a form of mental unsoundness very rarely assumed, in consequence of the facility with which its genuineness can be ascertained. The history of the individual which can in these days be more easily traced than in times gone by will, in all cases show whether it is feigned or real. The form of the head is a symptom which cannot be feigned. No man by taking thought can take away that deformity any more than he can add a cubit to his stature. There are often other deformities associated with idiocy, and for those who have to decide a question as to real or feigned insanity, it is most useful to remember that those symptoms only which are quite beyond the power of the individual are, as it were, the rock on which to build their theory—for, after all, the answer to that question is a theory and nothing more—while the other facts, which must be had recourse to, are like the sand, and winds of doctrine may lay it in ruins!

2. *In Imbecility.*—But there may be great mental weakness, and the form of the head may not be indicative of the defect. In such cases the imbecility is not congenital, but acquired. The history in such cases is of the greatest importance, and the supposed cause of the enfeeblement should be very carefully sought for. In such a case the impostor would prove too much, by assuring us that he had been in his present condition since his birth. The cause assigned, and the nature of the malady, will in most cases of imposture discover the trick by the inadequacy of the one to the other. It is to be borne in mind that it is in reference to the "outside" facts of the disease that errors will ordinarily be found. All the acts which get out of the dominion of will, and become automatic, will differ in the case of an impostor and in the case of a real imbecile. The history of the case, as showing his opportunities for becoming acquainted with the symptoms of the disease, should be carefully studied. And yet due weight should in each case be given to the force which unconscious imitation is known to exercise over a weak mind. The physiognomical diagnosis of expression is a very important point in all cases in which simulation of insanity is suspected; and skill in this department of the work of the medical-jurist is only to be acquired by long and careful experience—to be best learned, it seems to us, in the wards of our hospitals for the insane. The description of a "look" is difficult. To say that the imbecile has a dull, stupid, vacant look is true; that his manner is uneasy, that his temper is variable, and that sometimes the dead level of his mill-pond existence is broken by a little eruption of passion, is likewise true. But the description would do for many other persons besides imbeciles. By careful watching, gleams of the smothered intelligence will shine through, or flash out of the impostor's face, and it seems to us that an experiment by means of the introduction of some object likely to excite curiosity or wonder into the presence of the individual suspected of imposture, would often serve to uncover the ambush intelligence. In many forms of imbecility there is a mixture of folly and acuteness. Many of the stories told in Scotland of their village fools, or "naturals," prove this; and the ordinary test that while the real imbecile is shrewd or foolish irrespectively of prospective interest, the impostor is shrewd in all matters connected with his scheme and its success, and shows his folly and stupidity only in connection with matters of indifference, is, it appears to us, unsatisfactory! One thing seems somewhat certain, and that is, that this form of insanity is not often assumed, first on account of the fact that this amount of imbecility, even when really present, is not necessarily incompatible with responsibility; and, secondly, on account of the difficulty of impressing individuals with the idea of insanity, and its existence in one who manifests many signs of intellectual activity. When this amount of unsoundness does occur, it is not unfrequently accompanied by sufficient self-control to enable the individual at certain times (when it suits himself) to appear perfectly sane. And when such an amount of self-government exists, the individual, whether labouring under mental defects or not, seems to be properly punished on account of a proved transgression.

3. *Dementia.*—Dementia may be, and sometimes is, simulated by aged persons. In most cases, however, it is not a sufficiently demonstrative form of insanity to find favour with impostors; and it is so imperfectly understood, and so commonly confounded with simple dotage, that its adoption is rare. The characteristic of senile-dementia is a deficiency of mental excitement; there is a torpor of all the faculties; in it the mind is like an engine working under defective pressure. One circumstance which has led to dementia being confounded with the defects of age is, that one of its symptoms is that memory loses hold of events near to the present in point of time, sooner than it does of those events which are more distant. Delusions which do come, fancies which take possession, are generally connected in some way with a substrate fact of the past life of the individual; and there is a gradual decay, which the impostor would find it impossible to simulate; indeed, one rule for the guidance of the medical-jurist in all those cases, might be:—Look always for gradual changes in cases of real disease; look for sudden transitions in cases where the will of the individual is attempting to take the place in the production of physical events—of the great slow laws of nature. This is a good rule! The will jumps—the laws of nature creep! The gradual decay above alluded to is marked by the darkening of that glass through which the senses, at best, darkly see! The power of recognising persons, places, and things goes, and there is no return. The mind lies in circumstances, like a water-logged ship in the waves. *Sans* everything! Even in this stage of the disease a man might commit crime, or, in other words, might do harm to himself or others. But little or no difficulty is likely to arise from attempts to feign senile-dementia in this its last stage. There is an actual repugnance in strong humanity to sink so low—to

seem so weak. After death Cæsar's clay may keep the wind from whistling through a chink, but not before. We find then, as a fact, that it is rather those forms of mental disease which arise from undue excitement that are chosen for imitation by impostors, than those which arise from defective development or diminished activity of the faculties. It is to be remembered, with reference to dementia, and our diagnosis of it, that where it is not the result of some severe mental shock, it is the consequence of organic disease of the brain, which almost invariably, in time, reveals itself in paralysis. So time fights for truth here too!

The remaining subjects—Mania, Partial Intellectual Mania, Monomania, and Melancholia, will be continued in our next.

ON ISCHURIA RENALIS.

By J. Waring-Curran, L.K.Q.C.P.I., L.R.C.S.I., &c.

My chief object, in narrating the history of the following cases, whilst I feel they are not devoid of practical interest in themselves, is to bring more prominently forward the employment of powerful diuretics in the treatment of certain forms of renal disease. Admitting, however hazardous such a method may prove, there is no disputing the fact that the description of case wherein I recommend the adoption of such a plan is universally fatal if not speedily relieved; and I thus open the question whether, after the failure of certain orthodox remedies to relieve formidable symptoms and effect excretion of urine, and death accordingly impending, we are not justified in falling back upon a treatment to which I regret the Profession usually says its *veto*, without first fairly, in suitable cases, testing its value and effect.

Dr. Elliottson refers to Sir Astley Cooper exhibiting powerful and stimulating diuretics in obstinate cases of suppression of urine, and men of the older school were in the habit of prescribing tincture of cantharides with the same intention, I may then be excused trying to revive what the most eminent at one time practised.

Case 1.—*Mixed suppression of urine, produced by mechanical obstruction, and terminating in renal congestion.*—Mr. E., a corpulent, previously healthy man, aged sixty-seven years, sought advice on the 22nd of September of last year. Before visiting him, I was informed he had been troubled with his water for some weeks; that he was in the habit of passing large quantities of gravel, and suffered a good deal with pain in the loins, for which he was treated by another medical gentleman. The day I first saw him he proposed going to London to consult Dr. Tanner, but as he had passed no urine for 24 hours, his family became anxious that he should have further advice before leaving home. He was walking about his parlour as I entered, and appeared the picture of health; discoursed freely upon other topics besides his ailment; and seemed a good tempered, lively old gentleman. I gathered from him that for some weeks he laboured under irritability of the bladder, frequent desire to pass water, burning pain over region of kidneys, and a sense of distension about the abdomen; that he suffered from nausea, occasionally accompanied by vomiting. The conjunctiva was tinged, and the surface of the body presented an icteic hue. He did not impress one with the idea that he suffered much if the face be indicative of such phenomenon. There was no tenderness over either kidney, and the pain he said was of a dull, heavy character, passing along the inside of the thighs; the tongue was dry at top and along edges; the pulse beat at 76; there was slight nausea; loss of appetite, and insomnia; but there was no retraction of testicle, no uneasiness at end of the penis. The temperature of the body was 105° F in the axilla. I was unable to detect the presence of fluid in the bladder. I ordered some linseed and mustard poultices over the kidneys; prescribed a saline mixture with belladonna, and exhibited some compound jalap powders. At bed-time I recommended warm hip baths to be used, and promised to see him early the following day.

The friends appeared surprised at the attention I bestowed to every symptom, and could not understand my attaching so much importance to so apparently trivial an illness.

September 23rd.—Has spent a restless night; bowels have been copiously removed; passed a few drops of bloody water which merely stained the urinary apparatus, but walks about as on yesterday. Went before breakfast-time for a short walk. There are colicky pains over the bowels, sickness, and thirst. The man is restless and uncomfortable, but cannot express, he says, how he feels. I cupped him over the kidneys, and gave him a full dose of calomel and jalap, ordering the warm baths to be continued.

Evening Visit.—Much the same as in the morning, with the exception that he seemed brighter because of having voided about an ounce of very dark coloured, bloody urine—if I may call it urine—as it had no smell of it, and appeared pure blood. I suggested another opinion. His family named an eminent Nottingham surgeon, Mr. Thompson, with whom I consulted. He viewed the case in the same light with me, that the tubes of the kidneys were loaded with lithates, and that renal congestion supervened. I suggested a powerful diuretic, but Mr. Thompson who is a famed practitioner would not agree, and I acquiesced to the passage of a blood catheter, which drew off a few ounces of blood; to the exhibition of turpentine capsules, to drinking of gallic acid dissolved in warm water, and keeping up free action of the bowels.

September 24th.—Our patient is no better; there is more weakness or declension in power of voluntary muscles; no water passed; stomach exceedingly irritable; anorexia; no continuous refreshing sleep, but short disturbed dozing; twitchings about the face and arms; pulse 74; respirations 24; temperature of body 102° F; I introduced a large sized catheter, and drew off three ounces of dark coffee-looking fluid. To continue treatment.

September 25th. — Met consultant. We agree that there is no improvement; another medical gentlemen joins us; neither will agree to a diuretic for common scientific reasons. Treatment to be persevered with.

September 26th.—Patient anxious, restless, and drowsy; breath smells of urine; pulse slow; distension about abdomen; vomiting of dark green coloured fluid, with ammoniacal odour; burning pain over kidneys; bowels freely acted on; drew off about an ounce of blood from the bladder.

September 27th.—Incessant vomiting; inclination to sleep, but very restless. Thoracic complications first evinced; respirations noisy; inspiration prolonged, painful, and wheezy; expiration short, abrupt, and followed by evident relief; tongue dry and coated with white mucous looking fur; insatiate thirst; no urine passed; bowels well opened; no inclination to talk; to have iced champagne and nourishing soups.

September 28th.—Patient, much weaker, is now unable to sit up in the bed unsupported; pulse 70, weak, and jerking in character; respirations 20; temperature between thighs 102°; intellect still clear; pupils somewhat dilated and don't contract under the influence of light given by wax taper; tongue dry and streaked with yellow lines. Skin and breath emit a urinous or ammoniacal odour; no desire to make water; introduced catheter, and drew off a small quantity of bloody fluid, which separated afterwards, the blood subsiding to bottom of utensil leaving a straw-coloured fluid floating on the surface.

September 29th.—General muscular twitchings; very noisy and embarassed breathings, as if the bronchiæ were filled with phlegm, and no effort made to dislodge it by coughing; does not lie still a minute; refuses to permit the introduction of catheter; does not raise his eyes, but

appears stupid and drowsy ; has no pain in any situation ; thinks he will be better in a few days.

Evening Visit.—In and out of bed with help of nurse and relations all the day ; keeps being sick ; refuses nutriment and medicines ; has had a convulsive seizure ; surface of body moist and cold.

September 30th.—Gradually became more quiet, and appeared to die by coma.

Notwithstanding a most earnest appeal, no *post-mortem* examination would be permitted.

Case 2.—*Hæmaturia, ending in complete suppression.*—E. G., a woman of about fifty years, who had borne a large family, and had been out of health for some weeks, sought my advice one day in the house of a neighbour of hers (whose child I had been in attendance on) for violent pain across the small of the back, and difficulty in passing water, which occasionally contained blood. I prescribed some ordinary mixture for her, and then lost sight of the case, being so much benefited that she did not persevere. On the 12th of March of the present year I was requested to see her again, and, upon visiting her, I learned that for four days she had been passing blood, and that for two days preceding my visit there was complete suppression of urine. She complained of burning pains over the region of the kidneys, sickness, accompanied by vomiting, colicky pains in bowels, headache and thirst. The pulse was 72 ; respirations 24; and temperature of body in axilla 104° F. As there was inclination to costiveness, I purged her freely with a full dose of compound jalap powder, and gave her a mixture of the tincture of the perchloride of iron.

March 13th.—Relieved of colicky pain in bowels, but the distress across the kidneys she expressed as being unendurable. No urine eliminated. Constant nausea, anorexia ; spent a sleepless and disturbed night ; ordered a blister to be applied over both kidneys, and diluents to be freely taken.

March 14th.—This is the fourth day and still no urine has been passed—not even any attempt made. There is no water in the bladder. The bowels act freely, but the vomiting continues. The pulse is 70, respirations 22, and temperature of body decreasing, Ordered a warm bath.

Evening visit.—Woman no better ; anxious and restless, inclined to become drowsy; breathing laboured and wheezy, and the pulse slow and weak—the pulse of an unfilled artery. To continue treatment.

March 15th.—The breath smells of urine. I introduce a female catheter into bladder, but no urine flows ; the apertures are plugged with blood. The respirations are become more embarrassed, and the case seems hopeless. The woman must quickly die if not relieved. I prescribe full doses of acetate of potass, tincture of belladonna, small doses of digitalis, and infusion of broom.

Evening visit.—No urine, nor even a trace of it. The pain in the loins is past endurance. I rub an extract of belladonna, dissolved in glycerine, over the kidneys. Cover it with silk paper, and apply a bran poultice external to all. I give her small quantities of brandy and soda-water to relieve sickness, and administer a draught with cyanide of potassium, and advise the diuretic to be pushed. Anxious for the safety of my patient, I visit her again in four hours. I find she has experienced the sensation of requiring to make water, but cannot. I think I can detect some fluid in the bladder. I advise a warm hip-water directly, and perseverance with the remedies.

March 16th.—I find my patient has voided about one and a half ounces of bloody urine, but the pressing symptoms continue ; pulse is so feeble in action and in character that I omit the digitalis. Sickness continues, but no vomiting to signify. Has spent a restless night.

Four hours or so after, a relative calls upon me to say the woman has made a large quantity of water. Upon my arrival I find half-a-pint of urine, tinged with blood, in the urinary utensil, containing a thick sediment of lithates. Patient, accordingly, is more sanguine of living. To have brandy-water acidulated with bi-tartrate of potass for drinking, since the thirst continues ; to have an increased quantity of acetate of potass every two hours, and to repeat the hydragogue cathartic.

March 17th.—In the course of twelve hours, there has been passed fourteen ounces of thick, dark-coloured urine. I find it contains lithic acid in composition with soda, and that it is deposited in large quantities as the urine cools. Vomiting has abated ; pain across kidneys of a different character, dull and aching ; patient more hopeful ; breathing better, and pulse more full in character, though still slow in action. To continue diuretics, and have some draughts of sal volatile, egg and milk, and beef-tea *ad libitum*.

March 18th.—Urine passed freely, pain subsiding, and patient altogether in every respect improving.

From this time there was no relapse. I gave her ferruginous tonics, and in ten days had the pleasure of finding her down stairs. I examined this woman's urine frequently when convalescing, and was surprised at the quantity of urea which it contained. Following M. Becqueril's method of putting a little urine in a watch glass, and gradually adding a like quantity of nitric acid in such a way as that the acid might get underneath the urine to the bottom of the glass, I obtained the crystallized deposit of urea in three or four hours. I coincide with M. Becqueril that, when the quantity of urine is increased, the quantity of urea is increased. It was so in this case, for it is impossible the large quantity of urea obtained could possibly have accumulated in the system without more serious consequences.

Case 3.—*Supposed calculus impacted in right ureter, with atrophied kidney of opposite side producing suppression of urine.*—T. H., aged fifty-six years, of spare habit of body and delicate appearance, sought advice for violent pain commencing across right kidney, extending down right ureter, and reaching the testicle of same side, which was retracted. He had suffered in the past from renal disease, and his last attack lasted over a period of several weeks. Upon removing his clothing, I observed a marked depression, corresponding to region of kidney of left side, there was a marked fulness, and tenderness on the other side—the patient crying out when firm pressure with the fingers was made. He has only passed a very small quantity of urine during the past few days. He is weak, and anxious as to the result. The tongue is dry ; pulse 70, bowels costive ; appetite deficient. Prescribed a hydragogue purgative, a mixture of potass with belladonna, and a liniment of chloroform and belladonna for local application.

Thirty-six hours afterwards I was summoned to his house, as he had not passed any urine for eighteen hours. The last voided was bloody, and contained mucus. The pain is violent ; testicle well drawn up ; vomiting continuous and distressing. I order a warm bath, and return in five hours, but find no improvement in general symptoms. His present state now is as follows :—Nausea with vomiting ; vertigo ; burning pain across kidneys and along ureter ; restless ; frequent desire to make water, but unsuccessful because there is none in bladder ; uneasy sensation at end of penis ; pupils natural ; skin cool, temperature of body 108° F. ; pulse 70 ; respirations 18 per minute. I lose no further time, but exhibit full doses of acetate of potass, tincture of cantharides, tincture of digitalis, spirits of chloroform, and decoction of broom tops. I direct a warm hip-bath every four hours, the parts to be well rubbed with the embrocation, and steamed flannels applied afterwards. To have plenty of diluents—barley water and lemon kali *ad libitum*. I returned again in three hours ; he does not retain the medicine, so I mix him a prussic acid draught, and direct the diuretic mixture to be given in small quantities, and more frequently repeated. After eight hours treatment he experienced the sensation of some rough body passing lower down his ureter, which produced a hot burning pain, and set up violent vomiting. Three hours afterwards he passed bloody water, which gave ex-

cruciating pain—genuine *ardor urinæ*, which put him on his knees in bed. From this period he kept passing urine, which gradually cleared; but no calculus came away until the end of a week, when he was able to retain his water so as to fill the bladder; and, in the act of emptying it, a very small and irregular oxalate of lime calculus, which I believe is rare as a renel calculus, weighing only a few grains, came away in the gush of urine. The man soon became convalescent, and resumed his employment of a frame-work knitter.

I narrate the first case—which is pathognomic of anuria—because it shows the longest period a man can live without secreting and passing urine, and because it is just such a case, if allowed to follow the bent of my own inclination, wherein I would give a powerful diuretic, after a fair trial, and the failure of, the common remedies. The two other cases speak for themselves, the result of treatment is eminently satisfactory, and I feel assured, had I not given the diuretic, that both must have perished from uræmic poisoning. I must not be misunderstood—in idiopathic and single uncomplicated inflammation of the kidney I should not be foolish enough as to once think of a diuretic, no more than in congestion the sequence of the exanthemata; but I do believe in cases of congestion induced by mechanical obstruction, whether in the ureter or in tubular portion of kidney, leading on to suppression, that powerful diuretics should be employed before the patient sinks. In the district which I live we possess a lady practitioner, far and wide famed for her water cures. This I know, she has succeeded in forcing the water when eminent members of our profession have given up their patient's disease as hopeless and beyond their treatment, and, if I mistake not, infusion of digitalis is the drug she uses. I am no advocate for amateur doctors. I know her success, and I have experienced the folly of her trying to cure all affections by the same method of treatment. The subject needs discrimination, but is well worthy of future investigation by those to whom may fall the treatment of parallel cases as I now relate. If the anuria extends over the fifth day, we are bound, I hold, to exhaust our treatment. I do not consider that Prout was correct when he remarked that coma became established on the fifth day if the suppression was complete. My experience in the past extends such an event to the evening of the eighth or morning of the ninth day, because I consider some of the urea is decomposed and converted into carbonate of ammonia, a phenomenon first remarked by Schmidt in the suppression of urine in *cholera morbus*.

ON A CHANGE IN THE URINE FROM THE EXTERNAL USE OF CARBOLIC ACID.*

By Augustus Almen.

In a former part of this journal, page 105, Mr. Waldenström has given an account of an altered appearance of the urine, &c., observed in some patients at the Academical Hospital, who were using a solution of carbolic acid in oil, either in dressing, or as an injection into abscesses, and he called particular attention to the danger of the occurrence of nephritis, and to the necessity for examining the urine during the employment of carbolic acid.

Although I have only a few very unimportant observations to make, which should most fitly be taken in common with the paper just referred to, yet, considering the practical importance of the inquiry, and the extremely unusual appearance the urine presented, I will say a few words on the method of determining the presence of carbolic acid in the urine.

The urine of various patients admitted to the hospital, had, after the use of the acid in question, a very dark, almost black, tarlike, appearance. It was acid in re-action, turbid, and did not throw down any unusual deposit. The urine contained albumen, but not in any great or extraordinary quantity, in fact, only to an insignificant amount. Blood could not be detected,* and the urine did not present anything unusual except its black tar-like colour, and a peculiar smell. When no absolutely certain re-action of carbolic acid could be obtained, either with the urine itself or with the residuum after the ether, with which the strongly acidulated urine had been agitated, though the presence of carbolic acid was highly probable from the smell of the fluid, about 400 cubic centimetres (some 14 ounces) of the urine was strongly acidulated with sulphuric acid, and about a third part was distilled from an ordinary retort, with glass condensing tubes. The distillate was as clear as water, colourless, smelt strongly of carbolic acid, and gave beautiful and undoubted re-actions of the same. For comparison, an analysis was instituted at the same time with distilled water, in which some drops of carbolic acid had been dissolved by agitation.

The distillate and the aqueous solution of carbolic acid, when mixed with some ammonia, and, subsequently, chlorinated lime, assumed the same pronounced and beautiful blue colour. Very thin chips of fir-wood (spruce fir), thoroughly soaked in the two liquids, and afterwards dipped into dilute-hydrochloric acid, and exposed to the sunlight, became with both mixtures beautifully blue, especially at their thinnest edges. The distillate, agitated with ether, and the clear ether evaporated in a watch-glass, left as a residuum oil-drops, smelling strong of carbolic acid, which, when mixed with water, and also when treated in other ways, for example, with strong nitric acid, behaved like carbolic acid; although on treating them with concentrated sulphuric acid, then neutralising with chalk and filtering, I was not fortunate enough to obtain with perchloride of iron the beautiful violet colour which is, without difficulty, got in the case of pure carbolic acid.

No doubt as to the presence of carbolic acid in this urine remained, and that its amount was not trifling, I conclude from the fact that the small quantity of urine which was subjected to distillation, afforded a distillate of which a small part, agitated with ether, left a not inconsiderable oily residuum. Although I have not instituted any comparative experiments with normal urine, I yet take it for granted that it does not contain carbolic acid in any such quantity as was the case in the present instance.

The unusual tar-like appearance of the urine naturally cannot depend on the presence in it of carbolic acid, and as urine so affected is not observed during the internal use of this substance, Mr. Waldenström's presumption, that it results from the presence of oxidised products of carbolic acid, formed even before the absorption of the acid, seems a very probable one. As is well known, carbolic acid and creosote have a great tendency to change; even when kept in well-closed glass bottles they become tinged with a more or less reddish-brown colour, and carbolic acid dis-

* Translated from the "Upsala Läkareförenings Förhandlingar" (Vol. v., Part III, page 253), by J. W. Moore, M.B., Ch.M. Dub., L.K.Q.C.P. Ex. Schol. T.C.D.

* The most delicate, simplest, best, and a really practical test of the presence of blood in the urine, is that mentioned by me at the meeting of Naturalists in Stockholm, 1863 ("Proceedings of the Meeting, Stockholm, 1865," P. 481), viz., the guaiacum test, which is most readily carried out in the following way:—Tincture of guaiacum (a solution in spirit of guaiac resin), and ordinary turpentine in about equal parts, or from half to one cubic centimetre of each, are blended into an emulsion in a test-tube, after which, a small quantity of urine is added in such a way as to sink to the bottom in a separate layer. Whether the urine is normal or unhealthy, for example, containing albumen, but not blood, the emulsion undergoes no change until a rather long interval, but if the least blood is present in the urine, or if a drop of blood be added to it, the emulsion immediately on mixing with the urine becomes of a light-blue colour, then darker, and finally the blue resembles a solution of indigo or Prussian blue, these changes varying in rapidity and intensity, according to the quantity of blood present. Many years' employment of this simple test has convinced me of not only its incredible delicacy, but also its reliability. Neither normal nor ordinary albuminous urine, if free from blood, changes the guaiaco-turpentine emulsion at all in such a way that any doubt or uncertainty can arise as to whether blood is present or not; and this test for blood is for clinical purposes (not for medico-legal) simpler and far better than all others. How Teichman's blood-crystals may be obtained from urine and other fluids containing blood is mentioned in the same Proceedings, at page 482.

solved in water when treated with chromic acid (or whit- $K O_2 Cr O_3 + S O_3$) turns to a dark brown, not unlike the urine under discussion. It seems not improbable that the carbolic acid mixed with blood and pus should, on exposure to the air, and, perhaps, through the properties possessed by the blood of ozonifying and promoting acidulation, might undergo a rapid and energetic acidulation with the formation of the dark products of oxidation, which, afterwards, along with the unaltered carbolic acid, are absorbed, and pass off in the urine. At an hospital an experiment could easily be instituted as to whether a little carbolic acid, mixed with similar pus, and agitated with exposure to the air, after some time assumes a dark, tar-like appearance. That the dark colour is not developed after the water is passed, or while it is in the bladder, seems to me likely, from the fact that, if the urine is agitated with a little carbolic acid, and exposed, without shelter, to the air, neither its re-action nor its appearance is changed (it does not putrefy), and a smaller quantity of urine evaporates even without undergoing any noticeable alterations.

Sharing Mr. Waldenström's view, that a dangerous nephritis might possibly arise from the external use of carbolic acid, I yet do not believe that we should therefore abstain from a judicious employment of it. The acid in question possesses, as is well known, unusual antiseptic properties, even when used in extremely minute quantity, and therefore I cannot imagine any advantage that is likely to accrue from employing it in so large an amount, and in such concentrated solutions as physicians appear to prefer. In my opinion its good effect depends less on the quantity of the acid than on a complete and general contact with the pus, and, doubtless, quite as good results might be obtained with much less acid. On the dressing a more dilute solution in oil should be the best, but for injection an aqueous solution appears to me to be the more serviceable, if it is brought into contact with the interior of abscesses, an end which is most readily attained by an injection of a large quantity of an aqueous solution of carbolic acid, which should subsequently be rinsed or squeezed out. Experiments with this solution, or even better with a solution in spirit, of which various quantities, according to various cases, may be added to the water used in washing, and to an injection fluid, would be of advantage.

From what is already known of the action of carbolic acid on the kidneys, it is then always our duty not to omit an examination of the urine for albumen, during even the external use of this substance, and this, too, even if the urine does not present any abnormal appearance.

Hospital Reports.

ROYAL FREE HOSPITAL.

THERE is a manifest improvement in many respects in the arrangements of this excellent institution. The wards look bright and cheery. They are kept scrupulously clean, and the nursing department is beyond all praise of ours, in comparison with what it formerly was. On visiting the hospital the other day we were shown many most interesting cases under the care of Mr. John Hill. The first object of interest presented to us was a coloured drawing of the urethra, ureters, and kidneys of a patient, who had died some week or two after the performance of the operation invented by Mr. Holt for splitting the strictures. He caught some kind of fever which proved fatal. The drawing showed that the urethra had been left intact by the splitting process, which had simply burst the submucous tissue. Mr. Hill showed us a case of stricture of the urethra in which he had performed Syme's operation. This operation he finds only necessary in four per cent, or so, of all cases of stricture. There was felt extensive, thickening of all the tissues in the neighbourhood of the strictures. Syme's operation, says Mr. Hill, is one of the most difficult operations in surgery. In the absence of M. De Meric, who, we regretted much to hear, was suffering from bronchitis, Mr. Hill had to attend to one of that gentleman's cases, where excision of the shoulder joint had been performed on account of an extensive burn, caused by the patient, a man of some thirty-six years of age, falling on a fire, whilst in a fit of epilepsy. There is a most successful operation for remedying the effects of the contraction caused by burning in the same ward under Mr. Hill's care, in which the boy has been subjected to all kinds of operations in other hospitals ; but at length has been enabled to shut his mouth pretty well, by means of the excision of two V-shaped pieces from the lower jaw, and by using an instrument to keep up the head whilst some new incisions made in the sub-clavicular spaces were granulating. In another ward, we observed a case of Pirigoff's operation, a disarticulation of the shoulder joint, and a patient who had broken his tibia after having had his knee joint excised some few months back. A prize fighter had his jaw broken professionally by the blow from a brother of the P.R., and next bed to him was a patient suffering from stricture of the gullet caused by swallowing sulphuric acid. This poor fellow had been in the habit of himself passing a probang down the œsophagus into the stomach in order to relieve him from his inability to swallow. Recently, Mr. Hill had nearly had recourse to œsophagotomy in this case. In the female ward we noticed a case of tertiary syphilitic cachexia, following after a syphilitic phagedænic ulceration of the rectum. We understood that the venereal wards are still in disuse, and we are inclined to suspect that the able operative surgeons of the hospital are rather glad that this is the case, as they have thereby more beds for surgery. To this we have no objection ; only we would remark, that in the year when investigations were made as to the hospital accommodation for syphilitic cases, the Royal Free Hospital was greatly complimented for its charitable and tolerant practice of giving shelter to so many unfortunate women, who had been turned away from other less humane hospitals. We trust that the mantle of Dr. Marston will fall on some of his successors, and that they may remember that human misery and disease are very prevalent among prostitutes, and that there are as yet too few beds in London for them to allow of all the beds in the Royal Free Hospital being turned into more *respectable beds.* We have said enough, we think, to show what an excellent field for surgery the hospital is at present, and those who are well acquainted with the skill of Mr. Hill and his *confrères* may grant with us that no better opportunity for learning the operative art exists in London. Ladies wishing to learn nursing, too, or even the art of surgery, could not do better than become nurses in the hospital under the care of Miss Cole. If they filled precisely the same situations as the young nurses, we remarked in passing through the wards with Mr. Hill, they could not fail to learn much of practical surgery, and of surgical nursery. It has always seemed to us a pity that the Royal Free Hospital wards were not used for clinical purposes. At least, we have seen in them far more surgical cases than usually occurs in much larger hospitals. The well-known unequalled attention and skill of one of the younger surgeons of this hospital are quite sufficient to account for this fact, and we can only add that students would do well to become dressers for a time in wards where they will have ample opportunities of study, conjoined with tranquility, and absence of those distractions which exist at so many of the large school hospitals.

METROPOLITAN FREE HOSPITAL.

AMONG the out-patients of Dr. James Jones, we observed a case of fluctuating tumour of the liver in a young man, aged twenty. Dr. Jones considered this as probably a case

of hydatid cysts, and treated the patient by painting the tumour over with strong iodine paint. He is persuaded that the human tissues are more permeable than is generally supposed, and that enough iodine passes through the integuments into the cyst in many such cases to destroy the vitality of the hydatid, As a general rule, Dr. Jones is not in favour of operating in cases of presumed hydatids of the liver, unless where suppuration has manifestly taken place. In many cases the hydatids perish spontaneously, and become absorbed. He has never seen a death occur from leaving such tumours to nature, although he is aware that many such fatal results have been reported.

(Under the care of Dr. C. R. DRYSDALE.)

Chloral Hydrate in Pertussis.

JOSEPH HILBERT, four years, has had pertussis for two months, and been very ill indeed. Coughed as much as thirty to forty times in night, and "was often nearly suffocated." Brought up blood with cough. During daytime had very severe attacks "every half hour," and sometimes brought up blood.

September 6th, 1870.—Seen by Dr. C. R. Drysdale, who prescribed hydrate of chloral, gr.j., syrupi simplicis, ʒj., to be given frequently; but not more than ten times in twenty-four hours.

September 13th.—Mother says this medicine has nearly stopped the cough. He hardly whoops at all now, and does not bring up blood. He had been given many medicines before this with not the slightest effect. Among others, bromide of potassium had been prescribed by another medical man in five grain doses. Dr. Drysdale is much pleased with the action of chloral hydrate in this complaint.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE LANCASHIRE ALKALI TRADE.

MR. GOSSAGE read a paper upon the above subject, which was of considerable importance, although only from a technical point of view. Mr. Gossage may be viewed as the originator of this trade in that district.

As one of the most important facts connected with the soda manufacture, I must not omit to notice the passing of a legislative measure, entitled "The Alkali Act, 1863," rendering it imperative that all manufacturers decomposing common salt, for the production of sulphate of soda, should condense not less than 95 per cent. of the hydrochloric acid gas evolved by such decomposition. In my former paper I described fully the means which I had devised and carried into successful operation in the year 1836 for effecting such condensation, and these means are now adopted universally by the soda manufacturers, and so successfully that not only do they comply with the legislative requirements of condensing 95 per cent. of the hydrochloric acid set free, but in many instances this condensation exceeds 99 per cent. It has been very fortunate for the manufacturers as well as for the public that Dr. R. Angus Smith was selected by the Government to undertake the duties of chief inspector under the Alkali Act of 1863. This gentleman, with his able staff of district inspectors, has assisted greatly in promoting the effective working of the system of condensation. The able reports submitted annually to the two Houses of Parliament by Dr. Smith contain the fullest details of the working of this legislative enactment, and it may be fairly expected that when the same amount of care and attention has been applied to subduing the bad effects resulting from other noxious vapours chemical manufactories will be relieved from the charge of occasioning injury to their vicinities.

The most important use for hydrochloric acid obtained by such condensation is the manufacture of hypochlorate of lime, or bleaching powder, the demand for which has taken an extraordinary development since the introduction of straw, esparto grass, and some other substances than rags for the manufacture of paper.

At the date of my last paper, the chlorine required for the manufacture of bleaching powder was obtained by the action of hydrochloric acid on native peroxide of manganese. Recently, Mr. Walter Weldon, of London, after long-continued devotion of time, labour, and money, has succeeded in perfecting a process by which peroxide of manganese is obtained from the chloride of manganese, produced by the action of hydrochloric acid on peroxide of manganese. Mr. Weldon effects this object by causing the chloride of manganese to be decomposed by hydrate of lime, thus producing hydrated protoxide of manganese, which he converts into peroxide of manganese by causing streams of atmospherical air to be forced through the fluid mixture of protoxide and water. When in this state of minute division the protoxide of manganese absorbs oxygen from the atmospheric air and becomes converted into peroxide. Mr. Weldon has found it essential, for successful working, that not only a sufficient proportion of lime be used to precipitate the oxide of manganese, but that such an excess be employed as will be sufficient to form a chemical compound with the peroxide of manganese as this is produced, which compound Mr. Weldon designates as manganite of calcium. This process has been successfully carried into practice in this district, also in that of Newcastle, and it has already been adopted by some of the largest manufacturers of bleaching powder in both these localities.

It is well known that to obtain one equivalent of chlorine by the reaction of hydrochloric acid on peroxide of manganese, it is essential that two equivalents of hydrochloric acid should be employed, one of these yielding chlorine, the other chloride of manganese.

Mr. Deacon's process for the manufacture of chlorine without the use of manganese is one by which the whole of the hydrochloric is decomposed into chlorine. By this process each equivalent of hydrochloric acid yields an equivalent of chlorine.

Mr. James Hargreaves, of Widnes, has also devised means for producing chlorine without the use of oxide of manganese. He has a process for the separation of phosphorus from the iron-slag produced in the puddling operation of the iron manufacture. In carrying out this process the iron-slag is treated with hydrochloric acid, and thereby proto-chloride of iron in solution is obtained as a bye product, which is evaporated to dryness, producing dry proto-chloride, and this, by slow application of heat with access of atmospheric air, becomes per-chloride, which undergoes decomposition, yielding chlorine and per-oxide of iron. This process also yields an equivalent of chlorine for each equivalent of hydrochloric acid employed.

In my former paper on the soda manufacture, I took occasion to remark that nearly all the sulphur used in this manufacture (the cost of which is about equal to two-fifths of the total cost of materials required) was re-obtained in combination with calcium, forming what is expressly designated as "alkali water."

I noticed, also, that this presented a problem worthy the attention of my juniors for its solution. Dr. Ludwig Mond a German chemist, has made the nearest approximation to the solution of this problem with which I am at present acquainted. Mr. Mond's process consists, in the first instance in causing atmospheric air to be brought into intimate contact with the alkali waste, as this is left in the lixiviating vats after treatment with water. This is effected by the use of a ventilating fan, which forces air into the lower part of the vat under a false bottom. The air percolates the mass of waste and a portion of its oxygen becomes absorbed by the sulphide of calcium yielding soluble hyposulphate of calcium, and at the same time a portion of the sulphide of calcium becomes converted into soluble polysulphide of calcium. The oxidisation is so regulated, as regards its extent, that the resulting solution, when this is obtained and treated with hydrochloric acid, should yield sulphide of hydrogen and sulphurous acid in such proportions as to mutually decompose each other yielding free sulphur at the same time that the second equivalent of sulphur contained in the hyposulphurous acid of the hyposulphate of lime is set free. A very pure sulphur, almost absolutely free from arsenic, is obtained by this mode of working.

This process has been carried out successfully by various manufacturers, but, unfortunately, the quantity of sulphur obtained is far short of that contained in the waste, and I consider the problem I have mentioned still remains as an exercise for ingenuity and perseverance.

In my former paper on the soda manufacture, I gave some particulars of the means I had adopted for obtaining copper and silver from the burned residua of copper pyrites which had been used for yielding sulphur to manufacture sulphuric acid. This mode of working has been superseded by a process devised and carried out by Mr. Henderson. This process consists in mixing a small proportion of salt with burned pyrites, previously ground to a fine powder, and exposing the mixture to a red heat, either in open reverberatory or closed furnaces, through which a current of atmospheric air is allowed to pass. By these means the small portion of sulphur which has escaped being consumed in the burned pyrites becomes oxidised, producing sulphate of iron, which decomposes common salt, yielding chloride of copper and sulphate of soda, which are obtained in solution on lixiviating the product with water. The copper is then precipitated from the solution by means of iron, and is obtained in the metallic state. A large quantity of oxide of iron is obtained as a residiuum from the lexiviation. This is sold to the ironsmelters for the production of iron. These operations are carried out very extensively by the Tharsis Metal Company, at Glasgow, Newcastle, and Widnes. There are also several other establishments engaged in the same business in the neighbourhood of Widnes—amongst others that of the Widnes Metal Company, where Mr. J. A. Phillips has carried out successfully a process invented by Mr. Santler, of London, for extracting gold, silver, and lead from the burned residua of copper pyrites.

In the year 1861, during the negotiations of the French treaty of commerce, it was estimated that the total quantity of salt decomposed in Great Britain for the production of soda was 260,000 tons. Of this quantity, 125,000 tons were decomposed in what is called the Newcastle district, and 135,000 in the Lancashire district. According to the returns of the Alkali Manufacturers' Association for the year 1869, the total quantity of salt decomposed for the manufacture of soda was 326,000 tons, thus showing an increase of 66,000 tons, or 25 per cent. on the total. Of this quantity, the decomposition in the Newcastle district, in 1869, was 142,000 tons, which, being compared with 125,000 tons in 1861, shows an increase of 17,000 tons, or 13·6 per cent. The decomposition in the Lancashire district is returned as 184,000 tons in 1869, against 135,000 tons in 1861, showing an increase of 49,000 tons, or 36 per cent. It would thus appear that the total quantity of salt decomposed for the manufacture of soda in the Lancashire district in 1869 exceeds by 30 per cent. the total quantity decomposed in the Newcastle district during the same year.

One of the most important applications of soda to other manufactures is that of the producton of soap, and it may be interesting to notice the increase in the production of this article, which is so essential to cleanliness, and, therefore, to civilisation. In the year 1852, when the excise duty on soap was finally abolished, the total production of soap in Great Britain was equal to 1,600 tons per week, less than one-half of which was produced in the Lancashire district. From some inquiries which I have recently made I am satisfied that the present production of soap in the Lancashire district is fully equal to the total production in 1852. We may, therefore, infer that the production of this article has doubled during the past eighteen years.

THE SOCIAL SCIENCE CONGRESS FOR 1870.

Mr. Phillips Bevan, F.R.G.S., read a paper on

LEGISLATION TO PREVENT ADULTERATION OF FOOD AND DRINK.

Although it is one of our most important social questions, the apathy and ignorance of the public on the subject of adulteration is astonishing. As each person thinks that all others are mortal except himself, so he imagines that adulteration affects any class but his own; and although we acknowledge its prevalence, and cry shame when we read of any particularly bad case, the sensation is but momentary, and we go on our way as before. What is adulteration, and what does it mean? It means the lowering of the physique of the nation, the poisoning of the people, the deterioration of our constitution; and, morally, a fraud practised by the seller on the buyer, a cheating, to which we have become so callous, that it has hardened our conscience for honesty in other and bigger things. The great difficulty in dealing with it is, that the Government is so slow to move; and even men in high places practically defend it, by declaring that it is not so bad as it might be; that the buyer must look to himself, and so on. It is also very common argument that people bring adulteration on themselves by buying such very cheap articles; so cheap, that they cannot be good for the money. But they do so in ignorance; and if the seller was compelled to label his goods with the names of the real ingredients, such as "best butter mixed with starch, mashed potatoes, and horse-bone oil;" "coffee, with bread-crumbs and sand;" "tea, with iron-filings;" "sugar, with chromate of lead;" "beer, with salt and cocculus indicus," it is not the least likely that their cheapness would tempt the buyer; and, if a certainty of detection and punishment followed, we should find that the sellers would think twice before they offered such articles. It is strange that, in all our sanitary machinery, the food question and its purity have been so overlooked; but pure food is as necessary as pure air, good drainage, or wholesome water; and it ought not to be left to the philanthropist to remedy the evil, with the tolerable certainty that he will only get snubbed for his pains. It is a Government question, as important as that of education or the Irish Church; and it ought not to be the duty of a private member of the House of Commons to bring in a Bill.

With a view to arouse public interest, in conjunction with Messrs. J. M. Johnson and Sons, of Castle street, Holborn, in February last, I established the *Food Journal*, feeling that there was a great want of some public organ to discuss these matters; and so convinced was I that no Bill could properly be passed without the knowledge of the legislation which prevailed in other countries, that the late Earl of Clarendon was applied to for permission to address the various British Legations and Consulates abroad on the subject. His Lordship not only gave that permission, but evinced his great interest in the matter by requesting that a circular should be drawn up, embodying all the enquiries on food matters that it was desired to make. A thousand of these were accordingly issued through the Foreign Office; and Earl Granville, who has taken up the subject in the same warm and earnest spirit as evinced by his predecessor, has forwarded for publication in the *Food Journal* a mass of valuable information, which has never before reached this country. To detail even an epitome of these answers, would take up far too much of the time of this meeting. I will, therefore, only briefly touch on some of the main points of the first question of the Circular—viz., "What legislative enactments at present exist in the country to which you are accredited respecting the adulteration of food and drink? Are these laws actively enforced; and how far do they appear to meet the evil?" "Very valuable information come to us from the United States, in Mr. Thornton's report; which adverts to the difficulty of getting systematic information, even through the well-arranged machinery of official correspondence. The *State* legislation varies very much in the different states, some possessing no legislation at all, and others inflicting very severe penalties. Each state legislates independently; and, in so doing, often delegates the regulation of these matters to the various town or county authorities within their borders. As a general rule, the adulteration of alcoholic liquors is almost universal.

In Rhode Island, the penalty for adulteration of food, drink and drugs, or for selling unwholesome food, is imprisonment up to six months, or a fine up to 200 dollars.

In Vermont, for adulteration of medicine, imprisonment up to two years, or a fine up to 400 dollars. For selling adulterated intoxicating liquors, from 10 to 300 dollars for each offence. For selling unwholesome provisions, imprisonment up to six months, or fine up to 300 dollars. For adulterating bread or any food with impurities injurious to health, imprisonment up to two years, or fine up to 300 dollars.

In Ohio, for adulterating spirituous liquors a fine of 100 to 500 dollars, *and* imprisonment for ten to thirty days.

In Indiana, for adulterating any food or drink, a fine of from 50 to 500 dollars, and, at discretion of the court, imprisonment up to three months.

In Illinois, a fine up to 100 dollars, or imprisonment up to three months.

In Missouri it is a *misdemeanour*, punishable with imprisonment up to one year, or a fine up to 500 dollars; but adulteration of intoxicating liquors with strychnine or any other injurious substance is a *felony*, punishable by imprisonment from two to five years. Every liquor seller has to appear before the county clerk, and enter into a bond of 500 dollars, with good security, not to mix or adulterate his liquors with any material, not even water; the penalty for non-compliance is a fine from 50 to 500 dollars. There is also a very rigorous inspection and testing of all spirituous liquors imported into this state.

In Mississippi adulteration is punishable by an imprisonment from one year to five years.

Cincinnati appears to turn its attention more to milk, for the sale of which the rules are extremely strict. Each milk seller has, under a penalty of one-hundred dollars, to have his milk inspected and tested, that it should not be watered, or the produce of diseased cows, or of cows kept in stables and fed upon garbage. The address of the dairy, whence the milk came, must be legibly painted on each stall.

In Georgia every baker, brewer, distiller, grocer, merchant or other person selling pernicious or adulterated food and drink, and also all accessories after the fact, are liable to a fine up to 1,000 dollars, imprisonment up to six months, whipping up to thirty-nine lashes, and to work in a chain-gang up to twelve months.

In Texas the fine for adulteration is from 20 to 500 dollars.

These laws generally work well throughout the states, but all the reports show that there is generally a pretty high standard of reputation amongst the dealers, although it is at the same time true that the system of comprehensive laws, and the knowledge that they will be strictly enforced, tends to preserve this feeling.

The Prussian Penal Code provides that any person selling adulterated or spoiled goods shall be liable to a penalty up to fifty dollars, or imprisonment for six weeks, with confiscation of goods. In these cases, it is not necessary that the seller be aware of the adulteration, for he is liable just the same. If death ensue, the seller is punished with death; but if only severe bodily injury, the penalty is imprisonment from ten up to twenty years. At Konigsburg there is an additional law respecting the sale of damaged meat, and particularly of pork containing *trichinæ*. At Leipzig the same regulations are in force, but the police are not active. At Hamburg, if any injury happens to the buyer, the seller is liable to be imprisoned for from three months to four years.

In Holland the Dutch law is very similar to the Code Napoleon, and inflicts a punishment of imprisonment for from six days to two years, with a fine of from 16 to 500 francs. The adulteration of bread with copperas or vitriol is dealt with by an imprisonment of from two to five years, and a fine of from 200 to 500 florins. Not only is punishment provided for people who mix ingredients for adulteration, but also for those who manufacture or sell the ingredients, knowing that they were to be used for adulteration.

Any fresh legislation on this subject should be compulsory in its character, and not permissive. All articles of consumption which are manufactured should have their ingredients declared, for there is a feeling prevalent amongst manufactures, as for instance, cocoa makers, that as long as their articles contain nothing hurtful, they are at liberty to call them by the general name of cocoa. Still, a sophistication is to a certain extent a fraud, and every purchaser has a right to know what he is purchasing; and although we might be safe in the hands of the largest and most respectable manufacturers, there is a considerable class of unprincipled makers who are not above taking advantage. Differences of opinion sometimes occur as to the relative hurtfulness of certain common adulterants; and an eminent authority has assured me that he had grave doubts as to whether alum was not a good thing instead of a bad one. I would suggest that there should be a Food Sub-department formed, which should take cognisance of all food legislation and supplies. To it a board of two or three of the most eminent analytical chemists should be attached, who should examine and pronounce upon all disputed chemical questions, and whose opinion should be law. The sub-department should have the election of, and a certain amount of control over, the county and borough analysts, whose appointment should be compulsory and not permissive; neither should it rest with vestries or corporations, many of the members of which are often largely concerned in adulteration. Inspectors should have power to visit and take samples from all dealers in articles of food, subject to certain checks, so as to prevent any risk of tyrannical domiciliary visits. They should also have the power of testing the supplies furnished to public bodies, such as union contracts; for guardians have frequently a habit of accepting tenders for food at a price at which the real article cannot possibly be supplied; as a London Union Board did the other day in the case of butter. In cases where a petty dealer declares his ignorance that the goods which he sells are adulterated, I should make the onus of proving this fall upon him, and then it would be for the Food Sub-department to take the matter up, and prosecute the manufacturer. When adulteration takes place before importation, as in the case of the Maloo tea mixture, the department might well provide the machinery for setting consular and other influence to work to prevent it; and might also step in as the proper arbiter between conflicting interests. In this very case, a great fraud on the public was allowed to go unpunished, because the Customs could not legally forego the duty.

As to offences, when proved, I am no believer in either a very small or a very large fine; but I would have no sliding scale at the option of the magistrate. For the first offence the penalty should be sufficient to make the offender smart in his pocket; for the second, I would double it, and have an *affiche* detailing the offence put outside his door, as also outside the door of the church, police-station, and town-hall, for a month. The case should also be advertised in the local papers at the offender's expense. For the third offence there should be imprisonmebt for one month, with hard labour. Adulteration is either a fraud, or it is not, and it should be punished like any other cheating.

Abstracts of Lectures.

SESSION 1870-71.

QUEEN'S COLLEGE, BIRMINGHAM.

After a word in favour of the provincial schools, Professor Berry, F.R.C.S. said:—As far as medicine was concerned they had a right to demand that the General Medical Council should be properly constituted, that the various grades of our profession should be truly represented, that the education in the three kingdoms should be more uniform, and that the members of the profession should have perfect freedom to practise untrammeled by mediæval privileges. He directed attention to the fact that while practical science had been making, during the present century, great and rapid advances, medicine had not been behindhand, but had achieved results as striking, and advanced with strides as rapid, as in any one department of science. He then went on to show the progress that various departments of science had made during the present century, and having said much of surgery, turned to medicine in which the advance, he thought had been as remarkable. The physician had acquired a far more extended knowledge than his predecessor of the last generation had of the nature and diagnosis of the various diseases to which the body is liable. In proportion as his knowledge had been precise and clear, so also had he been able to use his remedial means with greater precision for the relief and removal of them. They had also learnt to know more precisely when they ought to strike into aid nature with the resources of art, and when they ought to leave nature to her own unassisted efforts. Every step of true progress in this knowledge formed, undoubtedly, a step of trne advancement in practical as well as scientific medicine. As evidence of how much practical medicine had progressed, he adverted to many improvements in the practice of medicine in relation to particular diseases, as scurvy, now banished from our fleets; the improved treatment and detection of the oxalic, phosphatic, and other diatheses, indicated by the state of the urine; to our increased knowledge of the diseases of the head, chest, abdomen, and pelvis; and to the vast addition made latterly to our previous knowledge of the importance of various prophylactic and hygienic resources in the prevention of disease.

QUEEN'S HOSPITAL, BIRMINGHAM.

The Introductory Address was delivered by Dr. Fleming, who devoted much of his address to the science and art of healing. The art consists, he said, of a series of rules of action directing how to cure or prevent the disease which the science has enabled us to understand. There are many arts, however, which may be practised with success where the sciences on which they are founded are unknown to the practitioner; take photography and telegraphy as examples. The student may therefore ask, Why should he spend so much time in studying the science of medicine in order to practise the art? When the science on which the art is founded is perfect, the rules which form that art are certain, and admit of universal application; and the more nearly the science approaches perfection, the fewer exceptions do we find to the rules in the arts dependent on it. At present the science of medicine consists of a number of groups of biological facts, often unconnected by any known fundamental law; it is, in fact, an imperfect science. And though in the greater number of cases certain effects follow certain remedies, there are always sufficient exceptions to remind us that we have to deal with vital phenomena of a very complex and uncertain nature, and which oblige us to fall back on the science from which our art springs. Were the public made more cognisant of this fact, it would put a stop to a great amount of evil, and amateur doctoring would be looked upon as too dangerous, even for the most adventurous. "Infallible cures" and "universal remedies" would then meet with the contempt they deserve.

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, NEWCASTLE-UPON-TYNE.

The Address was delivered by Dr. T. C. Nesham, who urged the necessity of devoting the first two or three years of their studentship to the study of human anatomy, physiology, and chemistry.

Having shown how these are to be learned practically, he said that at the end of two or three years they would pass on with a sound basis of preliminary education to the study of morbid action—to the science of the practice of medicine. And where were they to learn this? A little in the lecture-room, a little more in their study at home, but most of all at the bedside of the patient, where they would see morbid action in all its different phases of development, trace its course from day to day, and mark the result of efforts made to alleviate and cure. In the study of medicine they might avail themselves of either the inductive or deductive methods of reasoning; but whichever they employed they must be sure to verify every step of the argument by practical experience, or else the complete theory would be a source of danger, and the propositions they had deduced would be found in practice to be erroneous. He desired them to remember that, more than 2,000 years ago, Hippocrates had recognised the fact that nature when attacked by disease had a tendency under certain conditions to restore herself to health. If they wished to be successful practitioners they must remember this power, the "vis medicatrix naturæ." It was one great secret of the advance of our knowledge that we used as far as possible, in the study of medicine, scientific argument and logical sequence, but at the same time qualified and regulated them by practical experience, and thus endeavoured to establish the agreement of "theory with practice, and of reason with experience."

In urging the advantage of pathology the lecturer proceeded:—"The post-mortem room must be as familiar to you as the walls of the hospital. I would have you enter it with feelings of reverence and awe, with your minds earnestly bent on scientific investigation. You go there to rifle the dead of their secrets, for the benefit of the living, and not to gratify inquisitiveness or idle curiosity. Much that was dark and obscure will be revealed, the cloud of uncertainty which hung over many perils will be rolled away, and perhaps some errors of diagnosis detected. Pathology is as yet only in its infancy, and I look to improvements here as one great source of the future advance of medical science."

LEEDS SCHOOL OF MEDICINE.

The Address was delivered by Mr. E. Atkinson, the lecturer on botany, who dwelt first upon the importance of established principles of conduct, and next upon the value of an orderly and methodical disposition of time to the student. "Before presenting yourselves here for the commencement of special professional studies, you have all, as in duty bound, submitted to one or another of those very moderate previous examinations in arts (as they are rather magniloquently styled) which the authorities require. But let me hope that the measure of knowledge exacted from you on that occasion is no true guage of your acquirements. Indeed, it is difficult to imagine what art is illustrated by this elementary process, except it be the art of legerdemain, in converting a very ordinary schoolboy into a certificated student. Greek, for example, is an optional subject, while half the technical terms employed in medicine and the allied sciences are derived from this language; and how, then, are we to expect you to understand words which will meet you at every turn unless you have some previous knowledge of it. Mathematics, again, are required to so small an extent that, unless you have proved yourselves more than a master for your examiners, it may be doubted whether the main object of this branch of science—viz., the acquisition of a habit of close reasoning—has been attained; while the rudiments of chemistry and the natural sciences are left out of the field altogether. The authorities have, doubtless, done well to require satisfaction as to the previous knowledge of candidates for medical education by instituting these examinations; but have they gone far enough? Our daily experience says they have not. The four years usually allowed to special professional study are not any too long for the purpose." Mr. Atkinson thought the student, therefore, ought to come to a medical school thoroughly grounded in all preliminary knowledge, and he urged that botany and some knowledge of chemistry, with zoology, should be considered necessary parts of a liberal general education.

Registered for Transmission Abroad.

THE
MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
,, If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of A. A. Tindall, 20, King William-street, Strand, London.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 19, 1870.

MEDICAL POLITICS AND THE INTRODUCTORIES.

We have given so fair an account of the several Inaugural Addresses that our readers may think sufficient space has now been accorded to them. Before, however, it is too late, we desire to draw attention to the hopeful sign that more than one lecturer ventured to mention questions of medical politics. There are, unfortunately, those among us who exhibit indifference to such points, but their apathy is the result either of ignorance or of too narrow a view of what is comprised under the term. Medical politicians, we know, do not make money, but a good number of them give their time and zeal to elevate the position of their brethren; and they include in the

term medical politics, everything relating to the general welfare of the Profession as a body. Education is, then, one of their fundamental questions, and these introductory addresses could not but be full of interest to them.

The regulations of the various examining boards, the means at our disposal to meet them, the condition of our schools, the changes that have been made, the improvements contemplated—all these and many other points deserve fuller attention than they have yet had, and must give rise to much discussion.

Mr. Hancock gave a series of figures relating to the preliminary examinations at the College of Surgeons, that he did not hesitate to call "disastrous," and which clearly shows how little prepared to study medicine are many who aspire to practise it. It can hardly be said that this college has pitched its standard too high, and yet we have distinct proof that it was much higher than the general public supposed. Is that one reason why the public valued the Profession so little? One of the liberal professions should comprise only men of a moderate education like that shadowed forth. This revelation, however, at least, points to the danger of transferring other subjects, such as chemistry and botany, to the preliminary list, as urged by some lecturers. Any student entering our schools with such knowledge would be at a great advantage, but to enforce it might diminish the supply of practitioners too suddenly for the public to submit.

Dr. Cayley, at the Middlesex Hospital, as we have already stated, touched on the London University examinations with great discrimination. One scarcely likes to complain of too great stringency, and yet there is danger even in that. It is a fact that men who have taken high honours at the London University have been found sadly deficient in certain kinds of knowledge that cannot be obtained from books. The London graduates are obliged to take other diplomas under our present system, and this is a point deserving the attention of the Senate. We do not become doctors for the sake of passing examinations, and every examining board ought to consider the wants of the public and the real requirements of the practitioner. Let us turn from this to the Scottish Universities, which now require a year's residence. To all who can afford to do so it would be of permanent advantage to spend a year in one of the great Northern Schools of Medicine, and in that way they would take a degree which is every year increasing in prestige, and they would reap the advantage of a year's study under celebrated Scotch professors. This fact alone should render the London University more thoughtful of the career of its men *after graduation*.

Mr. Gascoyen boldly took up another subject—the amalgamation of the London Medical Schools. This topic must come to the front. The Parisians were lately envying us. Many among us seem to have been envying them. Perhaps the best plan of all would be a medium. We see defects in the multiplicity of schools, but they are more tolerable than complete centralization and only one Faculty.

At Queen's College, Birmingham, Professor Berry succinctly stated what we had a right to demand of the Medical Council, and so introduced another question of medical politics. Taking, then, all these points as mere illustrations of what large subjects are embraced under the much abused name of medical politics, we are prepared to demand the attention of our readers to them, and, looking forward to the future, are encouraged at the tone of the Introductories this year, and hope that medical politics are no longer to be pooh-poohed.

LIFE INSURANCE.

Our American cousins, whom nothing daunts, are trying the experiment of doing business in life insurance on this shore of the Atlantic. There may be difficulties in the way of success; but they regard difficulties as things to be conquered and overcome. But there may be compensating advantages also. At any rate, a New York Office would lose nothing by assuring English lives on the same terms as American.

The New York Life Insurance Company is one of those Transatlantic offices which have committed themselves to the bold venture. It lifts its front, we observe, in the very heart of London, of Manchester, and of Liverpool. A better time, perhaps, could not have been chosen. A statute has just come into force, the whole policy of which is drawn from arrangements of public laws and administration, under the restraint of which the New York and other American Life Assurance Associations have grown up, and are conducting business. If, therefore, Mr. Cave's Act affords guards and securities for those who, as policy-holders and their families, are in the hands of British Companies, the mere fact of a new candidate for favour among ourselves hailing from New York, should be, other things being equal, one great point of recommendation.

It is boldly affirmed that no American office, confining itself exclusively to *Life* Insurance business, has ever yet failed; and, assuredly, the one already named is not the least of those in either importance or success. We have companies of greater age, as is natural to an old country. But the New York has been in existence for a quarter of a century, and, during that time, it appears to have assured 73,000 lives, to have paid policies to the amount of £1,152,000 sterling, with another million in cash consols; yet retaining in hand a third of a million after the discharge of every liability.

The mutual method, the proprietary method, and a mixture of the two—all have their advocates and admirers in this country. The tendency of modern opinion, however, is in favour of mutuality. If, indeed, the tone of Parliament and of the Press, in connection with the late panic, and with the debates on Mr. Cave's Bill, may be relied upon, there is a growing inclination among us to regard the policy-holders as having, not merely the first and chief claim upon their own premiums and the fruits of them, but even an exclusive title to the fund, which is formed by their contributions, and to the proceeds of it, less only a rigidly economical charge for office expenses.

This being so, the New York Life Insurance Company, being purely mutual, presents itself under an aspect which might be expected to prove attractive to the British public.

Another advantage which it possesses in common with any American office that might solicit our custom, is the fact that in the States money yields a higher rate of interest than either in Great Britain or on the Continent of Europe.

The laws of the State of New York have made a provision with respect to life-policies which commends itself

to every rightly-constituted mind. They cannot be attacked by creditors. Even though the assured person should die insolvent, his widow and orphan children would derive the full benefit of his providence. We presume, though without consulting the text of the law, that they would not be able to claim upon a policy assigned for valuable considerations by the original holder to another hand.

Besides the general advantages belonging to an American office as such, the New York, we observe, puts in several special claims, particulars of which may be found in their prospectus, one of them being, that the Company is the originator and sole issuer of "non-forfeiture investment policies." This kind of policy, on payment of a yearly sum, assures to the holder, on attaining a specified age, a certain sum, together with all the profits and payments made; or, in the event of intervening death, his surviving representatives will receive all the money paid in, together with the accumulated profits and amount insured.

Notes on Current Topics.

About the War and Wounded

A GREAT question is as to the supplies in Paris. The circular which anticipated the death by famine of hundreds of thousands at the capitulation may only foreshadow what may occur before the inhabitants and garrison yield. What may occur none can tell, and the data on which to form any judgment are few. By balloon, amongst other news, we naturally note that the Commission of Health have appointed committees to study the best way of utilising the blood of the animals slaughtered, a new system of saving 20 per cent. of grain, and the best plan of cooking whole grain. This seems to point to scarcity of meal and scarcity of flour, and it illustrates a well-known fact that Paris is badly off for mills to grind her corn. The measures may be adopted early intentionally, but we are assured positively that the supply of meal has been limited by command of the Government.

***

Hippophagy may triumph in the beleaguered city as it has done in Metz. We have little doubt that many of the cab horses and omnibus horses have already been slaughtered. There must be hundreds of little use, and their forage may be more valuable than the animals themselves. It would be better to eat them before they get thinner.

***

The prices of meat and bread are fixed by the authorities. Other commodities have risen. Eggs are threepence each. Fresh butter went up to ten francs a pound and then disappeared altogether. Salt butter is five or six francs a pound. Veal fat boiled down as a substitute is two francs. Stories like these show what a mass of misery may be in store for the devoted city. Fish, of course, is not to be expected. But milk—how about infants and invalids deprived of this?

***

A number of surgeons have arrived in Germany from America to offer their services for the sick and wounded.

Dr. Siemon, of the 4th Prussian Field Hospital, has spoken in high terms of the ladies who, with Dr. Luzeron, went out from the Tottenham Deaconnesses Institution in time to help after the battle of Gravelotte. We have heard from many sources of the invaluable services rendered by ladies who seem to be full, not only of sympathy but of ready wit, to turn to the best uses whatever they may find to hand. It is the old story of woman's ministry—

"When pain and anguish wring the brow."

***

The *Daily News* is raising a fund for the peasantry of North Eastern France, who are in a state of famine. Some £3,000 has been subscribed, and a good deal of provisions sent out. We have no doubt of the value of such a plan, of the urgency of the case, or the ability of the gentlemen sent out to superintend by our contemporary. We hope there is no chance of such food being confiscated by the Prussians, who seem rapidly to be degenerating, and if the war lasts long will become complete barbarians.

***

Dr. Thudichum has sent home an account of the Field Hospital we lately noticed as under his care. Mr. Simon has now left him for a town in Italy to recruit his failing health. Dr. Dupré, of the Westminster Hospital, has superintended the arrangements for water. The hospital is on a good soil, and ventilation has been attended to. There are ten assistant-surgeons (qualified) and five dressers. Dr. Thudichum and Mr. Simon both speak highly of all. We are sorry to observe that pyæmia, typhus, and dysentery have all been met with in so well arranged an hospital. What may they not do in other places where the sick and wounded may be conveyed? A bale of common oakum sent out was useless. It should be all carded, and Dr. Thudichum thinks it would be still better carbolised.

***

Around Metz we have already stated how serious is the amount of disease. We cannot expect it to decrease. Cattle plague, too, must add to the sufferings of the besieging army. But what of inside Metz? Could we get a reliable account of what is passing within the fortress we might find sadder scenes than many think about. Much is said, but anything reliable cannot be gathered. We can hardly hope, however, that the mass of human beings within are as healthy as the Government of Tours professes to know. Disease and death are probably enough rapidly reducing the ranks of the defenders. Professor Frerichs has been sent from Berlin to investigate the amount of disease round Metz.

***

It seems clear that some ambulances have had a surplus of useful articles of a particular kind, while others have been without these very things. Even in regard to chloroform this has happened. No doubt the haste with which they had to be despatched is the cause of this unfortunate mistake.

***

The German Aid Society has distributed sanitary tracts to a large extent—a few paragraphs relating to water, food, bathing, and other points of importance to the health, have been put in a popular form and freely given to the soldiers for their guidance. This seems a very sensible thing. Campaigning may be made more dangerous by ignorance, and many a soldier may save his life by mastering his tract.

The Germans, very wisely, continue to distribute their wounded as widely as possible. Several new modes of transport have come into use. By a plan of Professor Esmarck's, litters are hung up in railway trains by strong india-rubber rings, and patients ride thus with comfort when it would have been impossible to move in olden times.

***

The steamer *John Bull*, chartered by the National Society for Aid to the Sick and Wounded in War, sailed from the Royal Arsenal, Woolwich, last Thursday evening, with an ambulance train, complete in all its arrangements, and intended to operate in the neighbourhood of Paris. The personal staff consists of Dr. Thomas Guy, Deputy Inspector-General of Hospitals, who will be director and principal medical officer; Mr. Reginald Shee, secretary, Mr. J. S. Young, of the Army Control Department, commissary; Surgeon J. H. Porter, 97th Regiment; Staff-Surgeon Tertius Ball, Surgeon W. G. N. Manley, V.C., Royal Artillery; Staff-Surgeon J. Jameson; and Assistant-Surgeons M'Nalty, Power, Moore, Melladew, Macrobin, Malcolm, and Barroll. The stores shipped on board the steamer comprise eight ambulance waggons and twelve store waggons. The hospital will consist, unless a building be set apart, of twelve hospital marquees and twenty bell tents which will accommodate at least 200 patients. Provisions sufficient for 200 patients and 100 attendants for ten days accompany the ambulance, and a regular system of supply weekly will be organised by the society, with Havre as a basis. Lord Bury will meet the ambulance train at Havre, where he has been for some time purchasing horses and engaging drivers, and it will move forward without delay towards Versailles.

***

The *Indian Medical Gazette* devotes the chief place in its last issue to a review of the military medical organisation of France. The information on which the notice is founded is derived from a recent work, "De la Mortalitè de l'armèe" published by M. Chenu, and favourably criticised by M. Tuboulage in the *Revue des Deux Mondes*.

***

The two great evils that are complained of are mistaken economy, and the vice of centralisation that subordinates the Medical Service to the Intendance. Alongside of the combatant army is the second army of supply, which is termed the Administration. This is represented at head-quarters by one man, the Intendant-en-chef. He is responsible to the General for supplying all that is necessary, and to the Government for economy and control. In his hands are the supply of food and necessaries, transport, pay, hospitals, and general control. It is impossible that such different specialties can be efficiently combined. Hovering round armies are enemies usually more deadly than those they have to meet in the battle-field—typhus, cholera, and other zymotic diseases, which have always been the scourges of densely aggregated bodies of men like armies. As much special science and skill are required to combat these, as are required for the strategy and tactics of the campaign. During the Crimean war the French lost 95,000 men; of these 10,000 were killed in battle, about an equal number are calculated to have died of the effects of their wounds, leaving about 75,000 deaths due to disease, mostly zymotic and preventible. In the winter of 1856-57, 19,303 cases of typhus were admitted, of whom 10,278 died; while the English, with a third of the strength, had only 31 cases, of whom 17 died. The duty of the Intendance was honestly and faithfully to carry out everything according to regulation. There was an order from the bureau that no field hospitals were to be made, except in the Crimea. As long as the minimum of cubic space was supplied, the intendant had done his duty; crowds of fever patients were emptied into the hospitals at Constantinople, and it was in vain that the medical officers demanded barracks, bivouacs, space and air in any shape, to combat the epidemic. The theory is, that the surgeon is all-powerful at the bedside of the patient. He can bleed, blister or purge as he thinks best; but the hospitals are established, medicines are supplied, the hospital corps is directed, and transport authorised by the Intendance.

Clinical Society.

The first meeting of this Society was well attended, the President, Mr. Paget, occupying the chair. There seemed a slight feeling of disappointment when the President proceeded at once to business without gratifying the meeting with some of his excellent observations as a short preliminary address.

Mr. Spencer Watson exhibited some well-marked cases of parenchymatous keratitis in process of cure, drawing attention to the association of this affection with a rheumatic diathesis in the system.

Dr. John Harley narrated a most interesting case of intra-abdominal abscess, resulting from an injury inflicted by a restiff horse. The patient was a country surgeon, seventy years old, and for several weeks his life was in great jeopardy; after the loss, however, of a considerable quantity of purulent matter by the bowels, the patient made a good recovery, and eighteen months after the accident was able to ride and drive as usual.

Dr. John Ogle read his notes of a case of tetanus in St. George's Hospital, cured by ice applied to the spine, and belladonna given internally.

A good discussion on the therapeutics of tetanus followed: Mr. Croft said he had certainly seen recovery follow the administration of chloral, while he had found the calabar bean, given in full dose, quite inert. The President had seen a case treated with chloral without the least benefit; one case he had cured by the inhalation of oxygen; but in the next that came before him he tried this same remedy, but it had no effect whatever; as yet we were much in the dark as to the treatment of tetanus.

The Threat to Destroy the New Boulevard.

In Wednesday's *Times*, under the head of "City Commission of Sewers," we find the following paragraph:—

"In answer to Mr. Elias Davis the engineer (Mr. Haywood) said he believed it was the intention of one of the City Gas Companies to open up the Poultry in a short time to lay down pipes; that it would occasion no injury to the asphalte, and the repairs would be quickly made. He added that he informed the company in question, before the paving was undertaken, that the Commission intended to take up Cheapside and the Poultry for the purposes of the work."

Is it not really too bad that as soon as we are delivered from the fearful misery of our old granite in one short

street, it is to be handed over to the natural enemies of our thoroughfares. Let us hope the new asphalte may stand it well, and then perhaps we may get more of it.

The Curtain Falls.

Now that Margaret Waters has paid the last penalty of the law, we cannot refrain giving her credit for her becoming conduct during the few days preceding her execution. The woman's behaviour indisputably proves that she was not thoroughly depraved, but that she was rendered debased, and that she committed acts for which she deservedly suffered, through the iniquity of others, prompted by want, and the exorbitant demands made upon her by a nefarious, scheming son of Shylock. She did not become bad at once ; step by step she became hardened to the horrible traffic in infant life ; their innocent lips found no compassion in her breast, any more than in the unnatural parents who deserted their own offspring, and confided them to what they knew must be sure death. She became poorer month by month as she followed the profession of a baby-farmer ; and, for the sake of obtaining money to supply her wants, she was ready to carry out any villainous act with regard to the infants committed to her care. We do not believe the woman ever directly stamped out life, but if health flagged, and disease invaded the children of the farm, no effort was made to save them. Those in the background, who breathe the free air of heaven to-day, who abetted this woman, encouraged her in her evil trade, and gave into her care their children, are virtually as guilty as she, who lies within the precincts of a gaol, and has just expiated on the scaffold all she had to give in return for the lives she neglected, and allowed prematurely to pass away. We publish to-day a letter from a correspondent, who asks that seducers be ranged in the same category as baby farmers ; or, to employ Dr. Waring-Curran's own words, that the act of seduction be punished as a criminal offence. We enter heartily into the suggestion. Were *seducers* unknown to us, possibly Margaret Waters, with her more than ordinary intelligence for women of her class, might have wafted into some honest means of fighting honestly and honourably the great battle of life, and, instead of being as she is at the present, a degraded corpse, have been a useful member of society. It has been otherwise ordained, and, all things considered, since baby-farming does exist to so alarming an extent, we cannot regret the single life which has paid the penalty of the law. Considering the revelations made at the time of trial, and the very awful (to those whom it applies, if they possess feeling, or retain a spark of humanity or christianity in their hearts), accusation, that she died not alone for her own shortcomings and evil propensities, but for many who cruelly connived with her in secretly ridding the world of those who should be dearest to them. The death of Margaret Waters is the death warrant to seduction as practised so openly, so fearlessly, and so infamously at the present time. It is, as Dr. Curran says, the root of prostitution, the nest for baby-farming. If seducers were punished—and we only want the act of Parliament to allow it, and it will be quickly done—as criminals, the number of illegitimate births would soon rapidly decline, and the great evils of prostitution, ostensible and secret, with the consequent ravages effected by venereal disease, would be found to decline too. No grade of society, no profession or body of men is without well-known seducers. Seduction to these morbid minds becomes natural and of little consequence ; they perfect their cruel ignominious tricks only too easily without having anything to fear. Cowards at heart, they only need the strong arm of the law to be held out and they will quickly desist. A few examples, and female society will be saved the scourge which ever threatens, and only too often strikes home—strikes destruction to the victim, endless misery, privation, disease, and an early grave, whilst the breath of the destroyer withers all the comfort and united happiness of a once quiet home. We repeat, Margaret Waters has died for others as well as herself. We ask the co-operation of all our brethren in trying to carry into effect further legislation on this important topic, and we shall not cease until we obtain for the act of seduction a criminal punishment.

Snubbing a Member.

The proceedings of the Convocation of the Queen's University, Ireland, on Tuesday week, were attempted to be made formal and uninteresting by a process of management which ought not to pass unnoticed by any journalist interested in the success of a body which claims to be the National University for the granting of medical amongst other qualifications. The meeting was held under the presidency of Sir Robert Kane, the Principal of the Queen's College, Cork, and whatever view may be taken of his conduct in the chair, we are bound to acquit that gentleman of any *mauvaise honte* or undue timidity in the exercise of his powers. The adoption of the report having been moved and seconded with the proper amount of complimentary adjectives, a Mr. O'Donnell desired to move an amendment, but was peremptorily informed that the motion had been put and carried, against which decision he protested, saying that he had waited to hear the opinion of the "No's" asked, and had not heard the Chairman put the question.

While ruling that the motion had been disposed of, the Chairman, nevertheless, consented to Mr. O'Donnell moving his amendment, which declared the report to be deficient, but finding its terms not to his mind, the Chairman immediately declared the amendment informal, and refused to receive it, recommending Mr. O'Donnell to bring it before the Senate—a tribunal in which neither Mr. O'Donnell nor any other person outside the official circle has much confidence.

The following squabble then ensued :—

Mr. O'Donnell—I would beg to take exception to a portion of your ruling—(cries of "Chair")—that convocation is not the place to discuss these important matters.

Chairman—It is not open to any individual member to take exception to the ruling of the Chairman. I cannot hear you further on the subject.

Mr. O'Donnell—In that case I beg to move the rejection of the report. I speak against that report, which if we adopt it will go forth to the world as our opinion.

Chairman—I beg leave to rule, as it is necessary to preserve order in an assembly such as this, from the course the matter has taken, that the report was read. Professor Nesbitt moved its adoption, and having been seconded it was put from the chair and declared carried.

Mr. O'Donnell—I beg your pardon, you never asked us ; and never hesitated, to give an opportunity for a speaker to move an amendment. There was not the slightest opportunity ; I carefully listened for the smallest delay in your voice, and then I addressed you. I

protest against the idea of an important motion being declared carried without full liberty being given to the members of Convocation to express their opinion upon it.

Chairman—I have ruled that this resolution has been adopted ; we have proceeded to other business, and I shall not hear any further remark upon it.

Mr. O'Donnell—Mr. Chairman, I beg to insist that the motion was not declared carried within my hearing, and that there was no time given for speaking ; that furthermore, inasmuch as you allowed the proposal for an amendment, you will necessarily permit me to speak. It is now too late to go back. You have stated that it was from courtesy you allowed me to speak. I say I have a right to speak, and I protest against my mouth being shut on this important occasion (order, order).

Chairman—That does not in the slightest degree alter the course I have stated. I have declared the motion carried. As a matter of courtesy I allowed you to show me whether you had any *bonâ fide* amendment to propose. Your amendment I found not consistent with the order of proceedings, and I declared I would not receive it (hear, hear).

Mr. O'Donnell—If that is so, has a member of Convocation power to move that the Chairman do leave the chair ?

Chairman—You have—that is if the Convocation think fit.

Mr. O'Donnell—I beg to propose, in order to mark my extreme dissatisfaction at the course you have adopted, that you leave the chair.

Chairman—I have just consulted the Clerk of Convocation, and having read the rules I believe it is not competent for a member of Convocation to call for the removal of the chairman.

Mr. O'Donnell—Then I beg to propose that this house do now adjourn, inasmuch as I feel that fair liberty is not given to proceed.

Mr. O'Donnell again rose, and inquired what time might be given in protests ?

The Chairman—If you tell me what the protest is, I will then be able to answer your question.

Mr. O'Donnell—I am forbidden to protest. I don't get time to do it, and I now leave this Convocation, never to enter it again. I shall take care to tell the public of the manner in which I have been prevented from speaking.

The Chairman—In the proper time, and in the proper place, you will get liberty to speak.

Mr. O'Donnell—I was denied the right of speaking. I spoke at the proper time, but the authorities of the University dare not hear the bare truth told.

Mr. O'Donnell then left the hall.

Whether Mr. O'Donnell be characterised as an independent member of Convocation or a troublesome person, the effect of these proceedings on the public mind will be the same—a very strong feeling that the authorities of the University desire to suppress the discussion of debatable questions, by relegating them to their own tribunal, the Senate, and to make Convocation useful only for the purpose of humbly agreeing to all that the governing body puts forward. It is quite possible that Mr. O'Donnell's views are objectionable ; of that we know nothing, but we do know that a resort to such means to put him down, enunciating decisions, and immediately reversing them, is undignified, despotic, and, we believe, perfectly illegal. In our opinion, Mr. O'Donnell was perfectly in order in every one of the motions he made, and Sir Robert Kane entirely irregular, and acting *ultra vires* in refusing to hear him.

The Sanitary State of Lincoln.

As we predicted, an enquiry was opened by one of the Commissioners from the Home Secretary on Wednesday, in order to enquire into the sanitary state of Lincoln. There were legal representatives for the promoters, for the Town Council, local Board of Health, and for the memorialists who petitioned the Board against the scheme. The enquiry still proceeds. Already the evidence of architects and leading doctors prove the inefficiency of sanitary arrangements. We forbear making any comments until all the evidence is fairly before us, but we cannot refrain prophecying that the member of the local board who pronounced the report of Dr. Harrison to be a lie, will have the epithet thrown back upon himself, and that Mr. Maltby will see the fallacy of his statement that the laudable object of stamping out disease is to bamboozle the town. Our contemporary, *The Lincolnshire Chronicle* merits our warmest approval for its persistent advocacy of the efforts made by the medical men of Lincoln, and for the able manner in which it has so materially helped to bring about this investigation, which cannot fail bringing home disgrace to the doors of a certain clique in Lincoln.

The Sanitary Committee of the Dublin Corporation.

The Public Health Committee of the Dublin Corporation does its best to disconnect itself from that notorious body by a most creditable activity in the discharge of its duties. Its members really appear to be the only members of the Town Council who fulfil any useful purpose, and it is to their honour that they don't follow the example of their colleagues, and shirk all disagreeable or responsible duties.

The Sanitary Reports for September were submitted at the last meeting of the committee, and it appeared from them that during that month 38,000lb. of beef, 1,200lb. of bacon, 9 barrels of herrings, and 2 cwt. of other fish, and 11 cwt. of fruit and vegetables—constituting a total weight of about 43,000 lb.—were detected by the sanitary staff, and confiscated as being unsound and unwholesome, and utterly unfit for human consumption, for which it was intended.

A resolution was adopted directing the attention of the sanitary officers to the numerous complaints of the frauds now extensively practised in the adulteration of milk and butter.

Six persons were fined in sums ranging from £1 to £12 for the possession, for sale, of adulterated food, and one for the sale of adulterated porter.

Two hundred and thirty summonses had been served, and 220 convictions obtained in sanitary cases during the month, ten cases standing over. In no instance was any sanitary proceeding dismissed during the month.

272 dwellings in which infectious or preventible diseases had occurred were inspected and cleansed. In six instances chemical disinfection was found necessary.

1,169 articles of clothing were sent for disinfection to the Corporation Hot-air Chamber at Marrowbone-lane.

In Dr. Mapother their Medical Officer, and Dr. Cameron their Public Analyst, the Corporation has two invaluable servants, and we earnestly trust that now that the obstacles to the initiation of the system have been surmounted the sanitary *surveillance* of Dublin will never again be allowed to fall into disuse.

To one point in the foregoing report we take exception. It is but little use that the inspectors detect and seize diseased meat or adulterated articles, so long as the rascals

who are guilty of these frauds are shielded from publicity by the concealment of their names. The patronage of these gentry is too valuable for the daily papers to disoblige them, by making known their misdeeds, but the Committee have no interest to subserve other than the protection of the public, and it is, we consider, part of their duty to put the public on their guard by publishing the names of persons detected in selling diseased meat or sophisticated articles.

Funeral Cars.

We desire to call attention to the funeral car in common use in provincial districts and country villages, wherein the coffin is placed beneath a row of seats upon which the mourners sit. We have received intelligence of a case which should act as a caution to others. A girl dies of malignant scarlatina. Her remains placed in a coffin, are deposited in a receptacle underneath the relatives who sit above; in a week or so, every single person who occupied a seat in the hearse is struck down with scarlatina. It is to be presumed the wood of the coffin was as bad as the partition of the car, which separated the dead from the living, was defective. If such vehicles are still to exist, and we question their utility, we advise the coffin to be placed on the roof, for where the journey is a long and necessary tedious one, and the wood of the coffin new and emanations from the dead body likely to occur, we consider it highly detrimental to the health of those who desire attending the funeral to sit in such a funeral car.

Over-crowding in the Upper Classes.

We have heard enough of the over-crowding among the poor, and are apt to forget that the same evil may occur in houses of high rent and in aristocratic positions. The other day we encountered as out-patient at an hospital, a housemaid in one of the clubs in Pall Mall, and thinking her symptoms due to want of fresh air, we questioned her as to her habits, and elicited that she occupied part of a bed-room in the club-house in which seven of her fellow-servants also slept. This, we consider, demands the investigation of the Committee who cannot wish to breed fever in their club-house.

Eggs—How to Keep them.

The value of eggs in the sick chamber is only too generally known to be commented on, our object is to give timely warning that this most valuable food, for which no substitute is to be found, should be economically dealt with, as a very great scarcity must inevitably result. We need expect no importation of French eggs this season, the consequence will be the supply of English and Irish eggs will be inadequate to the demand. We recommend hospital authorities, and all those who will likely need eggs in mid-winter, to store away a supply now that they are plentiful, and comparatively inexpensive. The best means of preserving them is to pack them in salt, with the smaller end directed downwards. The "buttering" system is expensive and uncertain, but packing them in salt so excludes the air and keeps them safe, that the discovery of an unwholesome or decomposed egg is the exception. Fowls may be induced to keep laying by feeding them on morsels of uncooked beef and fat, and by mixing a little Cayenne pepper with their food.

Army Medical Department.

Staff-Surgeon Jameson, doing duty at Armagh, has been ordered to proceed to the Seat of War to join the International Society's ambulance. Staff-Surgeon Birnie and wife, Staff Assistant-Surgeon Pont, and Staff Assistant-Surgeon Kearney embarked in H.M.S. *Serapis* at Portsmouth on Saturday, for conveyance to India. Staff-Surgeon Burke has been ordered from Dublin to Aldershot, to take medical charge of the 2nd Battalion, 22nd Regiment. Staff Assistant-Surgeon Canny has been transferred from Dublin to Ballina, Staff Assistant-Surgeon Flood from Gort to Dublin, and Staff Assistant-Surgeon O'Malley to Boyle. Staff Veterinary-Surgeon Gardiner has arrived at Dublin for duty, vice Gloag, to half-pay.

Royal College of Surgeons in Ireland.

At the Quarterly Examination held on the 11th and 12th inst., the following gentlemen passed the first half of their examination for the Letter's Testimonial, viz.:—Joseph Athearn, Edward Morris Day, William Donovan, Jeremiah J. Donworth, Robert Drury, Michael Fitzgerald, Thomas Sargent Floyd, Edward Mulany, Joseph William Neligan, Domenick Rice, John Ryan, and William H. S. Westrope.

The subjects of the Fothergillian Gold Medal, value twenty guineas, offered by the Medical Society of London, are, in 1871: Some subject in Obstetrics (including the Diseases peculiar to Women). For 1872: On Croup.

The next Primary and Pass Examinations for the Diploma of Member of the College of Surgeons of England, will commence on the 5th and 11th of November respectively; and the First and Second Professional examinations for the Fellowship on the 19th and 23rd.

The next Meeting of the Pharmaceutical Society of London will be held on Wednesday evening, November 2nd, at Eight o'clock. The following Paper will be read:—"On some of the Infusions of the Pharmacopœia," by Mr. J. R. Barnes.

The Session of the Medical Society of London commenced on Monday last, October 17th, at 8 p.m., when an Address was delivered by John Gay, Esq., F.R.C.S., President, entitled "Surgical Art and its Limitations," followed by "A Practical Account of Basic Disease of the Lung," by Andrew Clark, F.R.C.P.

In the Faculty of Medicine of the Queen's University in Ireland, fifty gentlemen have within the last year been examined for the Degree of Doctor, of whom forty-three have passed; thirty-six for the degree of Master in Surgery, of whom thirty-two have passed; and 131 presented themselves at the First University Examination in Medicine, of whom ninety have answered to the satisfaction of the examiners.

Dr. Pantaleoni, who some years since was banished by the Pope, and who has sometimes contributed to our columns, has been appointed Inspector of Hospitals by the new Government of Rome, and will, we hope, again favour our readers with some articles. Professor Maggiori and Dr. Toscani have also returned to their posts at Rome.

SCOTLAND.

EDINBURGH.—The foundation stone of the new Royal Infirmary was laid on Thursday last by the Prince of Wales. The event was made the occasion of a great masonic display, it being the first masonic act in Scotland performed by the prince as patron of the order. The Princess of Wales was present at the ceremony.

ON Wednesday the Prince and Princess of Wales visited the Sick Children's Hospital, and inspected the wards under the guidance of Dr. Matthews Duncan, Chairman of the Board of Directors, Dr. Peel Ritchie, and Dr. Gamgee, acting physicians. The utmost satisfaction was expressed by their Royal Highnesses with the arrangements and comfort of the wards.

WE are glad to learn that the University of Aberdeen is fully alive to the propriety of establishing bursaries in connection with the Faculty of Medicine, and that measures will shortly be taken for accomplishing this object.

DR. ANGUS FRASER, Aberdeen; Dr. Fiddes, Aberdeen; and Dr. Trail, Moneymouth, have been appointed Examiners in Medicine in the University of Aberdeen.

SPECIAL CORRESPONDENCE.

[LETTER FROM OUR SPECIAL CORRESPONDENT.]

[This letter has been held over in consequence of the recent pressure on our space by the Congresses, &c.—ED. MED. PRESS.]

PARIS.

I SAID that I would endeavour to send you a few notes from the able lectures, recently delivered by Dr. Peter, on "Diseases of the Heart," at the Hôpital de la Pitié. Dr. Peter remarks that all observers agree in having noticed that the aortic valves are more frequently injured in old age than the mitral valves. This is because the sigmoid valves form part both of the heart and of the aorta. The symptoms of disease of the heart in old persons are less distinct than among the young, because the heart is old, and the blood which it sends forth is feebly launched, and thus less violently directed against any obstacle than it is in the vigorous adult; but if you listen carefully at the base of the heart in old persons with intermittent pulse, you will be able to detect a bruit. The fourth left intercostal space is the best position for listening to such bruits, near the juncture of the fifth cartilage with the sternum. As the organism is aged, and the sensations less acute, palpitations—those painful symptoms of heart disease—are either not perceived, or are not felt. Thus, we see old persons with clearly marked heart disease, and with tumultuous disorder of arterial pulses, denying that they felt any kind of pulsation, and quite unconscious of their pulse being intermittent. In old persons, also, the functional disorders of other organs are far less marked than in the young. The engorgements of the viscera take place much more slowly; but, if you listen carefully at the base of the thorax, you will detect fine râles, indicating a permanent condition of œdematous conjestion, and the malleoli are often œdematous. Heart disease is common in old age; but frequently unrecognised. The use of alcohol produces more rapidly than old age the using up of the tissues of the heart, and is thus only premature senility. Budd has pointed out the frequency of heart disease among drunkards, and we have shown by numerous autopsies of drunkards, that their heart is always injured, and usually most gravely, as in old persons, in the aortic valves. Rheumatism and chorea, a disease connected with rheumatism, are causes of acute valvular disease, as old age and alcohol produce chronic disease. Gout rarely attacks the heart; it is the great vessels it injures. Syphilis, when it attacks the heart, injures the muscular tissue rather than the endocardium. Eruptive fevers, and more particularly scarlatina, when intense, may produce heart disease. The endocarditis of scarlatinal, or puerperal, or typhoid origin may be the starting point of an organic affection of the heart. In the last named disorder there is found frequently after death of typhoid fever, epithelial proliferation on the mitral and sigmoid valves. The lesions due to alcohol are frequently seated on the ventriculo-aortic valves, and are frequently complicated by a fatty addition to the heart at its base, and along the anterior coronary artery, just as takes place in old age. In rheumatism, again, the endocardium is alone usually affected, and especially the mitral valves. Scarlatina, of all eruptive fevers, is the one which most frequently gives rise to endocarditis. We ought to listen daily to the heart in scarlatina patients, so as to be able to combat any endocarditis which may arise by means of blisters, &c. It is probably in rheumatic persons that the fever causes disease of the valves.

Dr. Peter observes that it would seem as if the knowledge of the exact relation of the different parts of the heart with the thoracic parietes ought to furnish information useful at the bedside, and permit us to precisely localize the seat of abnormal sounds. But nothing is more illusory. The heart, when diseased, is of larger volume, and thus its relations to the chest walls alter. According to Gendrin, among others, outside of the left edge of the sternum are found the two-thirds of the pulmonary artery and one-third of the aorta. The heart's apex beats normally between the cartilages of the 5th and 6th ribs at lowest, or between the 4th and 5th at highest. According to Luschka, cited by Dr. Gairdner—1. The aortic orifice corresponds to the third right chondro-sternal articulation; the pulmonary orifice to the most internal part of the 2nd intercostal space a little higher. 2. The left auriculo-ventricular orifice is situated behind, and to the left of, the aortic orifice, in the 3rd left intercostal space, one centimetre from the sternal edge. 3. The right auriculo-ventricular orifice is under the sternum, near the 3rd left intercostal space. All this is only true in health, and misleads when disease is present. The heart is fixed above by the great vessels, and free at its apex; so that when it is hypertrophied, its base remains almost motionless, while its apex descends, as also its valves. In some cases of hypertrophy, too, the base descends also. Now, all grave lesions, whether valvular or otherwise, in the long run, cause displacement of the point of the heart, and also of its base. On the other hand, the elongation of the organ, as well as the hypertrophy of the auricles, produces the descent of the orifices, so that all the relations of the heart to the chest walls are changed. For instance, in a patient in the wards, affected with aortic constriction, the bruit is heard, not at the level of the third *right* chondro-costal articulation, but at the level of the upper edge of the fourth left costal cartilage, near its junction with the sternum, whilst the point of the heart is felt to beat at the upper border of the eighth rib, whilst dulness finishes at the third. At the origin of the great vessels the dulness is six centimetres transversely.

Vivisections have shown that, during the diastole of the heart, the blood penetrates, by means of the vis-a-tergo and gravitation, from the auricle into the ventricle, without effort on the part of the auricle, which may be considered as a very dilated part of the venous system. There is, hence, no noise in this operation, even if there exist more or less considerable constriction of the auriculo-ventricular valve. The auricle, however, may contract on the last few drops of blood, and cause a pre-systolic bruit, coincident with the systole of the ventricle. But the stricture of the auriculo-ventricular valve must be considerable, in order that a pre-systolic bruit should be possible. It must be remarked that this same bruit is always likely to be followed by a systolic bruit, on account of the insufficiency of the valve in such cases; this same sound may continue

after the systole, and then is called pre-diastolic. It may be easily understood from this that the blowing murmur due to the constriction, as it tends to be heard chiefly at the point of the heart, and as the blowing murmur due to insufficiency tends to be heard most loudly at the base, there ought to be heard, in case of stricture coincident with insufficiency, a mean murmur heard neither most loudly at base nor apex, but at a point midway. M. Hérard says he has clinically observed blowing murmur at the apex in four cases, in which the murmur at the apex was double, and in three of these cases, where there was a *post-mortem* examination made, constriction with mitral regurgitation was observed. The following conclusions are adopted by Dr. Peter :—1. That the notions so precise as to the relation in health of the orifices of the valves of the heart to the chest walls are rather useless when disease is present, since then the relations are destroyed. 2. That the blowing murmur of the systole heard most loudly in the neighbourhood of, or at the level of, the fifth left intercostal space, where the heart's apex normally beats, is characteristic of mitral regurgitation, this point of the chest wall no longer corresponding to the apex of the heart. 3. That the blowing murmur of the systole, in the neighbourhood of the point where the heart's apex really beats, indicates stricture of the mitral orifice, and, *à fortiori*, if this murmur is pre-systolic. 4. That the blowing murmur during the diastole at the point, which would be characteristic of mitral constriction is problematical.

It is above all important in practice to remember both for the patient and the physician, not so much what is the exact lesion of the heart ; but that there is *a* lesion, and to be acquainted with the general condition of the subject of this lesion. There is no relation between the functional disturbances caused by a disease of the heart and the intensity of the murmur which exists so that the prognosis of this disease is not to be drawn from the seat of the lesion, but, it is in a ratio compound of the intensity of the lesion, its duration, the age of the patient, and his habits and force of resistance ; so that, if we must learn to recognise the seat and the nature of a cardiac lesion, we must also learn that this is a mere artistic satisfaction, and that the work of the physician commences here. What you have still to know, and what is still more important is, the state of the vascular system and of the organs of hæmatosis and the general state of the system, because in this it is that we must, and ought to, look for our therapeutic indications.

Corvisart said that " in the last period of cardiac aneurisms, we sometimes remark delirium, especially at night." Dr. Peter has seen cases similar to this in heart disease, and accounts for them as he would account for coma, somnolence, &c., mentioned by some authors in like cases. Cerebral hyperæmia supervenes caused by venous stasis in certain cases. Independently of the exacerbation of the different symptoms, the morbid temperature rises every evening to redescend each morning. The occurrence of nocturnal delirium in cases of heart disease is no exceptional fact, and has for its material causes a passive habitual hyperæmia of the brain, so that this delirium is the index of grave and habitual disorders of the brain circulation, and one of the proofs of the thorough disturbance of the whole circulatory process ; it shows, as Corvisart says, that the patient has come to the last period of his cardiac affection.

All lesions of the *left* heart first of all take effect on the hæmatosis, *i.e*, on the oxidation of the blood globules ; all lesions of the *right* heart affect hæmato process, or the fabrication of these globules. But, in spite of the localizers of heart affections, the sole practical consequence which would result from the notion of the seat of the lesion, *i.e.*, the knowledge of the more or less tardy apparition of the consecutive functional disturbances, does not follow from this notion, and, besides, the functional disturbances are precisely the same, whatever be the lesion of the heart existing. Both in cases of aortic constriction, and in mitral regurgitant, there soon takes place tendency to pulmonary congestion. Whatever be the primitive lesion, it affects gradually the whole heart, and travels from the left heart to the right heart. Consequently, the gravity of a heart affection of the left heart commences when the difficulty of the circulation of the lung commences : since this difficulty does not only prove stasis to exist at the left auricle, but becomes an initial phenomenon, after which the consecutive lesion of the right heart is about to appear.

Dr. Peter says with regard to the localisation of sounds, he takes as his stating point the left nipple, and considers two regions, one above, and the other below that nipple. Nothing more is necessary than to see whether the blowing murmur is heard in one or other of these spaces. 1. If we perceive a murmur in the sub-mamillar region, it is always with a first sound or a little before it, and is always due to a cardiac lesion (mitral regurgitant, or constriction). 2. If you perceive a murmur in the supra-mamillar region, it is sometimes with the first and sometimes with the second sound. In the first case doubt is possible ; when with the second, it is always cardiac, aortic insufficiency. As to a blowing murmur with the first sound, if it be rough, intense, without great propagation to the vessels of the neck, if the patient has not the tint of chloro-anæmia you all know you will conclude that you have to do with a constriction of the aorta. The pulse, small in the former, and large and compressible in the latter, will complete the diagnosis.

If there is anything rare in the world, it is the simultaneous existence of a heart affection with tubercles. Why is this ? The tuberculisation of the lung commences at the apex, because that is the part of the lung which does the least work. Now, in persons affected with heart-disease, these are habitually passive congestions of the basis of the lungs, and this causes the apices to become more active. This is, again, the reason why asthmatic persons are so rarely tuberculous or, in a great measure, emphysematous patients. Peter remembers but one asserted example of the existence of phthisis and cardiac disease and that was in a drunkard.

One very important question in morbus cordis is, what is the state of the vessels ? In respect to the pulmonary artery, its functional derangements manifest themselves long before we can observe any sign of material lesion. There is dyspnœa and anæmia to guide us. The dilatation of the pulmonary veins of the capillaries and of the artery, cause passive congestion of the lung with œdema, hæmorrhage, or inflammation, all of which we can judge of by the stethoscope. As soon as you perceive râles of engorgement of the lung capillaries, you may conclude that the pulmonary artery no longer compensates, and that its contracting power is partially conquered. In many cases, there results for the pulmonary parenchyma from its basis to the middle part of the lungs, a definitive condition of induration and of friability, a mixture of œdema, of hæmoptoic infarctus, of cirrhosis, and of partial inflammation, and finally, the lung becomes thus struck with functional incapacity. Such are the necessary consequences of the dilatation of the pulmonary artery, vein and capillaries. From this dilated state of the capillaries with congestion of blood in the vesicles, there occurs a difficulty in the oxidation of the blood globules, which explains the anæmia we notice in patients who do not cough. There is too much blood to oxidise in the wall of the vesicle, and too little air in the vesicle to do it with. You may, from such a condition, conclude that the patient has arrived at the second stage of his disease of the heart. This may endure several years, during which time the patient is always in danger in case he become affected by bronchitis, &c. In practice, the repetition of pulmonary accidents, such as sudden and intense congestion of the lungs or bronchitis, in the form of suffocative catarrh, hæmoptysis, &c., in a non-tuberculous person may make us think of morbus cordis. Good hygiene may do much in such cases ; but unfortunate working people may soon be overwhelmed by the disease. Among the wealthy such cases may last for years, whilst they are rare among hospital patients.

Is it possible to prognosticate what is the anatomical condition of the heart? We can certainly know the volume of the heart by percussion, but we possess no actual method of ascertaining if the augmentation of the organ is accompanied by a dilatation of its centres. If there be a valvular lesion, dilatation is probable as well as the hypertrophy. As to knowing whether the fibres are intact or fatty, we can only judge by the functions. It is only in the third period of heart disease, that the heart degenerates. The *arcus senilis* which might better be named fatty circle, since it is fatty and is observed in some young persons, is a very good sign of alteration of a similar nature in the muscle of the heart. If we have a fatty degeneration of the cornea, we may deduce from it immediately the existence of an alteration of like nature, almost certainly in the endocardium, in the lining membrane of arteries and in the muscle of the heart. These remarks were made first by Canton. Endarteritis and periarteritis are common in gouty persons, and angina pectoris likewise.

In my next letter I shall attempt to give you a few more notes from Dr. Peter. It may serve to keep up our courage during the existence of this terrible war, which I fondly trust, Mr. Editor, may not last much longer. If it does, our beautiful city must certainly be grievously injured.

Correspondence.

BABY-FARMING.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—I observe you do me the honour in your "Notice to Correspondents' column," of quoting a remark made by the Editor of a much respected contemporary *Public Opinion*, respecting a letter written by me on the subject of *Baby-Farming* The Editor of *Public Opinion* gives me the credit of being the first to advise the punishment of seducers in order to strike at the root of the great social evil of baby-farming, and that all seducers be punished if the evidence be strong enough to convict in a criminal court, according to the nature of the seduction, and the attendant circumstances of the case—to make, in fact, seduction a criminal act. Now, the suggestion originated not with me, but emanated from a writer of a clever editorial article in the columns of another esteemed contemporary *The Daily News*, who lucidly showed that so long as designing men practised the cruel act of seduction, that in spite of detective police, the speeches of Crown prosecutors, the charges of Chief Barons, the convictions of special juries, and the sentimental termination by a private execution in the interior of a prison, that baby-farming will continue. The root of the evil exists with the men. We all know the seducer, no town or country village is without him. I loathe attempting his description, well-to-do in the world, gifted with the art of pleasing, and blessed by nature with good personal appearances, he wins his heartless game easily, and some I know, boast of the number of half-crowns they pay weekly to condone their guilt, in another's weakness—the sufferer or the victim entangled into the meshes of the silken woven web. Upon half-a-crown she cannot subsist, and support her illegitimate offspring. She is deserted as a rule by the seducer, who despises her for her weakness, and she is destroyed for ever in the eyes of her relations. As in the case of a man, there is no retracing the step in the wrong path. She goes for work where she is unknown, and places the child in the hands of a *farmer*. Recent events disclose the last scene of the performance. All this time, Seducer, Esq., is at large, boasting perhaps over his exploits, and hailed by his admirers as a hero. It is as curious as it is disgraceful to remark how this sort of man is fawned upon by friends of his own sphere of life, and how enthusiastically he is received into society with open arms. In truth such a man, and there are only too many thus encouraged to go on in the evil work of destruction, and of ruining their poor dupes for ever. In order to control prostitution and ring the death-knell to baby-farming, seducers must be made amenable to legislation and punished according to the nature of the evidence adduced against them. What effect would such a law have upon our garrison towns? Upon the unmarried, well looking squire, ever on the *qui vive* to betray and to destroy? Prostitution must have a starting point, and Dr. Drysdale, or any one who has specially listened to the sorrowful tales disclosed by hospital patients, in the hour of suffering and repentance, could tell that ruin came through some one in a better position of life than the erring, that the tempter or the betrayer was not on the same level so to speak.

The question only requires agitation that attention may be directed to it elsewhere, and the clever suggestions of the Editor of *The Daily News* be brought to bear good fruit, for if it be desired to out-root baby-farming, I repeat seduction must be made a criminal act.

I am, Sir, your obedient servant,

J. Waring-Curran.

Oct. 13th, 1870.

P.S.—Since writing the foregoing, I find the following remarks made to-day, by our foster-brother the Editor of the *Law Journal*, called forth by the case of a tradesman, who at the Southwark Police Court, was ordered to pay two and sixpence per week for the support of the illegitimate child of a girl whom he seduced under the promise of marriage. These observations are worthy the source from whence they emanated, and I congratulate the *Law Journal* upon them.

"We denounce baby-farming, and yet maintain a law which renders it almost imperative. Why should not a man be compelled to fully maintain his offspring? At present the mother, if left without provision, cannot even by an appeal to the law obtain a sufficient support for her child. Instead of a maximum of 2s. 6d. we would raise it to 20s. a week—the magistrate to make an order according to the circumstances of the case and the position of the parties. Not only would there be less baby-farming, but the man, knowing his legal obligation to keep his offspring, would be disposed to make a fair arrangement without compelling the woman to appear in open Court."

I would add, *abolish the rule of the necessity* that exists, *of swearing the paternity of the child within a twelvemonth*. This is the next best step to the suggestion of *The Daily News* commented upon above.

WHAT IS WRONG? WHERE IS IT? WHAT WILL BE DONE WITH IT?

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Aug. 21st.—A. B., a stout healthy young man, twenty-eight years of age, who cannot recollect ever having a moment's illness, ate his breakfast this morning as usual, and then took a book to read, the window was open and a gentle air was passing through the room. At 10 a.m., he felt chilly, which was almost immediately followed by rigors, or cold shivering; at 4 p.m., the skin is hot and dry, headache, mouth dry, thirst, countenance slightly flushed, loins painful, and general pain and uneasiness, nausea and bilious vomiting, some uneasiness over the epigastrium, bowels opened this morning; pulse 135, and full. This is a case of what is called typhus fever. What is the meaning of the word typhus? It is derived from the Greek, and means stupor. What is the meaning of the word fever? it is derived from the Latin, and means heat. The name of this disease is from two different languages, and means "Stupor, Heat, or Typhus Fever." But, where is it? The head aches, is it in the head? The skin is hot, the pores are closed, refuse to perform their usual functions, and the blood refuses to part with its watery portion in the form of perspiration, is it in the skin? There is general pain and soreness, is it in the muscles, veins, or nerves? The pyloric orifice of the stomach is relaxed, and the bile flows back into it which it rejects, is it in the liver? Is it in the lungs? There is increased respiration, is it in the kidneys? as their secretion is rather high coloured, or is it in the blood? The blood is the life of man, and from it everything is secreted pure or impure. Have the lungs absorbed a poisonous miasma and thrown it into the general circulation? Is the blood poisonous? What produced the rigors! What excited the heart's action? If the blood is poisoned it is in the whole system, and it will soon injure some vital parts. What about the stomach, as it has a most important part to play? The bowels have been freely opened, and what now is to be done with this stupor heat? We have diaphoretics, diuretics, and specifics, &c., &c., what will they do? If you draw blood from a vein and throw a solution of the nitrate of potash on it you see the result; and if it acts thus upon dead

matter, what action may it not have upon the living? It might neutralize or destroy the poison ; whatever is put into the stomach to do good must be absorbed. But, what have we to contend against here ? Certainly not typhus fever, or stupor heat ; what have typhus, or stupor, and fever or heat to do with it ? What keeps up the heart's action ? Certainly, neither the typhus or stupor, or fever or heat, the principal or chief enemy is that which caused the rigors, and it is keeping up the heart's action, it is in the blood and vitiates every secretion, what does the tongue say ? What about the stomach and the intestines ? There is air or gas in the intestines, will the stomach absorb anything now ? Petechia have appeared, what are they ? What caused them ? The artery deposited a particle of blood which the vein could not absorb, which shows great debility. What have the diuretics and diaphoretics done ?—Nothing—what should they have done ? Excited the skin and kidneys to action, would these lessen the heart's action, or carry off the poison ? were they absorbed by the stomach ? Stimulants are now given to excite the heart's action through the nervous system, what will this do ? Will it destroy the poison or alter the constituent particles of the blood ? I had a case once in which I gave a pint of brandy, and the patient recovered, after a long sleep of twenty-five hours, and a hard struggle against great debility ; but, in this case, the poison must have lost its virulence, its power must have been destroyed, but whether by exhaustion or the powerful stimulus, I cannot say. No, he has sank gradually, he is dead. What killed him ? No disease has been found in the skin, muscles, veins or arteries ; none in the liver, brain, or lungs ; the heart is sound, and we have only to look for the result in the stomach and intestines. It is with them we have been working since the commencement of our labours, and in them will be found the result of the cause. It is, I believe, an acknowledged fact that no two separate actions can exist in the system at once, at one and the same time. It is, I suppose, upon this principle that I have never lost a patient labouring under this affection whose system I could place under the influence of mercury. I have saved many by saturating the system with the nitrate of potash, and I have combined the saline with the mucinese with good results ; but much depends upon the virulence of the poison, if it is very active, I place my sole reliance upon mercury, and it has never failed in Africa, India, or any other places. It is strange to say that one has died from typhus fever, when we cannot tell what it is, at least, I cannot, nor could I ever find a man who could. People run from it as from a mad dog, without knowing what they run from ; they say that the "fever," "the heat" will catch them ; what is contagious or infectious in this ? The poison died with the patient, he could not exhale it from his lungs, though the poisoned blood passes through them, it seems to destroy the vitality or the oxygenizing principle of the blood, and produce a strange action in the terminal arteries and veins of the whole chylo-poetic viscera.

ALEXANDER LANE, M.D., R.N.

Chen, Salop, England, Sept. 23, 1870.

P.S.—If we, at the commencement, place the system either under the influence of mercury or potash, or both, we save the patient, or at least, in my opinion, give him a far better chance than by any other mode I know of, as if we leave until the absorbents of the stomach lose their action and cannot absorb what is thrown in, our chance is lost. If the patient recovers, no thanks are due to medicine, but either to the exhaustion of the cause or the strength of the constitution to resist. What is typhus fever, and how will you treat it ?

"CHLORAL HYDRATE."

A TRUE VERSION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I am glad to find your respected and spirited correspondent, Dr. Waring-Curran coming forward on the subject of Chloral Hydrate, which he truly says is an "over-estimated drug." Our profession is only too fond of new things, surgical toys, and therapeutical novelties ! An eminent Dublin hospital surgeon the other day, in conversation with myself, had reason to shake his head very seriously over the chloral. More power, then, say I, to Dr. Waring-Curran, and all therapeutists like unto him who have the courage to say what they believe, and who fear, so to judge from the boldness of their communications, neither to court displeasure nor cultivate favour. What about podophyllin ? What about pancreatic emulsion ? What about carbolic oil ? carbolic silk ? carbolised ligatures ? Where will hydrate of chloral be in another twelve months ? On the same shelf with lactate of iron and granulated tin.

Much time is lost—valuable to the patient, for his life not unfrequently is in the balance, because, as Dr. Curran says, over-drawn pictures effect more in the eye of the physician than is evinced by the patient's yielding to a rainbow treatment. *Veritas vincit !*

I am, &c.,

A DUBLIN PHYSICIAN.

Obituary.

THE LATE MR. RICHARD BARTER, M.R.C.S.

WE deeply regret to have to announce the death of MR. Richard Barter, M.R.C.S., at his residence at St. Anne's Hill, Cork, on Tuesday, the 4th inst. As regards his professional career, he studied at the London, Dublin, and Edinburgh schools of medicine, and gained his diploma at the College of Surgeons in 1828. We must state that by him the Turkish Bath was first introduced in England. As a literary man he was the author of "Lectures on the Turkish Baths at St. Anne's Hill, Cork," a treatise on the "Treatment of Cholera on Rational Principles," and he also contributed several papers to the MEDICAL PRESS relative to the same topics.

Medico-Legal Intelligence.

POST-MORTEM EXAMINATIONS AT HOSPITALS.—IMPORTANT DECISION.

THE decision in the matter between the authorities of St. Thomas's Hospital, and a person named Leverett, was on Saturday given by Mr. Ellison, the presiding magistrate at the Lambeth Police Court.

Mr. De Tracy Gould again appeared for Leverett, the complainant, and Mr. Poland for the hospital authorities.

There was one summons against Mr. Frederick Walker, the steward of the hospital, for causing the body of Everalda Matilda Leverett (wife of complainant) to be removed for anatomical examination from the place where she died within forty-eight hours of her decease. Mr. Richard Whitfield, the resident surgeon, was also summoned for having permitted the removal of the body within the time, but that summons on the last occasion was withdrawn.

Mr. Ellison, in deciding the case, said the summons was against the steward of the hospital for non-compliance with the provisions of the Anatomical Schools Act, the 9th section of which required amongst other things that forty-eight hours should elapse before the removal of a dead body for the purpose of anatomical examination. The case had been very properly described as a matter of great public interest. It was most important on the one hand that the feelings of surviving relatives should not be outraged by hasty or indecent proceedings, and, on the other hand, it was of equal importance that the researches of science, by which medical knowledge was extended, and by the prosecution of which alone it could be hoped to cope with disease, should not be fettered by unnecessary restrictions. The patient died under circumstances which made an examination advisable. The examination was conducted with decency and propriety, the regulations of the hospital being in no way departed from ; but it was conducted without the knowledge or consent of complainant. Although complainant had made no application at the hospital the whole of the day after the patient's death, it might not have occurred to the authorities that any objection was likely to be felt on the part of the husband, yet the authorities knew that he was aware of his wife's being there, and that he had been required and had agreed to bring her some necessaries ; that he had been at the hospital on the 16th September, and again on the 18th, when he saw the body and had expressed his intention to remove it on the Monday at half-past nine o'clock in the morning, and went at that time for the purpose. He (Mr. Ellison) therefore thought it would

have been better if the authorities had taken some little trouble and placed themselves in communication with the husband and ascertained his feelings in the matter before proceeding to the examination, and he would strongly urge upon the authorities that it would be advisable, whenever practicable, to take the addresses of the representatives of the patients, and to place themselves in communication with them before they proceeded to an examination. He was, however, obliged to come to the conclusion that there was no removal as contemplated by the statute in this case, and for that reason the summons would be dismissed.

The Complainant asked the magistrate whether he could carry the case further, as it was of great public importance.

Mr. Ellison said he could consult his attorney.

Mr. Poland said the authorities were fully prepared, and willing to meet any inquiry or further application.

Medical News.

The St. Bartholomew's Dinner.—This annual gathering took place on Monday evening week in the great hall of the hospital, when ninety-six old students sat down to dinner under the presidency of Dr. George Paget. Nearly all the medical staff were present, and the guests and visitors included the Rev. Dr. Bell, Professor Humphry, of Cambridge, Sir Trevor Laurance, Bart., Dr. Stenhouse, the Secretary of the College of Surgeons, Mr. Daniel of Ramsgate, &c.

St. Mary's Hospital Dinner.—The members of the staff, and the old and present students of this school dined together at Willis's Rooms, on the evening of Saturday, October 1st, Dr. Sibson, F.R.S., being in the chair.

Prizes Awarded at the Opening of the Manchester School of Medicine.—Third year Scholarship, value 20*l.* Mr. H. Reston, Manchester; first prize, value 5*l.* 5s. Mr. Webster, Manchester; second prize, value, 3*l.* 3s. Mr. C. Holmes, Ardwick. Second year Scholarship, value 15*l.* Mr. E. Bishop, Manchester; first prize, value, 5*l.* 5s. no award; second prize, value 3*l.* 3s. Mr. A. M. Edge, Rusholme; third prize, value 2*l.* 2s. Mr. R. T. Morris, Rochdale; fourth prize, value 1*l.* 1s. Mr. H. P. J. Price, Hulme. First year's Scholarship, value 10*l.* Mr. J. T. Hall, Rusholme; first prize, value 5*l.* 5s. Mr. J. Green, Bolton; second prize, value 3*l.* 3s. Mr. E. A. Birch, Rusholme; third prize, value 2*l.* 2s. Mr. F. W. Jordan, Manchester. Certificates of merit; Mr. F. Daniel, Crumpsall; Mr. G. Stansfield, Bacup. Mr. Turner's prize, 3*l.* 3s. Mr. E. A. Birch, Rusholme.—The following list of first, second, and third year men, who had obtained certificates of honour, was also read:—J. M. K. Buckley, H. B. J. Price, C. F. H. Kitchen, A. M. Edge, A. Kershaw, J. W. Sellers, G. Garside, A. Hurst, H. Reston, F. H. Walmsley, F. O. Bentley, J. Green, F. W. Jordan, C. L. Smithard, J. W. Whitehead, E. A. Birch, C. Holmes, E. M. Garstang, W. P. Counsellor, J. H. Cottam, J. Daniel, J. Hutchinson, H. C. Smale, R. T. Morris, W. Needham, J. C. Allen, P. L. Booth, J. F. Harrison, G. S. Stansfield, J. T. Hall, R. H. Hammond, H. W. Webster, H. P. Ilderton, F. H. Smelt, W. Swift, J. Hindle, J. H. Hall, J. T. Appleby, W. Holt, J. O. Smith, G. Morris, F. W. Buck, and R. Hartley. The students were addressed by Mr. Turner, and several of the lecturers to the Institution, who were loudly called for; after which the proceedings terminated.

The London Hospital Medical College.—The following prizes for the Session 1869-70., were distributed at the close of Dr. Sutton's Introductory Lecture, by Edmund Hay Currie, Esq., Chairman of the London Hospital House Committee,—*Clinical Medicine:* 20*l.* scholarship (given jointly by the House Committee and the Medical Council). Mr. George Earnest Herman and Mr. Tom Robinson, (Equal).—*Clinical Surgery:* 20*l.* scholarship (given jointly by the House Committee and the Medical Council), Mr. Tom Robinson; honorary Certificate, Mr. C. W. Vickers.—*Clinical Obstetrics:* 20*l.* scholarship (given jointly by the House Committee and the Medical Council), Mr. Tom Robinson; honorary certificate, Mr. George Ernest Herman.—*Dressers' Prizes:* given by the House committee for zeal, efficiency, and knowledge of minor surgery, 15*l.* prizes, Mr. Alfred Kebbell, Mr. C. J. Stocker, Mr. Alfred Hill, 5*l.* prizes, Mr. Lewis Mackenzie, Mr. Albert Morton, Mr. Kelly White.—*Buxton Scholarships:* given this year by the Medical Council, for proficiency in the subjects required for the preliminary examinations, 30*l.* scholarship, Mr. F. E. Pocock, 20*l.* scholarship, Mr. C. J. Vallance.—*Osteology:* 20*l.* scholarship (given by the Medical Council), Mr. C. W. Drew; honorary certificate, Mr. H. T. Shapley.—*Anatomy, Physiology, Chemistry:* 25*l.* scholarship (given by the Medical Council), Mr. John Blunsom; honorary certificate, Mr. H. T. Shapley.—*Special Certificates of Honour Awarded to Medical Assistants:* for three months service, Mr. R. W. Parker, and Mr. H. C. Fox; for six month's service, Mr. G. E. Herman; or four month's service, Mr. H. W. Page; for three month's service, Mr. W. Ley, and Mr. Philip Thornton.

Dr. John Lloyd, F.R.C.S., has been appointed one of the Commission of the Peace for the city and borough of Bath.

Queen's College, Birmingham.—The session at this college was inaugurated on the 3rd inst., by a *conversazione* got up through the instrumentality of Dr. Balthazar Foster, more than 300 students, professors, visitors, and medical men of the neighbourhood being present as guests. We hear that it is intended to open the session every year in the same manner.

Cholera in the Crimea.—A dreadful epidemic of cholera at Kertch, is reported by Mr. Barrow, H.M. Consul there. The generality of the cases have been very severe, death ensuing for the most part, in twelve or fifteen hours. In an adjoining house two victims died in twelve hours, and another is now at the point of death. The total number of deaths up to Sept. 17th, was 141, and, the number of cases up to the same date 318, the recovery of twenty-three being doubtful according to last accounts.

Cholera in Cuba.—Fifty-three deaths are reported from cholera in Havannah on the 5th, and eighty on the 6th inst. By all accounts the disease is rampant.

Bequests to Hospitals.—The following are bequeathed by the late Sir G. Philip Lee, K.T., in his will proved under 180,000*l.* To the Victoria Hospital, Surrey County Hospital, King's College Hospital, London Fever Hospital, St. Mary's Hospital, St. Marks Hospital, and the Cancer Hospital, 1,000*l.* each. To the Weybridge Convalescent Hospital, Brompton Consumption Hospital, Middlesex Hospital, City Orthopædic Institution, and the Ormond street Hospital for Sick Children, 500*l.* each.

The will of Dr. John Wilson, Inspector-General of Hospitals, was proved under 16,000*l.*

Medical Club.—The annual general meeting was held on Wednesday last, Sir W. Fergusson, Bart., in the chair. After the ordinary business had been transacted, the question of removing the Club to new and larger premises was discussed, and Dr. Lory Marsh stated that he had obtained the refusal of the lease of the house in Pall Mall East, at present in the occupation of the Union Bank. The outlay required for purchase of lease, furniture, &c., is estimated at £5,000, and it is proposed that the sum should be advanced by the members in debentures of £25 each, bearing interest at 5 per cent., and secured by a conveyance of the lease, furniture, &c., to trustees. The present members would be continued upon the same terms as are now established in the Club—£5 5*s.* for town, and £3 3*s.* for country members; and any new members joining before 1st January next would be admitted on the same terms and the payment of the present entrance fee of £8 8*s.* After this year, the entrance fee is to be £10 10*s.*, and the annual subscription to be uniformly £5 5*s.* for all members at home. It is believed that, when once finally settled in a suitable and commodious building, the Club will rapidly develop into one of the best in town.

The Present Medical Staff of the Prussian Army.—The *Allg. Med. Centr. Zeit.* of Berlin (No. 76, 1870) gives the following figures:—One medical officer for every 500 men. Besides this there is a special body of surgeons intended for the sick and wounded in the field, which body is called the sanitary detachment. Every corps of the army is followed by twelve field hospitals, each completely organised for 200 patients, so that every corps is provided with the means of treating 2,400 wounded. Each corps has besides a reserve, composed of three surgeons and three assistant-surgeons. There are also 200 civil surgeons, who have volunteered their services, attached to the army; and most of the great medical and surgical authorities of Germany have been appointed inspectors and consulting officers to the army sanitary department. Altogether there are about 2,700 medical men in active service with the German host. We find, however, in another part of the same paper that the Secretary at War has decreed that all medical men, who have chosen to serve as militants, should leave the fighting portion of the army, and take up medical duties, thus showing that surgeons are not too numerous.

NOTICES TO CORRESPONDENTS.

Correspondents sending newspapers will please mark the paragraph or item of news to which they desire directing our attention.

Prolegomenon.—Don't ask us to print your letters. Solicit a friend to mediate between you. The contemporary you name is only too fond of printing and amusing its readers with these personal brawls, or professional misunderstandings. We consider you more sinned against than sinning. At most the grievance is trivial, and you retain the patient. Forget and forgive.

Grist.—*Gratia gretiam purit.* We shall not forget your kindness. The three new subscribers shall have the Press regularly. We are indebted to you for similar acts in that part.

J. B.—The fault must be at your post-office, enquire further.

Philalethes.—"The people of Calabria feed their hogs on pears," as Horace says, *verbum sap.* Consult a properly educated physician. We cannot prescribe.

Dr. S.—Our respected correspondent may believe us when we assert the book is a *farrago libelli.* The other is in the hands of one of our reviewers.

A Numine Lalus.—You remember Lord Mansfield, on seeing your motto on the carriage of a noted quack, translated it "God help the patient." Without the motto we accept your contribution however.

R.—The fee is usually a guinea, but depends on circumstances.

Medical Education.—We cannot recommend any particular hospital or school for your son. We refer you to our "Student's Number." The sooner he enters the better, as the Session is advancing.

Raven.—Your letter is not acceptable in its present form, which is libellous, please remodel it.

Dr. E. M.—We send the additional copies to the addresses you give.

Antrim.—Yes, Dr. McCormack of Belfast. He does credit to Ulster by his operative surgery and splendid hospital management at the Seat of War.

Magnus.—You shall receive a private note by the end of the week, when we have enquired further in the subject of so much professional importance.

J. L. T.—We received the paper, but could not find the article; you should mark the subject to which you desire directing our attention.

A Lady Authoress.—Thanks, your communication shall receive the attention which it merits. We shall be glad to hear again from you.

A Medical Student Poet.—We don't print verses. We admire, however, your spirited attempt. Read Locke and you will find the reply to your question which would be too long for reproducing here.

F.R.S.—We hear that there are several candidates for the Regius Professorship of Natural History in Edinburgh, vacant by the resignation of Professor Allman:—We may mention William N. McIntosh, M.D. Edin., F.L.S.; H. Alleyne Nicholson, M.D., D.Sc. Edin., F.R.S.E.; and Wyville Thomson, LL.D. St Andrew's, F.R.S. We believe we are correct in stating that there is no truth in the rumours that either Prof. Flower, of the Royal College of Surgeons, or Prof. E. Perceval Wright, of Dublin, is a candidate for the chair.

M.D.—For publication your communication must necessarily be condensed—brief and pithy.

Sporans.—The fee should be five guineas.

Benjamin M.—1. The salaries of the Dublin Poor-law Medical Officers have been raised £25 per annum, the Belfast Dispensary doctors must try again. 2. Chemists ought not to prescribe. 3. No.

The Lady Adelaide.—Upon sending us your address we shall confide to you the author's name.

J. M. M.—We sympathise with Mr. Macaulay and the cruel persecution of the Duke of Buccleuch; write to the Hon. and Rev. Mr. Marsham, the Duke's nephew.

C. W.—The "Mystery of Pain" is a small philosophical book, generally attributed to a distinguished member of our Profession.

Maria.—We have heard that several applications from ladies for admission to the London Medical Schools have been made this year. They have been declined. The fact is that none of our Schools have accommodation for separate classes.

To Contributors—Accepted Communications received:—

"On the Treatment of Delirium Tremens," by Dr. Ludwig Meyer, of Berlin, translated specially for the Medical Press, by Thomas Bookin, F.R.C.S., to which is appended a few practical observations by the Translator.

Clinical Memoranda.—"Subcutaneous Injection of Morphia (Continuation), by John W. Martin, M.D.

"Cases of Pyelitis," by J. C. Thorowgood, M.D.

Dr. Kinkead, "On a New Digestive."

Mr. Milton, "On Eczema."

Dr. Hayes, "Cases in Country Practice."

Dr. Clarke, "Injuries of the Spine."

Dr. Dolan, "Clinical Memoranda."

Dr. Dickson, "On Baby-farming."

Dr. B. Taylor, "Paper read at the Science Congress."

A SUGGESTION.

To the Editor of "The Medical Press and Circular."

Sir,—I read with interest the communication of Dr. Bolton, of Leicester, who calls a certain journal "a Speaking-trumpet." The Leicestershire sheep are the largest in England, as Dr. Bolton knows, twice as big as South Downs! Dr. Bolton should call a spade a spade, for he well knows as I do that the speaking trumpet is a *tin-whistle.*

I subscribe myself, Sir,

A Roasted Apple with the Core in.

NURSES FOR PRIVATE PATIENTS.

To the Editor of "The Medical Press and Circular."

Sir,—Engaged in country practice I have been for the past few days trying to get a trained nurse for a wealthy private patient, but my efforts have been futile, because I did not know where to write for one. I have experienced the same difficulty before. You would confer a great favour upon me by stating the address of the best institution. I see advertisements in your journal to supply almost every want but nurses, and it is to be regretted that such institutions, if there are any, do not advertise in a Medical Journal like yours (as few country practitioners can afford to take two) stating wages to be paid, &c., according to the nature of the duties to be performed. Midwifery nurses so much per week; fever nurses so much, &c., &c. Excuse my encroaching on your valuable space.

I remain, Sir, your obedient Servant,

An English Country Physician.

GOING TO FRANCE TO DRESS A MAN'S HAND.

To the Editor of "The Medical Press and Circular."

Sir.—I thought your article "Glitter" would have eclipsed the light and put the extinguisher on false moons. Going to France to dress a man's hand, to breakfast on black bread and eggs, dispense cigars, behold the *British Medical Journal* in the battle-field (to light the cigar with?) and rest the weary bones on a sofa, could'nt all this have been done nearer London? Do you not think, Sir, "Sportive Visit to the Seat of War" would be a better title than "Surgical Visit" is?

My qualified assistant here went for his holiday to France. He tells his stories much better than any I have yet read. Will you accept them if I get him to write an account specially for the dear old independent Medical Press—dear to the hearts of us all who do not belong to the genus butterfly. My assistant did some *really clever* things with his knife. He has become quite a hero since his return, and is victimised by the ladies accordingly. Will it be said of your London men as of my assistant that he went for the name of the things? I have not the *heart* to go and see the ruin of a country I admired in the noonday of its beauty.

Yours,

Liverpool, Oct. 15th, 1870. Delta.

VACANCIES.

Charing Cross Hospital.—Surgeon-Dentist. Honorary.

Royal Free Hospital, London.—Senior House-Surgeon, Honorary, with board and residence.

St. George's Dispensary, London, W.—Physician Accoucheur.

Dreadnought Seamen's Hospital, Greenwich.—House-Physician and a House-Surgeon, both resident.

Queen's Hospital, Birmingham.—Honorary Obstetric Physician.

Derby Infirmary.—House-Surgeon. Salary £100, with board.

Bristol Infirmary.—Assistant House-Surgeon. Salary £100.

Queen Adelaide's Dispensary, Bethnal Green.—House-Surgeon. Salary £100.

Halifax Infirmary.—Assistant House-Surgeon. Salary £40, with board.

APPOINTMENTS.

Bower, W., M.R.C.S., Medical Officer for the Blankney District of the Sleaford Union, Lincolnshire.

Buck, T. A., M.B., Senior Assistant Medical Officer at the Gloucestershire Lunatic Asylum near Gloucester.

Donovan, J., M.D., Assistant House-Surgeon to the North Dispensary, Liverpool.

Evans, T. W., M.R.C.S., Hon. Medical Officer to the North Dispensary Liverpool.

Falls, W. T. B., L.K.Q.C.P.I., Assistant-Surgeon at the Tredegar Iron Works, Monmouthshire.

Hill, Mr. H. W., Resident Medical Officer at St. Mary's Hospital for Diseases of Women and Children, Manchester.

Lloyd, A. E., L.R.C.P.Ed., House-Surgeon to the North Riding Infirmary, Middlesborough-on-Tees.

Morris, W. J., M.R.C.S.E., House-Surgeon to the South Dispensary, Liverpool.

Philip, J. A., M.A., M.B., Junior Assistant Medical Officer at the Gloucestershire Lunatic Asylum, near Gloucester.

Ronald, R. W., M.D., President of the Glasgow Southern Medical Society.

Smart, D., L.R.C.P.L., House-Surgeon to the Surrey Dispensary.

Strathy, F. M.D., Assistant-Surgeon to the Leith Hospital.

Wallis, F., M.R.C.S., House-Physician at the Westminster Hospital.

Admiralty Appointment, Sat. Oct. 8.—Mr. Edward W. Lect, as Surgeon to the "Lord Warden," and Mr. D. R. Alcock, as Surgeon to the "Trafalgar"

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

Medical Diagnosis in Practical Medicine. By J. M. Da Costa, M.D. Philadelphia: Lippincott and Co. London: Trübner and Co.

Transactions of the Clinical Society of London. Vol. iii.

Report of the Metropolitan Board of Works.

Report of the Metropolitan Association of Medical Officers of Health.

Newspapers from Correspondents.—Croydon Chronicle; Greenwich Chronicle; Spectator; Public Opinion; Nature; Downpatrick Recorder; Northern Whig; Midland Gazette; Lincolnshire Chronicle; Observer; Nottingham Journal: Brighton Daily News; and the Liverpool Post, &c., &c., have been received since our last issue.

Marriage.

Godwin—Campbell.—On the 26th ult., at Mussoorie, India, Charles Henry Young Godwin, Esq., Assistant-Surgeon R.A., to Grace Matilda, eldest daughter of the late James Gordon Campbell, B.C.S. (By telegram.)

Deaths.

Berncastle.—On the 30th of June, at Prahan, Australia, Julius Berncastle, M.R.C.P.L., L.R.C.S.Ed., of cerebral disease.

Birnie.—On the 4th inst., W. Sharp Birnie, M.B., Bury, aged 31.

Howells.—On the 5th inst., at Kennington-cross, Thomas Howells, M.B., formerly House-Surgeon at King's College Hospital, aged 28.

King.—On the 29th ult., at Woking, Wm. King, M.D., aged 84.

Knight.—On the 29th ult., at Brighton, T. Knight, M.D., aged 37.

Lacy.—On the 7th inst., E. Lacy, F.R.C.S.E., of Poole.

Morgan.—On the 7th inst., John Marmaduke Morgan, son of Surgeon Puddicombe, Dartmouth, Devon, aged 21.

Murray.—On the 5th inst., at Whitehaven, C. Murray, M.R.C.S., aged 68.

Turner.—On the 4th inst., at Ards, Cashelmore. Henry Turner M.R.C.S.E., Assistant-Surgeon Scots Fusilier Guards.

The Irish Medical Journal
BEING THE JOURNAL OF THE
Irish Medical Association
No. 137. PUBLISHED EVERY WEDNESDAY New Series

CASTLEBAR UNION—Saturday, Oct. 1.

DR. BEAUMONT'S SALARY.

Mr. Hughes, pursuant to notice, moved that the salary of Dr. Henry Beaumont, the newly appointed Medical Officer of Castlebar North Dispensary District be raised from £90 to £110 per annum.

Mr. O'Donel—I have great pleasure in seconding the motion.

Mr. Nally—Let us first see if he deserves it. Why was the situation not advertised at £110? The extent of his district has been lessened since his appointment.

Mr. O'Donel—I second it for the reason Mr. Nally mentions—the diminishing the area of his district in taking two of the best divisions in it from him, by which he loses the registration and vaccination fees, and all the private practice that is to be had; for, it is well known that Turlough is much better for private practice than all the rest of his district. I think it would be just as well for us to act on principle. I would just as soon vote for increase before I know whether or not he is deserving of it, as after. I do not know Dr. Beaumont, but I know the district, and I believe a medical man at £90 a year not paid. Medical men, as a rule, are badly paid. We will be acting fairly and considerately by raising the salaries of each of the medical men as they came on.

Mr. Nally asked if the salary of any of the other medical officers had been increased?

The Chairman—Dr. Walsh's.

Mr. Cannon—The case stands thus: A doctor comes down; his work is lessened; and his landlord serves a notice of motion to increase his salary before he takes charge of his district.

Mr. Nally—The landlord ought to be applauded. He is an example to the landlords of the country (laughter).

Mr. Cannon—With reference to Mr. O'Donel's argument, I am surprised that he did not put it forward at the time the doctor's salary was being fixed—he knew the district then as well as he does now. It is rather soon of Dr. Beaumont to seek for a rise.

Mr. O'Malley—I think it is unnecessary to say more, because we are not the Dispensary Committe, which is the proper tribunal, and not the Board, to deal with the matter. It was I who gave notice to have Dr. Knott's salary increased before the Dispensary Committe, and on the increase being granted, it was then approved of by the Board of Guardians. Now the Guardians might as well appoint the doctor as raise his salary; but they have no power to do either, because the Dispensary Committee is the authority appointed by Act of Parliament. The appointment of the medical officer is made by the Committee, his salary is regulated, and both must be confirmed by the Guardians and the Poor Law Commissioners.

Mr. O'Donel—No such thing. I am quite satisfied to hang the issue of the whole question on that.

Mr. O'Malley—Dr. Blackwell's salary was reduced by the Dispensary Committee of Balla, and then brought here for approbation of the Guardians. The Act sets out that the Committe of Management shall appoint from time to time, subject to approval, one or more medical officers, with such qualifications as the Commissioners shall determine, and with such salary as the Guardians, subject to the approval of the Commissioners, shall determine, meaning that the appointment, as well as the salary, is settled by the Committee, and then determined by the Guardians and the Commissioners.

Mr. Cannon—Uuless it meets with the approval of the Board you would not trouble the Commissioners with it.

Mr. O'Malley—Certainly not.

Mr. O'Donel asked the Clerk his opinion.

The Clerk—With reference to that, Dr. Roughan was here within the last fortnight, and he asked me was there a notice given by a guardian to increase Dr. Walsh's salary. I said it had been given at the Dispensary. He said the Dispensary Committee had no power but to recommend: that it rested altogether with the guardians to reduce or increase the salaries of the medical officers.

Mr. Nally said the guardians should have been properly notified that the question was to be considered to-day. For his part, the only intimation he received of it was through the press. That he knew another guardian also who got no notice.

The Clerk—I sent it to you, Mr. Nally, and to every other guardian as well.

Mr. Nally—I did not receive it, and I get my letters regularly.

Mr. O'Malley again called attention to their treatment of the Dispensary Committee—that it was being thrown over board altogether.

Mr. Browne—I am very sorry to differ from you in your interpretation of the Act. The way in which I read it is this, that the Committee of management of the Dispensary investigate into the qualifications of the doctor, but the fixing of the salary belongs to the Board, because in the Act it says, "and with such salary as the guardians, with the approval of the Commisioners, shall determine." If there be any doubt upon the matter, the simplest way is to postpone the consideration of this motion to next Board day, and in the meantime obtain the opinion of the Commissioners. As regards the question of affording medical relief I look on it to be totally distinct from pounds, shillings and pence considerations, as entirely concerning the lives and health and wealth of her Majesty's subjects in the district, and no matter how high it may cause the rates to become, I conceive it is our duty to get the best medical man it is possible to obtain, and give such a salary as will bring an educated, well-qualified man to take charge of those people. You all know what I am going to say cannot apply to this country, as I am only a short time amongst you. I have seen the poor neglected, lives lost, and a great deal of cruelty resulting from too great a regard for pounds, shillings and pence. Guardians of the poor ought to be obliged by law to employ properly qualified doctors. You cannot expect £90 a year to be adequate remuneration. He must keep a

horse which will cost 10s. a week, amounting to £25 a year. When appointing a properly qualified man to the district, it is but right that we should give him a fair salary. Now, the doctor in Balla came here on a salary of £120.

The Chairman—£110.

Mr. Nally—£85.

The Clerk, on referring to a book, stated that Dr. Blackwell was appointed Medical Officer of Balla Dispensary District at £110 per annum, on 2nd July, 1863.

Mr. Cannon—At the time of his appointment a dépôt was established in Ballintubber, and that having been since taken from him, it was deemed right to reduce his salary likewise.

Mr. Browne—You must bear in mind that when you bring a medical man here you deprive him of every chance of medical advancement that he would have by going anywhere else.

Mr. Cannon—He would agree with a great deal of what Mr. Browne has said ; but his advice comes too late. Before advertisement issued all this should have been done.

The Chairman—I think we are all entirely too early.

Mr. O'Malley—Let the motion go on now, and the Commissioners will decide whether we are regular or not.

Mr. Nally seconded Mr. O'Malley.

Mr. O'Donnel proposed that the motion be postponed in order to receive the Commissioners' opinion on the Guardians' ability to raise the medical officer's salary.

A poll having been taken, there voted—For postponement, 6 ; against, 4.

Pending the Commissioners' decision, it was agreed to adjourn the further consideration of the notice of motion for a fortnight.

MITCHELSTOWN BOARD OF GUARDIANS.

THE KILDORRERY DISPENSARY QUESTION.

Mr. Therry—This day fortnight a wish was expressed at this board that the Rev. Mr. Riordan should endeavour to ascertain the feeling of the inhabitants of the Kildorrery Dispensary district towards their medical officer. The result is the petition I now hold in my hand, which bears 890 signatures of poor people, expressing their want of confidence in that officer. No pressure by solicitation, threat or otherwise was resorted to by the Rev. Mr. Riordan to obtain these names. I was not present on the occasion when these people were invited to pronounce their sentiments, but from all I can learn, from persons who attended, nothing could be more fairly or impartially conducted than the proceedings. Mr. Riordan told his congregation distinctly that they could express their confidence, or want of it, according as they felt, while, if they preferred it, they were at liberty to withdraw from declaring themselves one way or other. Mr. Therry read the petition as follows :—

To the Chairman and Guardians of the Mitchelstown Union County Cork.—Gentlemen,—We, the undersigned inhabitants, entitled by the Medical Charities Act to Dispensary relief in the Kildorrery district of your Union, beg respectfully to draw your attention to our grievances in our relations with your present medical officer. From the evidence of late investigation at Kildorrery, conducted by Mr. O'Brien, Poor-law Inspector, published in *Cork Examiner* and *Constitution* newspapers, as well as from the general testimony of dispensary patients and from our own painful experience, we are fully satisfied that the treatment of your medical officer has been so unsatisfactory for some years past as to cause your petitioners very serious anxiety regarding his immediate unconditional resignation for this district, or his absolute removal by the Commissioners as a Poor-law officer. We pray that after giving this memorial the benefit of your thoughtful consideration, that you will have it duly recorded on your Board minutes, to be transmitted for like purpose to the Poor-law Commissioners, and your memorialists will ever pray.

[Here follow 890 Signatures.]

Mr. Hennessy—That is strong enough, certainly—there can be no doubt about its meaning.

Mr. Therry—As Poor-law Guardian of that district, I have reasons to believe that the statements set forth in the memorial are perfectly correct (hear, hear).

Mr. Bailey would like to know what means were resorted to for the purpose of getting the petition signed, whether the names appended were all those of persons present at the chapel on the occasion, and whether people were not sent for to sign it, but did so voluntarily.

Mr. Therry—Let Father Riordan explain himself, and you will be satisfied that no undue influence has been used.

Rev. Mr. Riordan said, in accordance with the wish of the Board, expressed at its last meeting, he had drawn the attention of the parishoners to the subject of their treatment of Doctor Rogers for the few years previous, stating that he wished them to declare whether they deemed such treatment satisfactory or the reverse. He told them a difference of opinion existed among the members of the Dispensary Committee on the question, and that he was now anxious to know the opinion of people whose relations with the doctor were direct, and who might be reasonably supposed to know more than any member or members of of the committee. He told them also he had no feeling in the matter except to find what their opinion was, and to convey it to the Board of Guardians, and subsequently to the Commissioners. He stated, further, that there should be no pressure whatever put on them ; that they were at perfect liberty to express their satisfaction or dissatisfaction with him, as they thought proper. Having put the matter in the fairest manner—a guardian of the Board being present on each occasion—he found the result to be something over six hundred names furnished to the memorial from within the parish, the balance of the 890 names being from portions of the Dispensary district outside the parish. Nobody was to sign that memorial who was not sixteen years of age and upwards, thereby giving Dr. Rogers the fullest fair play. That was the course of election he had taken, and he could defy any contradiction, at that Board or elsewhere, as to the truth of the statement he now offered in reference to it (hear, hear).

Mr. Bailey said he had heard something about two little boys being sent round to a potatoe garden in his neighbourhood, and of signatures having been got of men from Kerry, Kinsale, Bantry, and other places. Were the 600 names signed in the chapel ?

Father Riordan said six hundred names were signed in the chapel. There was no ground whatever for any such statement as that which Mr. Bailey alleged had been made.

The chairman and other guardians while allowing that Mr. Bailey's inquiry was perfectly legitimate, and that such a course, if adopted, towards the Doctor would be totally unjustifiable, were satisfied that nothing of the was attempted.

Mr. James Hennessy—I have been hearing this long time the character the people gave of the Doctor. I heard them often say it was a terror to have to go near him. It is a terrible responsibility for any person that would try to keep him if he is not fit for his place.

Mr. Bailey—I have every confidence in him as a medical man.

Mr. Therry proposed, Mr. Magner seconded, and it was resolved (Mr. Bailey dissenting) that the petition from the Kildorrery Dispensary District, presented by the Rev. Mr. Riordan, C.C., bearing 890 signatures of persons entitled to medical relief under the Medical Charities Act, and which is, in our opinion, a faithful expression of their feelings of confidence, with respect to the medical officer of their district, be forwarded by the clerk for the consideration of the Commissioners.

In the foregoing proceedings is embodied the first open and avowed attempt to make the office of Poor-law Medical Officer subservient to religious influences, and we trust

that the Commissioners will have the courage to treat the proceeding as it deserves, and put the petition behind their office fire. Dr. Rogers has been already tried on charges raked up against him by the author of this petition from year to year, and he has been acquitted. He cannot, therefore, again be put upon his trial, and no re-opening of the question ought to be permitted. As for the petition, we would observe, that signatures obtained by such influences, from no one knows who, are only the blotting of good paper. If Dr. Rogers were the most exemplary of officers, and humane of men, the same pressure would secure the same result; and the Commissioners need not, therefore, hesitate in entirely disregarding it.

COOLRAIN DISPENSARY DISTRICT.

TO THE EDITOR OF THE "LEINSTER EXPRESS."

SIR,—Allow me, through the medium af your influential journal, as an individual dispensary medical officer, to express my feeling of sincere gratitude to Mr. Cullen for the very strong case he has made out for the dispensary medical officers of Ireland in his elaborate statistics in your last issue. He has proved to the most superficial mind that they are a most efficient and underpaid body. Mr. Cullen has stated in his letter that there were 775,327 dispensary and visiting tickets issued during last year. Now, Mr. Editor, that speaks volumes. How many of those 775,327 persons who got tickets may not have been fathers or mothers of families (which in Ireland are proverbially large), who, on falling sick, would have been incapacitated from supporting their families, and thus throw a heavy burden on the ratepayers, but for the timely assistance of the much despised dispensary medical officer? Or how many of them might have been valuable farm servants, whose labour their master could not afford to lose during a lengthened illness which might have been warded off by timely medical aid? The farmer well knows in these days of short help that the doctor is a valuable ally.

Mr. Cullen has found out by calculation that the rate of remuneration for each ticket attended is 2s. 1d! How munificent! Such unparalleled liberality! Can Mr. Cullen forget that a great number of the visiting tickets in rural districts represent thirty, fifty, hundred miles, or even more, travelled often in the night, or through rain or snow, to visit all kinds of contagious diseases, of which numbers of the laity are more afraid than of a mad dog? Mr. Cullen seems to writhe under the accusation of running the risk of endangering the efficiency of the staff in his solicitude to save the rates. Now I will ask any impartial man could any gentleman keep a horse and servant and himself, and pay rent, on £60 per annum! If not, he will have to dispense with the horse and servant, and then will he be able to discharge his duty efficiently? I have tried it in my district and found it impracticable. The fact of so few tickets being registered in the Coolrain district proves that sanitary arrangements are attended to, and the extension of disease prevented. I am sure that Mr. Cullen does not intend to insinuate that, in order for a medical officer to have his salary raised, he should make the poor sick. His duty is to keep them well as far as in his power lies. Mr. Cullen further states that the Poor-law Commissioners, guided by thirty years' experience, sanctioned only £60 per annum for the Coolrain doctor, but he seems to forget that the expense of living has increased very materially since that time.—I remain, Sir, your obedient servant,

HENRY R. RUCKLEY, L.R.C.S.I., &c.

P.S.—I hope the medical officer, whose salary Mr. Cullen states to be £5 11s. 4d., has good air in his district, as some gentlemen seem to think a man can live on that pabulum.

TO THE EDITOR OF THE LEINSTER EXPRESS.

SIR,—In your impresssion of the 1st inst., Mr. Cullen, P.L.G., writes in reference to the subject of the proposed increase, to the medical officer of the Coolrain dispensary district, Mountmelick union, and labours to prove that he and his followers on that board were justified in opposing an increase to his salary, mainly because he already received an income as high, and higher in some few instances, than other dispensary medical officers in Ireland (*the special circumstances however of such cases he carefully suppresses*); but Mr. Cullen must first prove "that two wrongs make a right" before he can lead men of enlarged or equitable disinterested views of economy to side with him. His premises are false, his conclusion consequently false, and his views narrow minded. He sets himself up as a champion for the rate-payers, and he supposes reduction of rates is almost the only duty of the guardians of the poor; but I am certain if the ratepayers, even of the division he represents, were fairly canvassed on the subject he writes upon, they would not endorse his niggarly sentiments; and I am equally certain the ratepayers of the Coolrain dispensary district, who have to pay an increase of salary to their medical officer, would cheerfully endorse the recommendation of the local committee and guardians for it; and I do trust also that should the case be fairly and forcibly put again before the Mountmelick board of guardians, there are members enough on that board who will be impelled by a sense of justice to support the Coolrain dispensary committee and guardians in their desire to fairly remunerate their medical officer. I maintain of all the districts in the union Coolrain is the one most requiring a liberal scale of remuneration, because all the doctors located in other districts have large towns or wealthier populations, consequently a larger field to supplement their dispensary salary by private practice. Coolrain district being very mountainous, entails on its medical officer several disadvantages, viz.: the visiting tickets he receives are mostly from parties scattered at considerable distances from Coolrain village over a wide mountain range very inaccessible, and entailing on the doctor the unavoidable expense of the purchase and keep of a horse, vehicle, harness, &c. His chances of private practice are *very small*, therefore he has mainly to depend on his salary as dispensary medical officer for the support of himself, his wife, and children. His case stands somewhat thus at present:—

Salary		£90 0 0	per annum.
House rent and taxes	£25 0 0		do.
Keep of horse, &c.	30 0 0		do.
	——	55 0 0	
Balance left of salary		£35 0 0	

From which he has to provide the necessaries of life, food, clothing, &c. He has also to sink for the time being in purchase of horse, vehicle, harness, and in the furniture of his house, and he his expected to maintain his position as a professional gentleman on such scanty and totally insufficient means—which I maintain no properly educated professional man ought to be expected to struggle to survive upon. I believe, however, the time is not far distant when the ratepayers, the guardians, and the Commissioners will find it is false economy to attempt to degrade the members of an educated, enlightened, and noble profession by treating its members as Mr. Cullen would fain do, viz., not better than second class artisans, and think the law will provide an adequate minimum salary for every poor-law medical officer.

The dispensary medical officers of Mountmelick Union I believe to be an independent body of gentlemen, and not without influence; and I call on them in the name of their Profession to rally round their brother, and use to the utmost their influence to support the laudable exertions of the Coolrain Dispensary Committee and Guardians in their desire to see simple justice done to their medical officer.—Your obedient servant, MEDICUS.

P.S.—Not being a Poor-law medical officer, I feel myself free to express my opinions.

Correspondence.

THE EXAMINATION OF PROSTITUTES.

TO THE EDITOR OF THE IRISH MEDICAL ASSOCIATION JOURNAL.

SIR,—I find it stated at the Social Science Congress, that Mr. Dalrymple, M.P. for Bath, had witnessed the examination of 300 Algerian women in company with several French generals. It will be doubtless interesting to your readers to learn how far such a disgusting, indecent, and brutalising exhibition of poor Arab girls, herded like cattle in the interests of debauchery and instrumentally violated in turn, in the presence of a number of men, has served its avowed end in checking disease. If you will allow me I will therefore quote a few lines from an article in the *Medical Times and Gazette* of Sept. 24th, 1870, in which the returns of venereal disease in the French Army are given. The article in question states that in Algeria the increase of venereal disease has been of a progressive character, and has been doubled since 1862. In 1865 there were 70 per thousand of effective strength suffering from venereal diseases ; in 1866 there were 86 per 1,000 ; in 1867 there were 145 per 1,000 ; in 1868, 309 per 1,000. Of 1,000 sick treated a l'hopital, 179 suffered from venereal diseases ; that is, more than one-sixth of the total number. The number of men non-effective from veneral diseases was equivalent to the loss of the entire army for 3·2 days, and of the men actually present 3·6 days, and each case was on an average thirty days under treatment. The utter failure of the filthy perquisitions of suspected women practised by the French administration is thus demonstrated. The folly of inspecting women for the benefit of soldiers as well as the inefficiency of the inspections of soldiers themselves as at present carried out in the French army, is proved by the fact that the increase was due in a great measure to an influx of fresh troops, and the editor of the *Medical Times and Gazette* very pertinently remarks, "we recognise in the spread of disease, in spite of preventive measures, one of the strongest proofs of the inefficiency of measures of repression under circumstances naturally favourable to the development and spread of venereal disease. In Rome there are no Contagious Diseases Acts, all such measures being very properly denounced by the Papal See ; and I would call your readers' earnest attention to the fact that the amount of venereal disease among the French troops quartered there is actually less than at any other station. Thus we find the relative proportions of venereal patients to the effective strength, and to total sick treated, were, in 1865, 81 and 85 ; 1866, 131 and 54; 1867, 73 and 26 ; and 1868, 20 and 9.

Mr. Donald Dalrymple has studied the working of these infamous laws to little purpose, if he has not learned that they are as futile in a sanitary point of view as they are obscenely cruel and hideously unjust.—I am, Sir, your obedient servant,

A SURGEON OF THIRTY YEARS' PRACTICAL
Oct. 15, 1870. EXPERIENCE.

Cinchona Cultivation.—The cinchona trees are taking well in Jamaica. *Nature* says that experiments on the culture of American tobacco in India are being made by the Maharajah of Burchwan in Midnapore and Cuttack. The last year's experiments with seeds from James River, Virginia, were very successful. The same journal informs us that the Cinchona cultivation has so well succeeded in the English hill settlement at Darjeeling, in the Himalayas, that last year 5,000 lbs. of bark were sent to London from Cinchona trees planted in 1862 on one plantation. Tea produced, in 1869, 1,319,743 lbs. from 10,769 acres of hill land formerly said and reputed to be worthless, and unsuited to give a return to Englishmen. We shall now hear of Indian bark as well as Peruvian, as we know Indian tea to hold its own against Chinese.

Baby Farming.—At a preliminary meeting held on Friday last, it was resolved to establish a society, to be called the "Infant Life Protection Society," having for its first object the introduction of a Bill into Parliament for the registration and supervision of nurses who receive children of others into their homes, and of the children entrusted to their care. The next meeting of this new society will be held on Tuesday, November 1st, at 3 p.m., at the rooms of the "National Association for the Promotion of Social Science," 1 Adam street, Adelphi, and all those interested in the subject are invited to attend.

Romford Sewage.—On Saturday a deputation from the Metropolitan Board of Works, accompanied by a number of scientific men, paid a visit to the farm of Mr. W. Hope, at Hornchurch, near Romford, in Essex, to witness his method of applying sewage to the cultivation of the crops.

The Preservation of Meat.—The subject for discussion at the Metropolitan Association of Medical Officers of Health last Saturday night, was the preservation of meat. Specimens of home and colonial manufacture were placed upon the table and examined by many present with much interest.

Testimonial to Dr. Dudfield.—We have much pleasure in announcing that a subscription has been entered upon in order to present Dr. Dudfield with a testimonial on his resigning the office of Hon. Secretary to the Poor-law Medical Officer's Association, which office he has discharged for four years, with the greatest zeal, tact, and ability, and thus contributed in no small degree to the success of the association. Mr. Benson Baker, 42 Grove Road, Regents Park, N.W., has consented to be treasurer to the "Dudfield Testimonial Committee," and will receive subscriptions. The labours of Dr. Dudfield in the cause of Poor-law Reform, have been very great—perhaps greater than those of anyone living, and we are glad that his modest work is about to be recognised.

Cambridge University.—The following appointments were made in the Medical Department, on Thursday last "That on the nomination of the Board of Medical Studies, C. Trotter, M.A., of Trinity College ; and T. W. Danby, M.A., of Downing College, be appointed Examiners for the first M.B. Examination during the ensuing year. That W. H. Drosier, M.D., and Mr. John Wood, F.R.C.S., be appointed Examiners for the second M.B. Examination during the ensuing year. That G. E. Paget, M.D., and E. Liveing, M.D., be appointed Examiners for the third M.B. Examination during the ensuing year. That Mr. Savory, F.R.S and F.R.C.S., and C. Lestourgeon, M.A., F.R.C.S., of Trinity College, be appointed Examiners for the degree of Masters in Surgery during the ensuing year. That A. W. B. W. Barclay, M.D. be appointed Assessor to the Regius Professor of Physic during the ensuing year."

Insurance against Accidents.—A new company has just been started, called The Carriage Accident Insurance Company, Limited, at St. Michael's House, Cornhill, for the purpose of granting insurances against accidents to carriages and all private vehicles against damage caused by accident of every description. As the number of accidents occuring daily is very considerable in all large towns, doubtless many of our readers will think it worth while to cover the risk against their brougham, by means of this new phase of insurance.

MISTAKEN ECONOMY IN THE FRENCH MEDICAL SERVICE.—The next great evil complained of is the mistaken economy used towards the Medical Service. The deficiency of officers is severely felt. The whole Corps de Santé numbered only 1,053, in 1868, for a strength of about 500,000. In the Crimean war, in May 1855, there was only 78 Medical Officers attached to the field and rear hospitals, for a force of 108,000 men ; or ·72 per 1,000 of strength, In the Italian war, the number was ·82 per 1,000. In the hospitals at Constantinople, each French surgeon had to attend about 300 patients daily ; while the English had to attend each only about a third of that number. It is during war that this want becomes so deplorable ; as in our short but bloody modern wars, as many as 10,000 to 20,000 men may be brought into the hospitals in a few days.

Printed and Published for the Proprietor, at the Office of the "Medical Press and Circular," 6 D'Olier street, Dublin.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 26, 1870.

CONTENTS.

Original Communications.

ON BABY-FARMING.*

By Thompson Dickson, M.A., M.B. Cantab.

In entering upon the subject of baby-farming this evening, I feel that no apology is needed for its introduction. Marvellous as the fact is, we live on in a sort of apathy, and though revolting dramas may be playing under our very eyes, we heed not the performance until some enormous catastrophe startles us out of our reverie. Even then too often we again relapse speedily into indifferentism, resume our enervate habit of seeing and not observing, and perhaps continue for ever afterwards in a sort of happy somnolence, forgetful altogether that the scene has been acted at all, still less acted upon the stage of daily life; and unless a second catastrophe should again rouse us to consciousness, we rather prefer the repose of oblivion. Even after many warnings it is rare for us, without a crowning disaster, to take action, or to attempt the enaction of laws which may sweep abominations out of the arena of our social systems altogether.

This representation indicates exactly our position in regard to the subject we are about to review; and, though we are perfectly cognisant of the fact, yet our minds seem closed to the truth that we are living in an age in which the mother has forgotten her sucking child, and has ceased to compassionate the son of her womb. She has abandoned her offspring to the mercy of the stranger, and the little ones have become the prey of worse than vampires.

When Gulliver described the baby-farming of Lilliput, he could hardly have imagined that such a business existed in England. The farms of the ideal Lilliputians were regulated by excellent laws; it is a pity that the actual farms of our own country are not under as good an administration.

We seem to have forgotten the case of Charlotte Windsor, and the story told by the child Harold McDonald of his foster-mother, Jagger, and her "Dop o' din in a dottle." We seem also to have forgotten the scathing articles in which the *Pall Mall Gazette* contrasted the highly moral tone of precept and the demoralizing tendency of the practice of some of our daily newspapers, which lent their advertising columns to proprietors of apartments furnished for ladies, with piano on drawing-room floor, nurse recommended by physicians, baby linen and other requisites found—others with all medical attendance provided, and some even with the audacious announcement that the child can be either nursed or adopted.

At the time that an old "hag" made some incautious statements to the Commissioners appointed by the managers of the *British Medical Journal* to institute inquiries, general attention was aroused. A knowledge of the fact that a deeply-rooted evil was living and growing like a vigorous upas in our midst spread, and a general outcry was raised, to be, alas! but too soon hushed by whispers that fed the fire and supported the life of the system; and unless society had been convulsed, and that nondescript something, the appendage of polite society called morality, had been shaken to its very foundations by the horrible revelations of the Brixton case the practices of baby-farming and baby-murder might have gone on undisturbed. Even the Brixton case has already become history, and there is a danger lest we become careless of the fact that a systematized traffic in infant life is going on.

* Read before the Dialectical Society.

The subject, however, is still in every one's mind, and the necessity of legislation generally felt; and if we can but now fan the smouldering embers into a flame, we may succeed in initiating a better condition of things.

Although there can be no doubt that there are numbers of women after the type of "the old original," "the jokelar person," who "says funny things and cheers 'em up," whose houses are but charnel-houses, and whose doorways but the mouths of the sepulchres, ever open to engulf the helpless dependent and confiding nursling; women whose profession is more properly defined as that of the murderer than the nurse; yet there is another side to the picture, and it is not impossible that in some lights parts of that picture may even appear beautiful. Regard, for instance, the foster-mother of the helpless infant orphan whom she fondles with tenderest solicitude and care; she is nevertheless a baby-farmer. Such baby-farmers often cultivate their charges with earnest devotion, and conscientiously fulfil the duty which it has fallen to their share to perform. Among these, however, there is often heartless neglect, avarice and love of gain being too often the incentive to pitiless deprivations and merciless cruelty. Again, we have another view of the picture in those nurseries in the manufacturing districts which are absolute necessities, and which go far to elevate baby-farming into the position of a self-made institution that cannot be pulled down, and therefore the more demanding that we should so deal with it that we may secure to each member of the commonwealth his due share of protection.

There is another class still, though one regarding which it is not easy to obtain statistical information. It happens, however, that among the upper grades of society, and from an endless variety of causes, a large number of children are put out to nurse. And since the nurselings are not free-will agents, but under the control of those deriving profit from their care, they seem at least entitled to state supervision.

Our subject naturally divides itself into two divisions, the one which is baby-farming in the strict sense of the term, the other that in which the term baby-farmer is but a synonym for baby-murderer.

In the five years 1863 to 1867, the Registrar-General recorded in England and Wales 578,394 deaths of infants under one year of life, and the majority of these only survived their birth a very short time. What proportion of these died from neglect, whether criminal or the result of absolutely uncontrollable circumstances it is impossible to say. Comparing the number with the total of living births of the same period, viz., 3,730,613, we have an average of 15·5 per cent. of infant deaths, which it has been estimated from the statistics of the Society of Friends, taking their returns as the nearest approach to a normal standard, that 11·1 per cent. would far more nearly represent the average infant death-rate under one year if criminality, ignorance, and carelessness be excluded. It is hardly necessary to show that the proportion of deaths of illegitimate children is vastly in excess of the legitimate.

Dr. Lankester, in his sixth annual report, says that he finds in his district that the inquests held upon illegitimate are equal to nearly a half of those upon legitimate children; and when it is remembered that only one child in seventeen is born illegitimate, it will be seen how large a proportion die under circumstances that demand an inquiry.

Mr. Acton, who has studied the subject with the greatest care, has given figures which correspond with those of Dr. Lankester. The former states that in the year 1867 there were 1,153 inquests upon illegitimate children, aged one year and under, against 2,960 inquests held upon legitimate children of like age, so that though the proportion of legitimate to illegitimate children exceeds 16 to 1, the number of inquests upon the former are a little more than double the number of those held upon the latter.

These figures, if they show nothing else, at least indicate that of the children who die under suspicious circumstances, the illegitimate bear to the legitimate a ratio of eight to one.

Dr. Tyler Smith, in a most able address on infanticide and excessive infant mortality, delivered in 1866 at the annual meeting of the Harveian Society, stated that in the year 1864, 47,440 illegitimate children were born in England, the total of births being 740,245, or a proportion of 6·4 per cent., and that the ratio of increase of illegitimate births to increase of population was as one-half to one-third.

It is not easy to arrive at a very accurate estimate of the death-rate of illegitimate children in England on account of the faulty registration. The returns show percentages of from 46 to 96; but judging from the returns of foundling institutions in France, in which the mortality percentages range from 60 to 90, we may conclude that 96 rather than 46 per cent. is nearer the average of our own death-rate; and Dr. Tyler Smith attributed to illegitimacy the cause of a large proportion of the infanticide which formed such a lamentable page in our national annals. And he remarked that the birth of what is called an illegitimate child is held to be a disgrace, especially to the mother. The responsibility of the maintenance of such a child is imperfectly defined; for the most part, if reared at all, it is reared in poverty, without participation in the ties and safeguards of home or family, and therefore it is not to be wondered at if illegitimates fail to reach maturity. From Dr. Tyler Smith's statistics domestic servants form the largest class among whom infanticide is practised, and the inducements of women of this class to conceal and destroy their offspring are certainly very great.

The workhouse treatment of unmarried mothers is tyrannical, and the women shrink from the union shelter; or if they avail themselves of it during their confinement, they are forced to take the infant away with them when they leave the big house. If a mother succeeds in getting an engagement as a wet nurse, her infant must be placed under the care of a dry nurse, when from want of natural food, inexperience, and improper management on the part of the nurse, and often, too, from neglect, it usually dies. The humber of infants brought to the workhouse as foundlings mostly all die also.

In London a large number of perfectly respectable and honest persons endeavour to add to a scanty and precarious income by undertaking the charge of

"nurse-children," and not infrequently fulfil their duty with a careful attention amounting often even to tenderness. Nor would it be a happy day for London and many other parts of England should such a system be done away with. Numbers and numbers of children daily stand in need of foster parents, and the causes which give rise to this need are almost innumerable. Vast numbers are illegitimate, and the necessity imposed upon the mother of supporting entirely by her own exertions both herself and her child, renders imperative that demand for nurses and nurseries which we have seen has lately been made the cloak and cover for crime.

The constant demand in our manufacturing districts for female and child labour, and the too lamentable poverty produced by wretched customs, such as the "truck system," compelling women in those districts constantly to work, necessitates the consignment of all the babies and the children not fitted for factory employment to the care of nurses, who are, as a rule, old women who have passed the age of serviceable factory hands, and who during the day, and often during the night as well, take charge of a number, sometimes a large number, of children, the elder of whom assist in keeping the younger quiet.

The standard of morality among the factory hands is proverbially low, and great numbers of illegitimate children are born amongst them; but whether legitimate or illegitimate, the necessity of the mother to continue her service in the factory is almost equally the same, and the nurses or baby-farmers are in requisition alike for both classes of children.

The inducements to infanticide among the factory girls are not nearly so great as among domestic servants. The factory girl requires only the character of a skilful manipulator, and sometimes not even that, and as the child's labour will after a few years be productive, their first engagement being to assist the old woman to take care of the babies, some sort of effort is made to preserve their lives; but, notwithstanding this fact, great numbers die. Nor is it to be wondered at, when they are deprived, to a greater or less extent, of their natural food, while that administered to them is, as a rule, wholly, or almost wholly unfitted for them, added to which the practice of the administration of narcotics—usually Godfrey's cordial or laudanum—to the fractious, is continually followed, not with any mal-intent, but often with honesty of purpose, both nurse and mother being fully persuaded that these abominable poisons are harmless, the nurse using them in the day to lull noise, which would otherwise convert the nursery into a Babel, the mother giving the dose at night to ensure her own rest, so that she may be fitted for her work in the factory on the morrow.

There can be but little doubt that much might be done by manufacturers themselves, in mitigation of the evils that exist, could a little more of that spirit called Christianity but actuate them. By affording the mothers more time to feed their children, and teaching them that the cultivation of domestic comforts is the surest way of rendering their lives happy, their labours more profitable, and their earnings more sufficient. Not only would some of the worst results of the present state be saved, but manufacturers would themselves reap a benefit by reason of the universality of accuracy in their hands resulting from the general improvement to their tone.

I have certainly no sympathy for that inhuman class of women who are too selfish to bestow upon their offspring those maternal duties which nature has prescribed. It is beyond all question, however, that many women in the higher walks of life prefer the enjoyments and luxuries of society to the performance of their maternal duties, and therefore they hand over the care of their little ones to the hireling; for those nurses and nurslings will continue to be in demand, and for members of the same classes of society. Also, those disgraceful advertisements I have mentioned were intended.

Running from the highest to the lowest of the monied classes, a demand for nurses and nurseries will continue, and homes will still be open for the reception of infants, whose parents desire never to hear of them again, and who are ready to pay any compensation for the child's adoption. I believe it to be impossible for any law to wipe out this state of things altogether, and as this is just the case where the greatest inducements for criminality are combined, it is the condition imperatively demanding the recognition of the state.

Under present circumstances, we detect one case while the many are left alone; and, on account of the supineness of our Legislature, we allow thousands to suffer, comforting ourselves with the mental promise that we will punish the offenders if we find them out.

In 1866, the Harveian Society appointed a Committee to inquire into the subject of infanticide, and the materials collected by that Committee were most valuable. Their labours were supplemented by an investigation, undertaken for publishing in the *British Medical Journal*, and the result of these inquiries combined was, that on the 12th March, 1868, Mr. Van der Ryl asked the Secretary of State for the Home Department whether his attention had been called to the statements in the *British Medical Journal* concerning the criminal practices connected with the system of baby-farming in the Metropolis; and whether he intended to put the law in motion to suppress such practices; and whether he would lay upon the table all letters and documents relating to infanticide and illegitimate children received at the Home Office during the years 1866 and 1867. Mr. Gathorne Hardy replied that in respect to the second part of the question, he was informed that there were not in the office any documents such as those described. He had read the statements in the *British Medical Journal*, but his attention had not otherwise been called to them. He had no hesitation in saying that, if true, they reflected great disgrace on any nation in respect to which they were made. At the same time, he must observe that the offences charged were crimes within the law; and it was no part of the Home Secretary's duty to act the part of public prosecutor. The attention of the public had been directed to the subject since the publication of those articles; but it was obviously very difficult, if not impossible, to get evidence of the transactions described in the *British Medical Journal* which would be available in a Court of Justice.

Again, in July of the same year, the Earl of Shaftesbury asked the question of the President of the Privy Council, in the House of Lords, whether the attention of the Government had been directed to the system of baby-farming; and, if so, whether they intended to institute any inquiry into the subsubject. The Duke of Marlborough replied that the matter was rather one for police than sanitary investigation. Measures might be adopted for putting an end to so inhuman a practice either by registering the houses of persons taking these children to nurse, or by a system of licensing, combined with periodical inspection by properly qualified officers. Government would turn their attention to the question during the recess, and he hoped that they would be able to discover means which, embodied in a Bill, would obviate the dangerous abuses to which attention had been directed.

Before Parliament met again, however, a new Ministry occupied the Cabinet, and nothing more was heard of baby-farming until the famous Brixton case forced upon us once more the fact that the business flourished, and, under the cloak of the system, the grossest crimes might be committed. How widespread the evil is may be estimated from a perusal of a letter, signed "A. B.," published in the *Times* on the 14th of July last.

The present condition of our law, without doubt, is the reason of the existence of so many of our social troubles; and the disinclination on the part of our law-givers to admit any principle, which they term foreign to the spirit of British Jurisprudence, is exceedingly great. The actual condition of many of our laws permits the doing of wrong; and, like the law of the Spartans, considers no sin to be a sin until it is found out.

The sentence of death passed upon Margaret Waters will not act as a deterrent to others as might fondly have been hoped. Baby-farming and baby-murder will go on as heretofore, with one or two slight variations in the present system; the first will be that baby-farmers will raise their prices, having learnt by the late trials that they are running greater risks than they formerly imagined they did; they will demand such sums as they think will equipoise the risk. A parallel occurred in the instance when some of the most devoted of those "immaculate" bodies, the London Vestries, with a sort of laudable activity, attempted to sweep out prostitution by indicting the keepers, of what they termed "houses of ill-fame," for nuisances. The immediate consequence of which was to drive a number of the bawds into other houses, where they recommenced business at increased charges, while deficiencies in accommodation were made up by certain hotels which immediately became brothels.

The second effect of the sentence passed on Margaret Waters has already begun to show itself in the increase of infanticide. Unfortunate mothers are, and will be, unable to pay the advanced prices of the baby-farmers, and so will be themselves the murderers. We have good evidence of this from the fact that some days since Dr. Lankester held no less than four inquests upon infants in one day.

In his eloquent Inaugural Address to the members of the Social Science Congress, at Newcastle-upon-Tyne, the Duke of Northumberland, adverting to permissive legislation, characterized it as a species of legislation anything but desirable, indicating at once a want of conviction and courage on the part of the law-giver, and inviting neglect of the intentions of the Legislature in deference to local prejudices.

It is a questionable sort of legislation, at best, that allows harm that good may come of it; and to allow a gross evil to live and flourish, in its own grossness, in order that an occasional prosecution may crop up by reason of some advertising growth, is monstrous. The spirit of the English law is only to step in when actual harm is shown; but it is, to say the least, a very imperfect law. When one instance of cruelty to an infant sufferer is shown, thousands of innocents are undergoing the same sentence. There was a time when the lunatic community were regarded in very much the same light. If they became troublesome and burdensome to their friends, they were handed over to the care and tender mercies of strangers, by whom they were maltreated, until at last their cry was heard, and the Legislature recognized the necessity of asylums, and passed permissive laws legalising such institutions, but requiring that they should all be registered and under supervision; and also that every person detained as a lunatic should be registered and visited by commissioners appointed for the purpose. However imperfect the existing Lunacy laws may be, and I, for my own part, am convinced that they are highly defective, yet they have worked a vast amount of good, and have, at least, saved many thousands from the ruthless torture with which the aliens used to be visited,

If our Legislature were once for all to recognize the necessity for baby-farms—I will call them nurseries—and require that they should be licensed, granting a licence only to those who could show themselves, by their respectability, entitled thereto, and subjecting all such nurseries to more or less frequent visits from commissioners, invested with a sufficient amount of power to deal summarily with all abuses, we might supply a present need, and at the same time wipe out one of the greatest blots upon our boasted civilization.

It has been suggested that the establishment of more foundling hospitals would meet the difficulty, provided that in these institutions were embraced the principles of some of the French foundling institutions. But, surely, the evils of the French system are not counterbalanced by the good derived from its adoption, since it has been shown that the mortality in these hospitals, as I have already mentioned, is 90 per cent.

Dr. Tyler stated that hospitals on the plan of that of the Enfans Trouvés, of Paris, tend to encourage—

1. Illicit connexion.
2. An increase of illegitimate births.
3. The abandonment of illegitimate children by mothers who could afford to rear them.
4. The abandonment of children born in wedlock by parents not desirous of large families.

In the last century, some years after the establishment of the Foundling Hospital in Great Coram street, that charity was, on the responsibility of Parliament, thrown open to indiscriminate admission.

In the first year, the number received was 3,296 ; in the second, 4,085 ; in the third, 4,229 ; and during less than two months of the fourth year, 3,324 infants were admitted.

After this time the system of indiscriminate admission was abolished. But in the short period referred to no less than 14,934 infants were, in this Metropolis, cast upon the protection and charity of the public.

By the present mode of admission into the Foundling Hospital, mothers are requested to make personal application. The father of the child must be dead, unknown, or not to be found. The children are put out to nurse in colonies in the country, and a premium is given to the nurses for rearing them up to a certain age.

The system is a good one, but its value and success lies in the registration and supervision associated with it. And if what has been done by the Foundling Hospital on a small scale was carried out in principle universally and by the State—viz., in detail, a registration of all births, and a registration and supervision of all the women who took nurslings into their houses—especial attention being paid to the food upon which infants so placed are fed, and sufficient authority being exercised to ensure and enforce proper care and attention, we should soon have an end to the gross inhumanity which so shocks us that we almost shrink from reflecting upon it. I will mention one means by which baby murder may be lessened is by the breaking down of some of the unreasoning and stern verdicts of society. I hold it to be a disgrace to our civilization, and to our boasted Christianity, to point the finger of scorn upon the poor girl whose only fault, after all, perhaps, is that she is human, and that she was not constituted of such frigid stuff that she could congeal into stone, and resent the soft behests and imploring tones of perhaps a practised seducer ; the poor girls are not altogether bad, and that they should be outcast and despised for an error is, I repeat, a disgrace to our civilization and our boasted Christianity.

In suggesting the necessity of the concession of society, I am not propounding an impossible proposition. In the sister kingdom, Scotland, where illegitimacy is so common, that the number of such births registered in the year often exceeds the number of legitimate, there is neither the vituperation of society nor the hatred of the family brought to bear upon the girl. It is true that she is usually summoned to attend the kirk session, where she is admonished by the minister and elders, after which she returns to her home, and her offspring is brought up in the midst of her brothers and sisters as a member of the family. So common is this state of things that nobody is ever shocked at it. But to the best of my knowledge infanticide as a common practice in Scotland is unknown. A valuable provision of the Scotch law is the legitimation of all bastards by the marriage of the parents. But the most valuable provision of all afforded by the Scotch law is the facility of marriage. If the father of the child has made any promise of marriage to the girl, she can claim him as her husband, and the marriage stands as a legal marriage in all the Scotch courts of law. And in this is the salvation of thousands of girls. And so perfectly aware of the provisions of the law are all classes in Scotland, that the case rarely comes to trial. The youth accepts the fact that he has a wife, and without any further question causes the marriage to be registered.

I cannot but conceive that a similar facility in England, instead of revolutionizing society, would purge English society of that maudlin sentimentality which is the prolific parent of that concealment that fosters crime. It is true that we should, perhaps, bring about some strange mixtures in families, but any reflections which might result as a consequence would be cast upon the proper persons, or the male members of the community, who now, as a rule, escape and are held harmless, while upon the poor girl falls the scorn of the world, perhaps the remorse of conscience, and the crowning misery of the necessity of providing for herself and her infant under overwhelming disadvantages. Can it be wondered at that in the slough of despair the mother should be tempted sometimes to lay violent hands upon her child ?

And now, Sir, in conclusion, I must apologise for the shortcomings of this paper. I desire to lay no claim to any merit in the manner of dealing with the subject. I have endeavoured to touch upon as many points as possible, my object having been that of opening discussion, not closing it. The compilation of this paper has given me much pleasure. I thank you, ladies and gentlemen, for your kindness in listening to it ; and as out of a multitude of counsellors there is wisdom, I now hand over the matter to you, with one hope—viz., that out of your deliberations upon it may come some action which shall lead to a solid and a permanent good.

ON DISEASES OF THE SKIN.

By J. L. Milton,
Surgeon to St. John's Hospital.

Continued.

Eczema—*Definition.*—An eruption of low, flattened, red papules, generally very small, often assuming the form of a general congestion, as in pityriasis rubra, or of limited congestion, as in tinea circinata ; the papules sometimes few and scattered, at others numerous and confluent ; followed by death and shedding of the cuticle, infiltration of the cutis, discharge of serum, sometimes puriform, and formation of crusts. In some cases vesicles, ill-formed bullæ or pustules may complicate the disease, especially at the outset ; accompanied by great itching ; health generally somewhat disturbed.

Pathology.—Up to a very recent period, eczema was classed, with scarcely a dissenting voice, among the vesicular diseases.* When in a paper, read some years

* "It is characterized in its commencement by an eruption of very minute vesicles."—Rayer, "Diseases of the Skin," 1835, p. 282. "It is characterized by an eruption of numerous minute transparent vesicles." —Neligan, "Diseases of the Skin," 1852, p. 70. "An eruption of minute vesicles."—Copland, "Dictionary of Practical Medicine," Vol. I., p. 547. "An eruption of minute acuminated vesicles."—Good, "Study of Medicine," Vol V., p. 620. "An eruption of small vesicles." —Burgess, "Manual of Disorders of the Skin," 1854, p. 96. "Caractérisé par des vésicules ordinairement petites."—Cazenave et Schedel, "Abrégé pratique," 1838, p. 90. "Une inflammation de la peau caractérisé par une éruption de vésicules ordinairement aplaties."—Cazenave, "Leçons sur les Maladies de la Peau," 1856. "Les vésicules sont la lesion elementaire habituelle de l'eczema."—Hardy, "Leçons sur les Maladies de la Peau," p. 3. "Charactérisé par le développement d'une éruption de vésicules."—Bazin, "Leçons théoriques et cliniques," 1860.

ago at the Medico-Chirurgical Society, I opposed this view not a single writer, so far as I could learn, with the exception of M. Devergie and Mr. Erasmus Wilson, had ever expressed a doubt as to the propriety of this arrangement, and even these two authors had not gone so far as to abandon the old classification. M. Devergie at this time seems to be struggling against the conviction forced on him by his own observations. In 1857, after saying* that "if eczema be a vesicular disease by virtue of its morbid element, *the development of the vesicles is only momentary*, and appears at the commencement of the attack simply to disappear again in a few hours;" he, in other respects leaves the classification where he found it. What M. Devergie really means by eczema being *vesicular by virtue of its morbid element*, I am quite at a loss to comprehend; but, as the fleeting nature of the vesicles is so fully acknowledged, we need scarcely be surprised to find him stating directly after, that *it is very rarely the physician can see them* (the vesicles), and that their covering is so thin *that they can only be made out by the reflection of sunlight (!)* a very difficult kind of vesicle, I should say, for anyone to find. Yet, a little further on, apparently mistrusting his own words, we find M. Devergie describing eczema as a punctiform, reddened state of the skin, discharging serum abundantly—a view which approximates much more closely to the real state of matters in this respect. Mr. Hunt, too, at the very time he was classifying eczema as a vesicular disease, got very near the true facts of the matter, in one instance at any rate. He says,† in speaking of the symptoms of a case of this affection, "the vesicular character was not distinctly seen, *the original eruption presenting rather the character of papulæ, containing no visible fluid.*"

In the discussion which followed the reading of the paper alluded to, the view I had taken up, namely, that eczema is really not a vesicular disease, was opposed very decidedly, and I need scarcely say that it would be opposed now by many writers. Hebra, McCall Anderson, and others, however, distinctly admit what I then contended for, viz., that the elementary lesion of eczema is not necessarily a vesicle; but, on the other hand, they go farther, and assert that it may be an erythema, a vesicle, a papule, or a pustule—a view which will, beyond all doubt, be ultimately adopted, but which, to my thinking, requires considerable modification.

This change of opinion seems, so far as I can make out, to be entirely attributed to the great influence exerted by Hebra. Not long ago, Dr. Hugenberger, in a paper published in the *St. Petersburgher Medicin Zeitschrift*, and of which a condensed account was given in the *Quarterly Journal of Cutaneous Medicine*,‡ treated the question as if no person but Hebra had ever touched upon the subject. But I believe Hebra first published his views on the nature of eczema in December, 1862, in the *Wiener Medizinische Wochenschrift;* whereas, the paper I speak of, in which eczema was defined as an inflammation of the skin, followed by death and throwing off of the cuticle and discharge of serum, and in which I expressly denied its vesicular nature and described pityriasis and tinea circinata as capable of passing into decided eczema, was read before the Medico-Chirurgical Society in 1860 and 1861, and a translation of it appeared as early as May 1861, or nearly a year and a half prior to the appearance of Hebra's first communication on the subject, in the very journal in which he first made known his views. I speak under correction—M. Hebra may have anticipated me, but I can only judge from those dates I have been able to obtain access to.

Mr. Erasmus Wilson recognizes six essential varieties of eczema:—1. The erythematous; 2. The papular; 3. The vesicular; 4. The ichorous; 5. The pustular; 6. The squamous. The arrangement seems to be essentially faulty. The erythematous is simply a variety of the papular form; the diffused redness arising from the coalescence of a mass of papulæ, is only a degree of the other, and is a different state altogether from genuine erythema. True eczema is not vesicular; the vesicle, as I hope to show, is an accident, a complication, as is the pustule, while the squamous and ichorous forms depend for their existence on conditions incident to the mature state—not the origin—of the complaint, and as such should have been separated at the very outset—unless, indeed, under squamous Mr. Wilson comprehends those cases in which a dry squamous state precedes, or even takes the place of, the watery stage, as for instance cases of eczema siccum of the hands, feet, and ankles.

Hebra* divides eczema into five kinds:—1. Eczema squamousum or pityriasis nigra—a complaint so rare in this country that I have not seen an instance of it in more than sixteen thousand cases of skin disease; 2. Eczema papulosum or lichen eczematodes; 3. Eczema vesiculosum or solare; 4. Eczema rubrum or madidans; 5. Eczema impetiginosum or impetiginoid eczema. He does not class eczema as a vesicular disease; but, on the contrary, ranges it with prurigo; he does not, however, reject the vesicular form, for he not only admits eczema solare, but says†—"While in one case the eruption of vesicles forms the starting point of the eczematous symptoms, we, in another case, see red scaly spots first of all." In other words, he recognizes the vesicle as a necessary lesion in one variety.

I cannot say that this arrangement is, to my thinking, satisfactory. The form of eczema which Hebra considers essentially vesicular, eczema solare, is simply a form of true herpes and totally distinct from eczema. He only allows forty-eight hours for the existence of the vesicles of acute eczema, whereas the true vesicle endures a much longer course; eczema solare, for instance, undoubtedly lasts beyond this time. Again, he maintains that eczema is still the same complaint, whether it appears under the form of vesicles or papules, and this view he upholds on the ground that an artificial eczema—as, for instance, one produced by rubbing in croton oil—will appear in the form of both papules and vesicles, according to the part it is rubbed into, a view which some writers have adopted without appearing to have examined it in any way. But with all possible deference I submit that it is faulty, for it is as certain as any fact can be that the papular form of eczema will appear on the very places where we at times see undoubted eruptions of vesicles; for I need scarcely say that both are occasionally found on nearly every part of the frame. It seems, therefore, clear that there must be a fundamental, essential difference between the process which brings forth the papule and that which generates the vesicle, and that difference in the eruption is not due merely to difference of site. There is another point on which I must also differ from Hebra. He looks upon the infiltration of the skin and the itching as "*the disease*," a view in which he is backed up by Dr. McCall Anderson, who seems‡ to have almost literally adopted his tenets. I consider the essential feature of eczema, the test of its nature, to be a chronic weeping surface, which I have never yet seen called into being by an eruption of true vesicles or pustules.

It simply requires that surgeons should judge for themselves to be convinced that true eczema is not vesicular at any period of its course. It was not without considerable diffidence that I first hazarded this statement, standing, as I then thought I stood, quite alone in this view. Having, however, suffered from this complaint, I had on numerous occasions watched the development of the morbid process hour by hour from the very beginning, and had long before satisfied myself that there was no real foundation for the view so generally entertained. Being unwilling, however, to rely exclusively on the evidence afforded by my own

* "Maladies de la Peau," p. 231.

† "A Guide to the Treatment of Diseases of the Skin," 1857, p. 168.

‡ Vol. II., p. 204.

* "Handbuch der speciellen Pathologie und Therapie, Dritter Band, Dritte Lieferung," S. 337.

† *Ibid.*, S. 337.

‡ *Medical Times*, 1863, Vol. I., p. 472.

case, I examined with a good lens a great many patients of all ages, and wrote down the observations just as they were made; but I looked in vain for the vesicles of eczema. I found, it is true, vesicles enough, but none which passed into a weeping surface. Again, on reading a paper in the *Medico-Chirurgical Review*, in which the old doctrine was upheld, I repeated these observations with all the care I could fancy necessary, but the result was the same, possibly the reader may say because I wished it to be so. Some circumstances were, however, noticed which probably contribute to support the view so generally taught.

(To be continued.)

CASES OF PYELITIS AND RENAL ABSCESS.

By John Thorowgood, M.D. Lond.,

Senior Assistant-Physician to the Hospital for Diseases of the Chest, Victoria Park.

Pyelitis, or inflammation of the pelvis of the kidney, when it has existed for some time, and is probably associated with some calculous formation in the kidney, is apt to lead to ulceration through the mucous membrane, and suppurative action being thus set up in the renal substance itself a true renal abscess forms, which may open in various ways, and gradually wear out and destroy the patient. This fatal result is illustrated in the two first of the following cases which have fallen under the author's notice. In the two second cases the pyelitis was simple, and the patients both seem to have done well, as no renal abscess seemed to form in either case.

Case I.—Miss H., æt. thirty-five, almost crippled with rheumatoid arthritis in the joints, was seen by me some years ago, and presented the following symptoms:—Face clear and flushed, is decidedly hysterical, and complains much of pain in region of sacrum. She has prolapse of the rectum, and a certain degree of uterine displacement makes micturition difficult and painful. With the urine is passed much pus, also from the bowels, the vagina, and by vomiting. She declares she has been in the habit of discharging pus in this way for some years, and various opinions have been given as to the source of these purulent discharges. She has cough and expectoration, but never had any hæmoptysis.

On examining the abdomen, attention is drawn to a prominence in the left hypochondrium. Passing round behind a flaccid bulging tumour is felt, which varies in size at different dates of observation.

I considered the case to be a cystic tumour of the left kidney, with abscess opening into stomach and intestine.

In four months she died of exhaustion and constant vomiting. The *post-mortem* examination, for the notes of which I am indebted to Dr. Dryland, showed some adhesions at base of left lung, and patches of tubercle also. In the apex of right lung, a small deposit of tubercle was found; heart healthy, liver much enlarged, extending over the left side; the colon lay between the ribs and the enlarged liver, a fact that explained the existence of a tympanitic space during life abruptly bounded by perfect dulness. In Dr. Ballard's book on the "Diagnosis of Diseases of the Abdomen," this occasional position of the colon is specially alluded to as important to bear in mind.

A very large cyst projected from the upper part of the left kidney, containing much pus. The ureter on this side, all the way down to the bladder, was as large as a finger, and full of pus. Bladder large and distended with purulent urine. The cyst communicated with the intestine, but not with the stomach, so far as could be made out. No calculi were found in bladder or kidney. The early history of this case was never clearly noted down, but the absence of calculi, and apparently of any distinct occlusion of the ureter is remarkable. The other kidney appears not to have presented anything remarkable.

Case II.—A gentleman, æt. thirty-nine, was brought to me by Dr. Lawrence, of Wandsworth, in November, 1868, in consequence of his frequently passing blood in his urine. The blood comes after the urine has passed, and it is now twelve months since it first appeared. There is no œdema; pulse 100; appetite bad; at times vomiting.

Lumbar pain, fulness and tenderness, exist on the right side; over the bladder there is very little tenderness.

The urine is acid; sp. g., 1,020, highly charged with very white albumen, and full of pus and blood corpuscles when seen by microscope.

The hæmorrhage was considered to be of renal origin, and the right kidney to be in a state of degeneration. For some time previous to death the urine was clear and free from pus.

In February this gentleman died. The *post mortem* examination was made by Mr. Bryant, who had also seen him during life, and the right kidney was found to be a sac full of pus, the ureter also full of pus and dilated to within one inch of its entry into the bladder, where it was impervious. The left kidney was healthy, but double its proper size; bladder also healthy.

There was no calculus found anywhere, but it seemed probable that the complete occlusion of the ureter did not take place till some short time before death, after which the urine that flowed must have come solely from the left kidney, and was, therefore, clear and healthy. This patient was always a free liver, and very intolerant of medical control. I only saw him once when he came to my house.

Case III.—A young man, who has been under my observation for nearly two years as a hospital patient has, for more than this period of time, observed his water from time to time to be very turbid with thick white matter. This thick matter abounds in albumen, and becomes very viscid when mixed with liquor potassæ. It contains abundance of pus corpuscles. Has passed blood, but not lately.

The right flank is full and tender, and when he first came under my observation this fulness and tenderness were very prominent symptoms.

The man has kept about on his feet, but did not feel able to attend to his duty in the militia, and now has lost almost entirely the tenderness in the flank; the fulness also is hardly perceptible, and the urine very much clearer. Attention to diet, abstinence from alcoholic drinks, and the persistent use of the tinct. ferri. perchlorid. have been the curative measures in this case.

During the time this patient was under my care, I read in the *British Medical Journal*, for June, 1869, Dr. Edward Mackey's "Reports on Cases of Pyelitis treated with the Tincture of Cantharides." I tried the tincture in plain water in my case, but did not observe any effects therefrom, either for better or worse.

When we find a patient passing quantities of renal pus in the urine, and complaining also of a large and tender swelling in one side, we certainly may consider the case as a rather serious one, and yet with all these ugly symptoms the patients not rarely get well, though they may still retain the remains of an indolent tumour in the side, as in the last of the above recorded cases.

When the case has become one of true renal abscess with suppuration in the substance of the kidney itself, I consider the prognosis bad, and in these cases there is at times found some calculous formation, which by its continued irritation, has led to the fatal suppuration by perforation

of the mucous membrane of the renal pelvis. As long as the case remains one of uncomplicated pyelitis, we may hope for recovery, even though the tumour be of some size, and the amount of pus discharged considerable.

CASE IV.—Was that of a woman, æt. fifty. For many years she had, from time to time, passed large quantities of pus in the urine, but rarely did she complain of much pain.

The right flank was tender on pressure and a very distinct tumour was perceptible there; during the four years in which I have observed this case, I have noted a gradual cessation of the purulent discharge, while at the same time the swelling has very greatly diminished, and now the woman considers herself quite well.

In this case, as well as in No. III., the patients were well able to walk about, and they were encouraged in this practice, as I believe it an important means of keeping the renal pelvis empty, and promoting the downward passage of its purulent contents. Very careful habits of life, and the persevering use of the tinctura ferri., were other means that decidedly promoted the cure.

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the MEDICAL PRESS.)

No. IX.

TREATMENT OF SEWAGE BY FILTRATION.

ATTEMPTS have frequently been made to purify sewage by means of rude processes of filtration and spontaneous precipitation, but they have never been successful unless the effluent sewage could be discharged at once into the sea, or into a tidal stream, for none but the grosser particles of suspended matter can be thus separated from sewage.

A *coarse filtration of sewage* is generally practised before it is distributed upon the land for irrigation. At Aldershot and Rugby, for example, the sewage is strained through perforated planks, with apertures of about three-quarters of an inch in diameter, but the purifying effect is not considerable, for the amount of suspended matter in the Aldershot sewage was only reduced from 43·77 grains per gallon to 35·01, the organic matter of which was 14·02 grains and 8·77 grains respectively. Even with a more elaborate system of filtration, as was lately practised at Merthyr Tydvil, where the sewage passed through a filter of course iron slag about three feet thick, and then through a small filter of coarse vegetable charcoal, the suspended matters were reduced from 169·81 grains per gallon to 32·31 grains, and the soluble matters were not at all affected. In this case the flow of sewage was about 915,000 gallons per day, from a district with a population of about 50,000 persons; and as the sewage flowed through a drain nearly four miles in length, the suspended matters were completely disintegrated before they arrived at the outfall at Troedyrhiew, where the sewage received a small quantity of caustic lime before it was passed through the filters of broken slag and charcoal. The slag filter was 219 feet long, 5 feet wide, and 3 feet deep, and the charcoal filter which succeeded it was 7 feet long, 3 feet wide, and 2 feet deep. Samples of the sewage were taken before it entered the filters and after it left them to be discharged into the River Taff, and the following are the results of the analysis :—

Constituents per gallon.	Raw sewage.	Effluent water.
	Grains.	Grains.
Solid matter in solution . .	47·27	33·07
Chloride of sodium . .	7·19	5·76
Organic matter . . .	11·23	6·94
Ammonia	2·240	1·582
Ditto organic . . .	0·159	0·161
Nitrogen as nitrates, &c. .	0·000	0·000
Oxygen required to oxydise	1·231	0·711
Matters in suspension . .	169·81	32·31
Organic matter . . .	72·64	14·11
Mineral ditto . . .	97·17	18·20

Mr. Strang, of Glasgow, has designed an apparatus for filtering the whole of the liquid matters discharged from a water-closet. It consists of a box about three feet long, eighteen inches broad, and four feet deep, having a filtering medium composed of the refuse coal ashes of the house, the filtration being upwards, so that the solid matters are retained in the lower part of the vessel, while the liquid portion passes away through the ashes. The apparatus may be placed in connection with the closet or the outfall drain from the house, and the solid matters can be removed from it when necessary. The apparatus has been tried at a public institution in Glasgow with about 200 inmates, and has, apparently, worked very well. Samples of the effluent water which we have examined have been very free from suspended matters, and Dr. Anderson reports of it that so far as deodorizing and decolourizing the fluids are concerned it is perfectly successful, although it allowed the soluble portions of the urine to escape untouched. The composition of the effluent liquid and the retained solids was as follows :—

Constituents per gallon.	Effluent liquid.	Retained solid.
	Grains.	Grains.
Total solid matter . .	13·20	1136·00
Organic matter . . .	3·12	269·92
Fixed salts . . .	10·08	166·08
Ammonia	0·19	59·81
Phosphoric acid . .	0·40	57·93

He reports that when the retained solids are mixed with about their own bulk of ashes, they form a solid compost, which is worth, as far as the ammonia, phosphoric acid, and alkaline salts are concerned, about 9½d. per ton, but that by an improvement of the apparatus a good deal of the superabundant water might be got rid of, so that the retained solids might be procured in a more concentrated state.

The late Mr. Austin, of the Local Government office, was of opinion that sewage might be purified by means of portable filters placed in the course of the sewers, each filter receiving the sewage of about 3,000 persons. In this manner the solid constituents of the sewage would be received into the filters and so retained before they had become disintegrated by the mechanical action of the stream, or by chemical decomposition; and when great

purity is required, he proposed that there should be a second, or even a third or fourth subsidiary moveable filter packed with broken clinkers, breeze, or gravel, and a layer of charcoal; and he enumerates the following as the advantages of this method, namely:—

"1st.—The filtration is easily accomplished, and the great r part of the fertilising ingredients are retained in the solid state in the manure box.

"2nd.—The solid sewage, confined in a portable vessel and surrounded by a deodorizing medium, can be taken from the drains in the course of a few minutes and conveyed without nuisance to the place destined to receive it.

"3rd.—The fluid part rendered innocuous may be allowed at once to escape into the nearest water-way, thus dispensing with the construction of large and costly conduits for its conveyance to distant outlets.'

As regards the profits of the system he considered that the solid manure would freely sell at the rate of 2s. per individual per annum, and that with 2s. 6d. per head per annum for the dust and refuse of a town, there would be a return of 4s. 6d. per head per annum; and allowing 3s. 3d. as the cost of expenses, &c., in working the system, it ought to yield a clear profit of 1s. 3d. per head of the population per annum, instead of the usual loss on interest of capital sunk in irrigation works. Experience, however, has shown that the filtration of sewage is not successful or satisfactory, and it has been invariably abandoned wherever it has been tried, as, for example, at Rugby and Birmingham, where sand filters were used, and at Chelmsford and Bilston, where clinkers and ashes were employed; for if the filtering material be fine in its texture it speedily clogs, and if it be coarse, it fails to remove other than the grosser particles of sewage.

Transactions of Societies.

MEDICAL SOCIETY OF LONDON.

October 17, 1870.

John Gay, Esq., President, in the chair.

The President opened the Ninety-eighth Session with an Introductory Address "On the Limitations of Surgical Art." The speaker was listened to with much attention, and at the close of the address a vote of thanks, proposed by Mr. De Meric and seconded by Dr. Richardson, was unanimously accorded.

Dr. Andrew Clark then read the paper of the evening—

ON LOCAL INFLAMMATIONS IN CERTAIN DEFINED CONDITIONS AS CAUSES OF PULMONARY PHTHISIS.

The author said that hitherto his illustrations had been drawn from cases of pneumonia and pleurisy, and as yet he had found no exception to the laws he had set forth as regulating these relations to phthisis. In the present paper he proposed to take his examples from chronic bronchitis, which, though a less common, was an equally efficient agent in bringing about phthisical destruction of the lung.

Case 1.—A woman, forty-eight years of age, was admitted into the London Hospital for chronic bronchitis in June, 1866. She has had winter cough for twelve years back. Percussion sounds good over both lungs; with the stethoscope sibilant and sonorous râles are heard everywhere, and at bases there is coarse moist expectoration; pulse, 80; no fever or night sweats. She was treated with alkalies, and afterwards with acids, iron, and creasote inhalations, and was doing well until she was placed on a more liberal diet, with beer and wine. It being obvious that the change did harm the diet was reduced. This displeased her, and she left the hospital. In three months she was again admitted under another physician. She got worse, became feverish, and in February, 1867, dulness on percussion in the supra-spinous fossæ was noted. In March lung tissue was found in the expectoration, she got diarrhœa, and died in the following May. The *post-mortem* examination revealed extensive disease in the left lung, the bronchi were thickened and dilated, and the intervening lung tissue was converted into a dense fibrous mass; a few small cavities were seen, and also some grey tubercles in both apices.

Case 2.—J. L., aged sixty-five, a widow, had winter cough for ten years. On admission, had much cough and muco-purulent expectoration; no dulness on percussion; sibilant râles over both lungs; pulse, 64; temperature, 98. This patient gradually declined owing to a nervous shock; she got hæmoptysis and diarrhœa, and signs of consolidation about right lung. She died, but no *post-mortem* was obtained.

Case 3.—J. W., aged fifty-three, a dock labourer, had bronchitis over twenty years. Four years ago his strength failed, he got profuse purulent expectoration, he became feverish, bronchial breathings and crepitations were heard over his chest, and right lung became consolidated about two years later. The sputa became lumpy, and contained areolar of elastic tissue. In December, 1869, the urine was found to be albuminous, and in the following April he died. The *post-mortem* showed dilated tubes, grey tubercles, and small cavities in the lungs.

Case 4.—Mrs. B., aged sixty-one, lives in Kent, for many years subject to bronchitis. In 1864 general health failed; she became feverish, and bands of elastic tissue were found in the sputa; crepitation heard in middle-third of right lung. The progress of the disease here is slow. Pulse, 80; temperature, 98. The patient is still under observation.

In concluding, Dr. Clark said that the chief causes of phthisical complication, in cases of chronic bronchitis, appear to be repeated colds, over-feeding, and the abuse of stimulants. Loss of strength, feverishness afterwards subsiding, and coarse moist crepitations were signs of the phthisical condition. When the bronchi ulcerate, fibres of lung tissue are found in the sputa. Fibroid or tubercular pneumonic changes in the lung follow, but the progress of the disease is usually slow. By meeting feverish complications with rest, milk diet, and salines, and by the use of inhalations of iodine, creasote, or carbolic acid, and appropriate treatment of tonics and diet, the progress of the disease may be greatly retarded, and life indefinitely prolonged.

Dr. Symes Thompson agreed with Dr. Clark that tubercle was not often the primary mischief; these cases showed the value of early treatment to avert the phthisical complication.

Dr. Thorowgood said that in going over the patient record of the Victoria Park Hospital, he had noticed a large number of the cases of phthisis to have had their origin in a catarrh at some more or less distant date antecedently. This bronchitis was probably inefficiently treated, while doubtless alcoholic drinks were freely taken by the patient, till the lung breaking down he is obliged to become an in-patient of the hospital.

Dr. Hare said that we must not rush too hastily to the conclusion that the disease was of catarrhal origin. Hospital patients usually referred all their ailments to cold caught. He could not agree with Dr. Clark that a pneumonic deposit unabsorbed at the end of three months would never go. He had observed no case of pneumonia where the consolidation persisted for two years and then went quite away. He insisted much on the value of counter-irritation as a curative measure.

Dr. Semple complimented Dr. Clark on his accurate reports. He believed such cases to be very rare, and commonly the sequence of events was the very reverse of that stated. Early tubercle causes the bronchitis, not the bronchitis the tubercle.

Mr. Sheeler made some remarks on the importance of perfect ventilation as a preservative against phthisis.

Mr. Peter Marshall asked if Dr. Clark included the cases of acute phthisis in young persons as sequelæ of bronchitis.

Dr. Wiltshire inquired as to whether there might have been any heart disease leading to mechanical impediment of the circulation and hæmoptysis, which might have caused deduction of lung tissue.

Dr. Clark, in reply, said he must admit Dr. Hare's case of pneumonia to be an exception to the rule he had propounded. He quite agreed with Dr. Hare as to the value of counter-irritation. He did not include cases of acute phthisis in young children as sequelæ of bronchitis. He had no reason to think

that there was any mechanical obstruction of circulation likely to cause such hæmorrhagic destruction of lung as he had himself described in his lectures before the College of Physicians in 1866.

Registered for Transmission Abroad.

THE
MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
,, If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 26, 1870.

LIFE INSURANCE.—No. II.

The concurrent appearance of American Life Offices in the British market and the passing of Mr. Cave's Bill for the better regulation of English offices naturally suggest a closer attention to the comparative condition of the American and the British law and practice. After the scandalous facts which came to everybody's knowledge concerning certain English offices of high pretensions, it was evident to every eye that legislative interference for the protection of personal and family interests, largely involved in such companies, had become absolutely necessary and solemnly incumbent. Although the Act now in force for this end has most stringent regard to Associations which may be formed in future, yet it makes obligatory upon such as already existed, periodical statements of accounts placed before the authorities, the public at large, and the parties more interested especially, of such a nature as to constitute at all events some guarantee against the repetition of that wasteful, not to say fraudulent, trifling with the hard savings and the rightful expectations of the many, of which the revelations of the year of panic afforded abundant and sickening proof.

In considering the claims and merits of American offices, whether as confined to their own country or as proposing to transact business in ours, it must never be forgotten that they took the precedence of ours, and, in fact, set us the example of submitting their proceedings to the periodical inspection of public functionaries appointed for the purpose. In the several States where life insurance is carried on by offices established within their bounds, not only is it compulsory on those offices to report progress from time to time, but special commissioners are appointed to look after them, rigorously to examine the returns made, and officially to report and record the results of such examination. In the Empire State of New York, as in several other States, each Life Insurance Company is required by State law to make a deposit of equal to twenty thousand pounds sterling with the State in which it carries on business. The Companies are further called upon to produce sworn statements annually of their assets and liabilities, income and expenditure, in full detail.

It is the duty of the State Commissioner, with these facts before him, to form a valuation of each office, upon a basis prescribed by law, with a view to ascertaining for the information and guidance of all, the amount of the liability or the reserve under policies outstanding. This important functionary is likewise empowered to investigate for himself the affairs of any particular Company which may be under a suspicion of being in a condition of insolvency. If, after such investigation, he see just occasion for prompt action and decisive steps, he is authorised to arrest by legal process the course of the delinquent office, and prevent its management from continuing to do business.

Provided always that this important and responsible duty is confided to men properly qualified and of inflexible uprightness, the arrangements concerning it leave little or nothing to be desired. Evasion of the requirements can only be effected by the offices by false swearing, which would prove a very dangerous resort. Let tricks of this sort be reasonably suspected, and probing investigation would promptly follow; while detection would lead to instant conviction, and conviction to rigorous punishment. These are some of the grounds which Englishmen taking out policies in an American office would have for persuading themselves that the risk of insurance is far from being in proportion to the breadth of the Atlantic, but that, on the contrary, the straits of Dover joined to a country and people entirely foreign might make a great difference in point of security than that vast ocean joined to a country and people that, though politically foreign, are in law and language, morals and manners, our next of kin.

The State laws in several of the States would seem to give securities which may be admitted to be so far quite satisfactory and perhaps complete, and it only remains to form a general law for the whole commonwealth, based upon the same principles and adapted, on the widest scale, to fulfil the same useful and necessary ends. We take the liberty, therefore, of suggesting to the Government at Washington, through their respected representative at this Court, of establishing a National Bureau founded upon the practice of individual States, and resulting in the formation of a distinct Administrative Department, with uniform laws and regulations for the whole country.

CROYDON SEWAGE AND THE TOWN WELL.

Our readers will perhaps remember that in an article, No. VII, on "The Croydon Sewage Farms," we said "that according to the analytical inquiries of Dr. Frankland, as stated by Dr. Carpenter, the chalk well in Croydon, from which the water-supply for the town is obtained, is charged to a large extent with nitrates and the other oxydised products of sewage." This statement appears to have given great offence to some of the good people of Croydon, for it has been the subject of angry comment and correspondence in a local newspaper, *The Croydon Chronicle*. At first, our statement was described by the Editor as "a pure invention," for he said he was quite sure

that Dr. Carpenter never said anything of the kind. In proof of our veracity we gave, in our issue of the 12th inst., reference to the published writings of Dr. Carpenter, wherein he states that he and Dr. Frankland had publicly discussed the question. In reply to this we are now met by a wrathful declaration from Dr. Carpenter that we were not justified in associating his name with the subject, although it is difficult to understand how we could have done otherwise, seeing that he and he alone is the author of the statement alluded to, and that we should have known nothing about it if he had not raised the question, and put it into print. His letter, in fact, of Saturday last, to the Editor of *The Croydon Chronicle*, affords ample proof of this, notwithstanding that it also exhibits a most anxious desire, on the part of Dr. Carpenter, to repudiate the connection of his name with Dr. Frankland's, and to deny the facts in question, for he says—

> If you will allow me, I will explain how this idea of Dr. Frankland's arose, and how I became interested in it. Dr. Frankland had stated that the appearance of nitrates and nitrites in potable water was an evidence of previous sewage contamination, and that such water ought not to be used for dietetic purposes. I demurred to this dictum at the meeting of medical officers of health at which the statement was made, and asked Dr. Frankland to explain, upon his theory, why, according to his own analysis, the quantity of nitrates and nitrites in the Croydon well water should be greater when supplied to the inhabitants as potable water, than after it had been contaminated with sewage and had passed over the Beddington fields. (It should be mentioned that this is a peculiarity common to most waters obtained from deep chalk springs.)
>
> Dr. Frankland assumed that it must have been caused by percolation from the sewage farm.
>
> I at once objected to this as an impossibility, and stated that the objections against it were the following facts:—
>
> 1—That the surface of the water in the well was higher than the surface of the fields irrigated at Beddington.
>
> 2—That allowance being made for evaporation, as much water ran off the fields as ran on to them.
>
> 3—That the River Wandle ran from the neighbourhood of the well towards the fields, and would be more likely to supply the well.
>
> 4 and lastly—That the analysis of the water from the well, made by Professor Way, twenty years ago, corresponded very nearly with that made by Dr. Frankland, and that that analysis was made years before irrigation had been practised in Croydon.

It is not our purpose to discuss, at the present time, these several questions, but merely to show that we had good authority for saying that, according to the analytical inquiries of Dr. Frankland, as stated by Dr. Carpenter, the Croydon well water is contaminated with the oxydised products of sewage from the irrigated fields at Beddington; and in saying this, we do not, as Dr. Carpenter supposes, produce his name as a witness *in favour* of the statement, but merely as the authority of the statement itself, whether he is in favour of it or not.

We had hoped, as we said in our last communication on this subject, that if the discussion were continued some information would be given of the exact condition of the scheme for forming a company to rent and manage the sewage farms at Croydon; and how many of the towns people who have heard, and perhaps seen, so much of the valuable results of sewage farming, have taken shares in the project; for, after all, the most practical and reliable test of the value of sewage is the money confidence reposed in it by those who have really had experience of its profitable results, and have seen the magnificent crops obtainable from it in all seasons. On this head, however, the learned Doctor is silent, although it would undoubtedly have greatly enhanced the interest of the discussion if he had in some sort alluded to the subject, as by saying, for example, that he himself had largely embarked in the undertaking; but, perhaps this is too much to expect of him, for, to speak metaphorically, whoever heard of a doctor taking his own physic?

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The proceedings at the last meeting of the Council of this College were as satisfactory as they were important. Sir William Fergusson, with that straightforward and manly determination to do what is best for his profession, which we always admire in him, adhered to his determination to resign his examinership. Mr. Curling also, with his high sense of honour, maintained the position he has taken as a genuine reformer by declining to become a candidate at the ensuing election, on account of the active part he took in securing the separation of the anatomical and surgical examinerships. By this action he practically carries out the reform he has done so much to bring about. Of course, this is "without prejudice," as the lawyers say, to his position, in case he should at a future time come forward as an examiner in surgery. Indeed, we should say it ought to secure him the next surgical vacancy. No one is more capable—no one more respected, and we hope, therefore, to see him occupy a post for which he is eminently qualified, and which his present abnegation should certainly secure him.

The 21st section of the Charter of 1843 has hitherto been a dead letter. Now, at last, the College is fairly in the right way. We have actually a President and Vice-President who are not on the Board of Examiners. The names of Fergusson and Curling will be long quoted as those of men who gave a final blow to the obstructive policy that has done so much to injure the College. After this may we not look to them as leaders? There are several other points of importance that must come forward. The *Members*, as well as the *Fellows*, desire to have some privileges in their College, and to feel some tie to the great institution to which they are affiliated.

May we hope that the names of Fergusson and Curling may yet appear at the head of the long list of those who wish right to be done?

MORTALITY AND REGISTRATION IN DUBLIN.

The Registrar-General's Report for the quarter ending October 1 has just appeared, and as it affords some considerations of interest, we append an abstract:—

Births.—In the Dublin Registration District the number of births registered amounted to 2,034, being equal to an annual ratio of 1 in 39, or 26 in every 1,000 of the population. The number of births registered north of the river Liffey was 1 in 32, and on the south side of the river only 1 in 43 of the population. In Rathmines, Donnybrook, Blackrock, and Kingstown, the number was only 1 in 46 of the population. There were registered in London during the same period 26,953 births, being equal to an annual ratio of 1 in 30, or 34 in every 1,000; in Glasgow 1 in 25, or 40 per 1,000; and in Edinburgh 1 in 27, or 37 in every 1,000.

Deaths.—The number of deaths registered in the Dublin District affords an annual ratio of 1 in 48, or 21 in every 1,000.

Diseases.—The deaths from diarrhœa registered during the quarter amounted to 168, showing an increase of 50 as compared with last year; of the total deaths registered, 1 in every 9·8 resulted from diarrhœa. 92 deaths were caused by scarlet fever, or 1 in every 18 of all the deaths. 13 deaths were referred to measles against last year's 80 deaths. 77 deaths were caused by fever—viz., 24 by typhus, 28 by typhoid or enteric, and 25 by simple continued fever. The assigned caused of death in 138 instances was convulsions. 23 deaths were ascribed to croup, 26 to whooping-cough, and 3 to diphtheria. Bronchitis was the cause of 109 deaths; and pneumonia, or inflammation of the lungs, of 18. 82 deaths resulted from heart disease; 5 from aneurism; and 2 from pericarditis, or inflammation of the heart's covering. Disease of the liver, unspecified, was the cause of 28 deaths; hepatitis, or inflammation of the liver, of 3; and jaundice of 1. Kidney disease, unspecified, caused 8 deaths; nephria, or Bright's disease, 6; and inflammation of the kidneys 2. 205, or 1 in every 8 of the total deaths, resulted from phthisis, or pulmonary consumption. Mesenteric disease contributed 49 deaths; hydrocephalus, or water on the brain, 38, and scrofula 11. Cancer proved fatal in 35 instances. The proportion north of the Liffey was 1 in 42; and the number south of the river 1 in 48. In Rathmines, Donnybrook, Blackrock, and Kingstown the number of deaths registered was 1 in 62. The ratio of deaths registered in London was 1 in 43, or 23 in every 1,000; in Glasgow 1 in 39, or 26 in every 1,000; and in Edinburo' 1 in 44, or 23 in every 1,000.

The most obvious inference from these figures is that the system of registration is evidently quite inefficient, and the returns accordingly untrustworthy, except as an approximation to the truth. The statistics tell us that the births in Dublin were only 1 to every 39 persons, while we know that in London they were 1 in 30, in Glasgow 1 in 25, and in Edinburgh 1 in 27. In any case, so serious a discrepancy as this, especially as representing the proverbial fertility of Irish parents, would entirely discredit the accuracy of the returns, and that conclusion is irresistibly confirmed by the observation of the figures for each side of the Liffey in the same city. We are informed that residents to the north of the Liffey have children at the rate of 1 in 32, while those on the south side are prolific only to the extent of 1 in 43, and those in the suburbs in the proportion of 1 in 46. Making allowance for the supposed greater fructification of Irish mothers than their English sisters, we should calculate that the ratio of 1 birth to 27 persons in English and Scotch cities ought to lead us to expect a proportion of at least 1 in 23 in Dublin, and thus we are bound to conclude that nearly one-half of all the births in the south side of Dublin are never registered at all.

This conclusion is greatly to be regretted by us, inasmuch as it will afford occasion for comment as to the inefficiency of medical men as registrars in comparison to the police, to whom it was proposed to entrust the duty of collecting these records. We are not altogether certain that such a conclusion would be a just one, believing that unnecessary difficulties are interposed by the Act in the way of parents desiring to register their children's births. No person who has not been actually present at the birth can give the information, and that person has to go a distance on a given day, and perhaps lose much time in doing so.

Amongst the poorest classes there is often neither doctor or nurse present at the birth, and the duty of registration is thus confined to the mother or the old woman who lent a helping hand, one or both of whom may be engaged or sick, and neither of whom is likely to give themselves much trouble about registration. The fee is not sufficient to make it worth the doctor's while to go to the mother, and the mother may not be able to go to the doctor, and so the case is left unnoticed.

Notes on Current Topics.

About the War and Wounded

Our readers will remember that Deputy-Inspector Gordon and Surgeon-Major Wyatt were sent by the Army Department to report on the French hospitals, &c. They are now shut up in Paris and have taken their part in doing what they can in that position. We hear through a private letter, per balloon-post, that our esteemed *confrère* and contributor, Dr. Gordon was, on some days, very fully occupied in attending to the wounded brought in after the late sorties. We look forward with interest to the reports that will be made.

***

Whatever may be thought of the utility of subsidising the belligerent Governments by giving them money for the wounded, there can be no such scruple about the fund for distressed peasantry of the North-east of France inaugurated by the *Daily News* and to which we have previously alluded.

Mr. W. H. Bullock, the upaid agent of the Fund, describes the whole country round about Sedan as having been desolated by the war. The condition of the population of one village—which he speaks of as the type of hundreds—is thus described :—"There reigns at this moment sad want and distress everywhere—not yet absolute dearth, but plain unmistakeable famine is advancing with fearfully rapid strides, with pestilence in its wake. The famine may be stayed by help from without, and, if we can stay the famine, the pestilence, it may be hoped, may be stayed too. In some villages," he goes on to say, "an almost clean sweep has been made of every conceivable article of food, clothing, or furniture; the savings-banks have, of course, stopped payment in Sedan, where those of the peasants who made any provision for the future had deposits. The cattle-plague is carrying off those of their cattle not carried off by the Prussians. Their pigs and poultry have vanished; typhus and small-pox are ravaging the wasted villages; the cloth-weaving, which is combined with agriculture in the villages about Sedan, is at a standstill; there is no seed to sow; their unthreshed corn was either consumed by the German cavalry, or wantonly strewn about the fields for the bivouacs." The reader may easily fill in this fearful outline. Mr. Bullock has found, in the course of his inquiries, that in all this district not merely the comforts but the necessaries of life are wanting. With the means at his command he cannot afford to supply the sufferers with such essentials as mattresses, coffee, and sugar, but he is obliged to confine the expenditure of the fund placed at his command to the purchase solely of bread, lard for cooking the potatoes which yet remain, blankets, and warm flannel clothing for women and children, especially for the little children, who are perishing

for want of it. "A month hence," says Mr. Bullock, "it may be too late."

***

The large sums that have been raised by the charity of Englishmen have, no doubt, been difficult to apply, and we are not surprised at the complaints that have been made as to its administration. We have commented from week to week on the matter, and even predicted such complaints. It was next to impossible that it should be otherwise. We would maks all allowance for mistake and hurry. English people have a knack of being ready when the war is half over. We feel, however, the gravest doubts as to the propriety of handing over the two sums of £20,000 are equal sums to each belligerent. Such a donation, although expressly stipulated to be used only for the wounded—is a subsidy for each—for it only sets free a similar amount for warlike purposes. We doubt if many of the contributors to the fund would have subscribed had they known that the money would be applied in this way. We have no wish to find fault, but we feel strongly on the point, and we fear this is not the only weak point in the National Society. So many complaints have been made that we do not like to repeat them, but this one involves a great principle. As to the statements of partiality that have been made in some quarters, we hope better things and assure our contemporaries that no one sees partiality so soon as your thorough-going partisan. It is the strongest partisans of France who have cried out on this score.

***

One more special complaint has been made—started by the Society itself—it is said the Committee is so small that they are all overworked. We cannot but think there are many gentlemen who would give their aid freely enough. Work may be, in some cases, more useful than money, and is often given at a greater sacrifice, though just as readily. We know one or two who have been ready thus to help on the good work, and there must be others. The Committee is no doubt much too small, and now the Fund has become so large, a better organisation should be established.

***

Little is really known of the condition of Metz. Correspondents give most contradictory accounts in the assertion of deserters and prisoners. The following is a hopeful statement from the *Telegraph* :—

"The prisoners taken in the affair at Peltre, of which I wrote in my last letter, were sent out of Metz yesterday (Oct. 1), to be exchanged. They describe their treatment as of the best. They were served twice a day with excellent soup made from horseflesh, and also a sufficiency of bread. The only thing that seemed to be wanting was salt, which they say is now served out only to the officers. They describe the French troops as being in excellent spirits, and say that the soldiers talked, laughed, and joked with them in the most friendly way. They were not subjected to any examination respecting the disposition of troops, or anything at all connected with the arrangements of the German army ; nor were they ever visited by any General officer ; but quarters were immediately assigned to them in the suburb of Le Sablon, where they were exceedingly well treated, and eventually sent with a flag of truce to the nearest Prussian outpost. Their report only tends to confirm the opinion I have already expressed in your columns, that Metz la Pucelle will not be taken before winter shall have tried the resources and constitutions of the German army."

***

Other accounts repeat the distressing statements we have previously published. If we turn our attention to the besiegers, we have only confirmatory evidence of the extent of disease on which we have already commented. To the epidemics is now added the dreaded epizootic. The *Daily News* correspondent with the German army before Metz, gives the following sad account :—

"I am sorry to have to inform you of the increased and fearful prevalence of the cattle plague among the vast herds of cattle which have been accumulated in our rear for the supply of the Prussian troops. The plains between Remilly and Bazancourt, and around the latter village, are strewn with the dead. Whole herds have perished. Isolation is impracticable, nor is it possible to keep fresh arrivals off the ground infected by their predecessors. The orders are imperative that the animals which have died of this mysterious pestilence shall be buried as soon as possible, just as they have fallen. From personal observation, however, I can state that this order is not always complied with, and its enforcement must be almost impossible where the herds cover so large an area of ground, and the supervision must necessarily be perfunctory. Many a hide is taken off these dead bullocks before they are buried, and I have reason to believe find their way into the bottoms of the waggons belonging to the hordes of carriers, market-tenders, and what not, that come over the frontier towards Saarlouis, Triers, and Luxembourg. If the people, therefore, knowingly admit the unclean thing within their borders, their blood be on their own heads. Probably the hides are smuggled into the tanneries without the cognisance of the authorities. But the question is one of deep interest for Britain. No doubt the regulations for the import of live cattle from the Continent are framed so as to be effectual against the admission of disease. But Leadenhall and Bermondsey need be told that consignments of 'wet hides' occasionally come over from Continental ports, and it is no impossible thing that some of the surreptitious windfalls from Bazancourt and Remilly may find their ways into these parcels."

Leave of Absence of Medical Men from India.

A REVISED compilation of General Orders has been issued by the Commander-in-Chief, in supersession of the compilation promulgated in 1868. It provides, as regards medical officers, that the application for leave of absence for a medical officer can be proper only when, the regiment being healthy, the attendance of one of the medical officers can for a time be dispensed with, or that the indulgence of leave of absence to any particular medical officer is an object of most material importance to his private concerns or to the state of his health. Deputy-Inspectors-General of Hospitals, previous to availing themselves of privilege leave, must obtain the sanction of the Commander-in-Chief through divisional commanders and the inspector-general. Leave to medical officers on private affairs is restricted to one year.

The Fever Epidemic in Liverpool.

THE Union authorities of Liverpool are exercising a praiseworthy, if tardy, energy in the repression of the fever epidemic, and the disinfection of the districts in which it is most rife.

It appears from the proceedings of the staff sub-committee that they have resolved to authorise the medical officer of health to provide such a number of carts, and engage such men as might be necessary for efficiently carrying out the work of disinfection in houses where fever occurred. The clerk of the Toxteth Guardians had written to the sub-committee to the effect that the guardians were prepared to incur the responsibility of destroying worthless beds used by poor persons suffering from fever, if the committee would undertake the removal of the beds.

The guardians also thought that the disinfection of the clothing was likewise of great importance, and they therefore proposed providing clothing for those who had not a change, to allow of disinfection.

Alas! why is it that all the ardour of the sanitary authorities should be reserved until the enemy is at the gates, and the defence too late. Liverpool is exceptionally well provided for in sanitary matters. It is liberal enough to pay a salary worth the acceptance of a thoroughly good sanitary officer, and its sanitation is accordingly ten times better cared for than that of other cities. And yet how short a way it approaches to perfection.

Hear! Hear!

We read in the *British Medical Journal*:—

"The British Medical Association never appears to greater advantage than when occupying itself with questions of public medicine, it addresses its energies to the solution of problems of sanitary organisation."

Such a declaration should be written in letters of gold as a mediæval decoration of the Council chamber, and then perhaps the administration of the Association could spare something more than a thousandeth of its income for those purposes which, we are told, are the brightest jewels in its crown.

The New Session.

The number of entries is eighteen more than last year. The total number of students now pursuing their careers in the eleven London Schools reaches the figure of 1,298. Guy's heads the list again, having 102 new entries. Charing Cross Hospital is at the bottom with 9 new entries. The remainder are distributed amongst the several schools. The freshmen altogether in London are 433.

Pharmacy in Medical Schools.

The University of Durham College of Medicine at Newcastle has arranged a curriculum for Pharmaceutists, which seems to promise well; and those actually engaged in pharmacy, who enter during the next twelve months, may have a perpetual ticket for the whole for £6 6s. We advise all who can to profit by it. It includes botany, materia medica, chemistry, and pharmacy. Now, the three first are taught in every school of medicine, and the last should be also. We are inclined to think, at any rate, that the instruction in pharmacy might be advantageously placed under the superintendence of professors of materia medica, whenever they felt able and were willing to take it.

The writer has seen in many ways the immense value of a knowledge of pharmacy, and has observed numerous instances in which such knowledge would have benefited his brethren. He can trace a certain degree of success to an intimate and practical acquaintance with pharmacy. Although he would willingly see the two callings as far as possible separated, he thinks every medical man should understand pharmacy. He thinks no one can be said to be up in his materia medica who is ignorant of pharmacy, and he considers that every physician and surgeon should be able to dispense his own prescription. Unfortunately, there are too many familiar instances that such is not the case.

The London Hospital.

Our readers know that at this large hospital, the assistant officers are after seven years' service promoted to full rank, even although they may not have any change of duties. Under this regulation, Dr. Hughlings Jackson, F.R.C.P., has lately become full physician to the hospital.

At the London too, the assistant-physicians and assistant-surgeons, enjoy some other privileges, and in many other respects there is great liberality at this hospital. There have been some recent improvements, to which we propose shortly to direct more particular attention.

Yellow Fever.

We learn that an outbreak of this disease has given some trouble at New York. The Board of Health after investigation, has pronounced that such is the nature of the disease, and quarantine hospitals have been called into use. It is supposed to have been brought in the first instance to Brooklyn Docks, by vessels from infected ports, arriving as early as last August, and to have been smoulder ing ever since. It is believed that deaths among the troops on Governor's Island, returned as due to remittent, have usually been caused by yellow fever, and now that it is decided to be amongst the citizens, very active measures have been taken.

Unattached Students.

At Oxford the Vice-Chancellor, the Rev. the Principal of St. Mary Hall, the Rev. C. L. Wingfield, M.A., Fellow of All Souls, the Rev. G. W. Kitchin, M.A., Christ Church, and the Rev. G. S. Ward, M.A., Magdalen Hall (censors). have just issued their report on the working of the new system, under which students can enter the University of Oxford without being attached to the College or Hall. The report says:—"During the year ending with the Trinity Term, 1870, the delegates in charge of students not attached to any College or Hall have entered forty-seven students on their books. Of these, thirty-four matriculated as *scholares non ascripti*, the remaining thirteen were members of the University who migrated to the Delegacy. In the course of the year twenty-eight names have been removed; one by death, three by withdrawal from the University, and twenty-four by migration to College or Hall; and of these, one as a scholar, five as exhibitioners, and eighteen as commoners. Of the eighteen, six were originally members of College or Halls who have returned again to collegiate life. The total number of entries from the beginning of the system in the Michaelmas Term, 1868, to the present time is 106, of whom seventy-two are still on the books. The system has not yet been long enough in operation to allow the students to appear in the class lists. A voluntary return made by twenty students enables the delegates to answer, with some confidence, the question so often asked, namely, what is the yearly cost of the system to a careful graduate? The average weekly cost of living—board, lodging, and extras—on the twenty returns, was 31s. But if the lowest ten be taken, the average falls to 26s. Taking this average as the sum per week for which a thrifty student can get respectable board and lodging in Oxford, we arrive at the following figures for a-year's expenses:—Board and lodging for three terms of eight weeks, at 26s., £31 4s.: University dues, £4 10s.: Examination fees (on the average), £1 1s.: Tuition expenses (about), £10 10s.: total £47 5s. It will of course be observed that these

figures do not include travelling, books, clothes, pocket-money, or cost of living in the vacations. Still, they prove conclusively that a careful student can get through his Oxford career for a sum not exceeding £50 a-year."

Cambridge University Electoral Roll.

The Vice-Chancellor has just promulgated the revised electoral roll of the University for the ensuing year. It contains 309 names, headed by those of the Duke of Devonshire, LL.D., Trinity, Chancellor, and the Earl of Powis, LL.D., John's, High Steward.

Registration of Diseases.—Deputation to Mr. Goschen, M.P.

On Monday afternoon a very large and important deputation waited upon Mr. Goschen, the President of the Poor-law Board, to urge upon his attention the desirability of making arrangements to establish a Registration of Diseases. The deputation was introduced by Mr. C. E. Cawley, M.P., and Dr. Lyon Playfair, M.P., and comprised Dr. Rumsey (Cheltenham), Dr. Morgan (Manchester), Dr. A. Ransome (Manchester), Dr. J. Harley, Dr. Gibson, and Dr. Farre, London, representing the British Medical Association; Dr. Day Goss, Dr. Ainslie, Mr. Ernest Hart, Dr. Carr, Dr. Fowler, Dr. Stewart, Dr. Ogle (Derby), Dr. Manley (West Bromwich), Dr. Aldis, Mr. Randolph Robinson, Dr. Rogers, &c., the Poor-law Medical Officers' Association being also represented. Dr. Lyon Playfair, M.P., having introduced the deputation, Dr. Rumsey said the object of the Association was to get the Government to adopt a plan of registration of disease in connection with the system of Poor-law medical relief and the relief afforded at public hospitals and dispensaries, and it was proposed to be done at the public cost. The registration of disease was regarded as necessary for the proper administration of general medical relief. It was also essential before any sanitary legislation could take place, and it would be beneficial to science. The proper organisation of medical relief would involve the adoption of the dispensary system, such as exists in Ireland, and a revision of many of our charitable hospitals and dispensaries. The cost was proposed to be left to any department the Government might think best. The President said he thought the arguments in favour of the value of registration of diseases were so clear and strong that nearly everyone would accept them; and the chief point for consideration was by what machinery it could be carried out, with what rapidity, and at what cost. The question of cost would not be for his department, but would be determined by Parliament in the estimates; but if the scheme could be carried out effectually, and at a reasonable cost, he should like to know what was the estimated expense of getting the returns and codifiying them for use. Would the medical officers co-operate in the matter? Dr. Morgan (Manchester), replied that in Manchester the medical officers had co-operated, and he believed they would require only a small remuneration of something like £3 3s. a-year. The President said in conclusion that the Royal Commission's report would determine to a great extent many of the questions under discussion, and as regards the registration of diseases, it would not be desirable to take any steps to carry it out till that report had been issued, which he hoped might be before the end of the year.

The Red Cross.

The old feud between the combatant and non-combatant branches of the military service, has extended to the Red Cross Knights attending the sick and wounded in France. Many of our professional brethren have returned disgusted by the treatment received at the hands of the German officers, who look upon them with undisguised aversion and suspicion.

They are quite willing to accept money and material, but prefer to dispense with the personal assistance of the officials of the National Society for Aid to the Sick and Wounded.

We understand that Col. Loyd Lindsay, who has just returned from Paris, having been permitted by the Prussians to pass into the city, complains bitterly of the difficulties thrown in the way of the representatives of the society.

The Germans on their part, assert that the Red Cross is often assumed as a disguise by spies and others.

The After-taste of Quinine.

In practice there is often experienced a great difficulty in getting patients to take quinine, because of its after taste, which to some is simply unbearable, and when antipathy thus exists, combined with a difficulty in swallowing pills, the therapeutic value of an important drug is lost. We find, and the fact may not be generally known, that the mastication of some acid fruit, as an apple or a pear, will permanently remove the disagreeable after-taste of quinine. The first mouthful of fruit should be well masticated and rolled through the mouth, so as to cleanse the teeth, &c., and then ejected. The second morsel may be swallowed, when it will be discovered all taste of the quinine will be removed.

The Sick Lion System.

Once and for all we beg to express our disgust at the common practice of our contemporaries who, taking advantage of the indisposition of a statesman, or noted member of Parliament, or an aristocrat with a handle to his name, ferret out in a most unbecoming manner, to a most discourteous and unprofessional extent, the exact state and condition of tongue and skin, and what cannot be dissected out, call to acquisition their imaginary faculties in order that a neat little sensational paragraph may be made for purposes of quoting by other journals. It is most unjust to the ailing patient, and to his relations. The first tidings are generally alarming; the consequence is, friends become frightened and loose confidence in those who are in professional attendance, since they have good grounds for supposing and believing that the truth is not spoken, and that the impending dangerous nature of the case is veiled from them when they come to read tidings of alarming danger republished in the morning papers, and quoted in authority from a medical journal. It is injurious to all until the Second Edition throws oil on the troubled waters. We have no desire to make personal remarks expressive of our dissatisfaction in the *Sick Lion* system, or reproduce here the expressions of disgust which have reached us, emanating from the relations of sick persons who have been unfairly dealt by, and from members of our profession, who, to speak the truth, have been temporarily injured, for although not directly superseded, others unnecessarily are called in who share—have unduly conferred on them—the credit of

the case. We are told that it is done for an object—either to injure some medical man, or to push on others. This on behalf of our fellow journalists we repudiate ; but we agree with a clever corrrespondent—a member of the English aristocracy—in his observation that a sick man's case during the progress of the disease, should be no more commented on in a public journal than a trial before the jury have returned their verdict. This, we trust, is the death bell toll to the vulgar unprofessional "Sick Lioning" system.

Post-office Grievances.

The Post-office we are told has not been so successful in its business as formerly. There has been an evident falling off in profit. The new telegraphic department has also not paid so well as was expected. Will the new halfpenny postage remedy this? We expect not, but still would be satisfied, if it were managed as well as it should be. It is not the first purpose of the department to make a profit. What is most of all demanded is public utility. Some of the grievances complained of are small enough, others are of vital importance. All our subscribers have for more than thirty years received their journal stitched, but under the new regulations we are forbidden to give them this convenience, and many naturally complain that the leaves are apt to fall out. When the matter was under discussion we did all we could to obtain the removal of this restriction, but without effect, and now our subscribers would do well to address their remonstrances to the General Post-office. This uncalled for regulation applies to all journals, and hundreds of respectable young girls are thrown out of employment by it.

Again, we cannot but think that better regulations might be made for obliterating the stamps or covers, and thereby avoiding a certain delay that is now taking place. Why cannot journalists be allowed to prepay *en masse* and affix no stamps at all? Or, if these precious stamps are to be insisted on, why could not the last office instead of the first obliterate them?

As to the new cards they are very useful for short messages, and the few complaints made will, we hope, soon disappear.

The Office would, perhaps, confer a further favour by selling stamped envelopes at one penny each, and thereby induce many to use them who for convenience will use the cards. Good quality envelopes supplied for the penny would be better for the office than a general halfpenny postage to which we seem rapidly tending.

No Dose! No Pay!

A Homœopathic paper has amused its readers at the expense of our profession by the publication in detail of the medical bill, alleged to have been delivered to the executors of a lady for fourteen months' doctoring. The total amount of the bill was £113 odd, and it included 870 bottles of medicine and 131 boxes of bills—about three prescriptions for every day of the fourteen months.

Whether our infinitesimal contemporary be only "poking fun" or not, we have a text for our condemnation of the system of doctor-drugging which the *Lancet* is so anxious should flourish. It is ridiculous to expect that the overdrenching system which has driven many victims into homœopathy shall cease, as long as the major part of the practitioner's income is made up of drugs, and the smaller of medical skill. If a general practitioner does a sovereign's worth of work, and is forbidden to ask for more than half-a-crown for his attendance and skill, he necessarily administers seventeen and sixpence worth of medicine and the result is 500 bottles a-year. The motto of the present system is, "No dose, no pay," and we cannot be annoyed or surprised if we make ourselves ridiculous by our efforts to comply with the principle.

A Combination of Leech Sellers.

The competition amongst tradespeople, and the great increase in their numbers, have made impossible in our times the combination between the dealers in any one article to create and keep up excessive prices of which we heard so much twenty years ago, but it seems that the system of "rigging the market" is not yet forgotten by traders whenever the smallness of their numbers or any peculiar circumstances have enabled them to overcharge for their goods. The *Chemist and Druggist* has exhumed a conspiracy of this sort amongst the London dealers in leeches, which it thus describes:—

"Certain leech importers in London, not making their fortunes fast enough, have come to the conclusion that this state of thing might be much improved, for them at least, by simply choking competition. Secret negotiations were carried on, and most, if not all, of those engaged in the business in London were communicated with, and much unanimity was expressed. A strong hope was entertained that all the members of the craft would eventually join this precious fraternity, and a most solemn league and covenant was decided upon whereby it would be agreed to fix a minimum price for leeches considerably higher than the normal quotations. The Franco-Prussian war is the immediate disturbing influence, but the opportunity (which an old proverb tells us, is often responsible for a deterioration of integrity) was by this means created, of which our keen commercial friends saw advantage might be taken. On Tuesday last a meeting of these leech gentlemen was held to consider the matter, with what result, we are not in a position to inform our readers."

We have no fear that any such organization of pharmaceutical "bulls" will succeed in inconveniencing the public or the Profession. There will always be a sufficient number of dealers urged by money interest, if not by honesty, to stand aloof from such combinations, and take advantage of the rise in price to get the trade into their own hands ; and we imagine these traders will soon discover that their conspiracy is no more sensible or practical than it is honest.

Yellow-fever prevails at New York.

There will be accommodation for about 550 patients at the Highgate Infirmary. The nurses will be of Nightingale training. Was it sensible to have such a large hospital, after all the late Sir J. Y. Simpson has written?

Scarlet-fever, according to Dr. G. Johnson, is sometimes propagated by means of linen sent to laundresses to wash. It is, therefore, safer to wash our clothes at home. But, then, must we not get scarlatina at some period of our lives? Why not when we are young, and can be more easily spared if we die?

The Anatomy Act gives hospital authorities the power to make a *post-mortem* examination, provided no objection is offered by the relatives of the deceased.

Horseflesh is said to sell for ninepence to a shilling a pound in Paris just now. After all, why is it that our poor people, who so seldom get meat, do not occasionally get a little of what seems to be a palatable and wholesome kind of food. But, then, poor cats would complain as they consume boiled horses to a great extent.

A meeting of the Fellows of the Royal College of Surgeons in Ireland will be held on Thursday, the 3rd November, at one o'clock, pursuant to the provisions of the Supplemental Charter, to elect a Member of Council in room of Dr. Barker, resigned. The ballot will close at Three o'clock, when the scrutiny will immediately take place. Fellows who may desire to have their names printed on the lists of Candidates for the office are requested to signify their wish, by letter, to the Registrar of the College, on or before Saturday, 29th October.

In the Manchester Medical Society on October 5th, Dr. Bradley mentioned a case of rupture of the gall bladder. Death occurred in six hours, and pus and bile were found in the peritoneal cavity. Dr. Simpson related a case of tubercles in the cerebellum, in a lad aged fourteen. There was palsy of the internal rectus of left eye. He had want of co-ordinating power in walking. At the *post-mortem* examination a little lymph was found about the optic commissure, the whole brain substance softened, particularly at the base. Both cerebellar lobes contained numerous yellow masses of tubercle from a pea to a marble in size. No tubercle was found in any other part of brain or other organ. Dr. Simpson also gave the case of a girl, aged nine, with hydatid tumour of the liver. The tumour was the size of the fist; and a small quantity of fluid was withdrawn by a subcutaneous syringe. A slight peritonitis followed, but the cyst disappeared. Would it not have done as well if the cyst had burst of its own accord into the peritoneum?

SCOTLAND.

University of Edinburgh.—Lady Amberley having offered a scholarship of the yearly value of £50, tenable for three years, to the lady who should pass most successfully the medical preliminary examinations in arts held last week, the examiners have declared Miss Emily Bovill to be the successful competitor. Four other ladies presented themselves, and passed the board.

Royal College of Surgeons.—Dr. Andrew Wood has been re-elected representative of the College in the General Medical Council.

We are glad to learn that an effort is being made to complete the memorial in the University of Edinburgh, begun some years ago, to the late distinguished Professor Goodsir, and which is to take the form of a scholarship in anatomy. £600 have already been subscribed, and a further sum is still required. This amount it is confidently expected will speedily be realised, and we trust intending subscribers will remember the adage, *bis dat qui cito dat.*

Correspondence.

THE PROFESSION AND OURSELVES.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,— Whilst the Bill lately introduced by Government occupied the attention of legislators and others enthusiastic on the subject of Medical Reform, I dared not presume to express an opinion on a question of such vital importance, and one whose solution seemed to puzzle the wisest legislative intelligence of the day. It has, for the present at all events, been laid aside, and Medical periodicals have ceased to be monopolized by correspondents whose theories regarding professional abuses, and their proposed remedies, were as numerous as they were dissimilar and impracticable. I therefore, albeit with some hesitation, crave a corner of your journal, at every juncture so ready to serve our profession, in order to call the attention of your readers to the fact that it is only within later years that the members of our profession saw that there was a necessity for parliamentary interference in order to preserve, or rather, in reality, to reform the pristine dignity of their art.

'Tis strange that advancing science has failed in itself to maintain the *status* of medicine, while, at the same time she has so steadily and rapidly added to the accomplishments of every branch of her extensive domain, and thereby increased her utility to mankind; there is no profession now whose scientific achievements adds an equal number of brilliant gems to the coronet of science as does ours; none which has sent forth a greater army of illustrious intellects to the battlefields of philosophical inquiry, and none whose labourers have alike reaped the golden harvest of retarding the temporal victories of death, and alleviating the earthly trials of suffering humanity. Notwithstanding, Sir, we cannot shut our eyes to the fact that nevertheless the members of our body have in a manner deteriorated in social regard; whilst the Bar, Church, Army, and Engineers still points to the colours under which they respectively serve as pathognomonic insignia of "the gentleman;" the time has, I fear, gone by when the "professional stamp" of medicine or surgery was sufficient of itself "to mark the man." We now see the dire necessity of obtaining authoritative means to retrieve what we ourselves should have year by year maintained—the prestige of "the Profession and Ourselves."

To whom is this deterioration due? To the Licensing Corporations who are the educational representatives of the Profession, or to ourselves? Can the blame be laid solely at the doors of the former? Can the fault be alone ascribed to their monetary covetousness, to the apathy of examiners, to imperfect curriculums, or to the facile obtaining of their licenses? No, Sir! Had medical gentlemen (as they ought *facile princeps* ever to have been) maintained collectively that they were *per homines honestissimos* medical reform should never have been required; had they upheld their dignity before the world at large, not by paltry, though perhaps loud, declamations regarding "professional etiquette" and "professional status," but by endeavouring to follow more accurately the example which the great Physician Himself left us in the very dawning of modern physic, we should have preserved a prestige in Society as untarnished, as our scientific reputation is unsurpassed. I should be far from being understood to say that the arduous and self-sacrificing duties which ever and anon devolve upon the medical practitioner have not been nobly undertaken and as nobly accomplished; I should be far from speaking disrespectfully of the very large majority of our body who are ornaments to any society they may move in; gentlemen, in the true sense of the word, submissive and inobstrusive, without being servile to those superior to them in learning or position, affable to their equals, kind and forbearing to their inferiors, and courteous to all; gentle to those in suffering—unmindful whether they be poor and rich; peaceable and forgiving towards each other and the public; always making allowance for an erring or less fortunate brother; unostentatious, ready ever to throw lustre on the Profession by endeavouring to raise that brother, even if a rival, in public estimation, rather than add the slightest iota to his degradation by word or deed; and besides, scholars, not only in the theory and practice of physic and surgery, but accomplished forsooth in the more general branches of science and erudition which assist professional study and refine the mind. What I

mean to convey, Sir, is this, that the exceptions to the rule are getting by far too numerous. The profession should show its distaste for anything ungentlemanlike or unkind, its abhorrence of professional squabbles, which tend most materially to prostitute its fair fame and its love of the refined; we should show the public that ignorance we would not tolerate in any member of our ranks, but that we required a high standard of proficiency in both general and special education, and that we not only scouted "shady diplomas," but any members of our body who aided in their being granted. Till we act with more unity, it will fail us to keep our profession as it ought, "διχθαδίας Κηρας φερέμεν θανάτοιο τέλοσδε" till then the uneducated and unstrung will be found gaining access to our ranks; then, and not till then, will the "bone-setter," and the "cancer-curer" be exterminated; then, and not until the injunctions of "Medical Ethics" and professional unity are more strictly observed, shall we succeed in *reforming* "the Profession and Ourselves."

Please accept my individual thanks for the services rendered the profession by your widely circulated organ, and the scientific assistance it records to those who, though qualified, are "Students still."

I am Sir,

Your obedient servant,

FRANCIS E. CLARKE, M.B.

Oughterard, Galway, October 19th, 1870.

CONTAGIOUS DISEASES.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In this week's number of the MEDICAL PRESS, there is a report of the Chief Commissioner of the Police to the Board of Admiralty, on the operation of the Contagious Diseases' Acts in Plymouth and Devonport districts.

If the numbers are correct, and I suppose they are so, as much as could be ascertained, there is an apparent improvement in that district, with the exception of Portsmouth, where the percentage of the soldiers treated for venereal diseases has not much altered, being in 1865, 19·83 per cent., in 1869, 19·81 per cent., showing at all events, that there the police system did not do much good, although we know that a new broom sweeps clean, so I think we must still wait before giving a decided opinion and accept the police system even in garrison towns.

The Report shows also that 49,389 women free from disease had wantonly been examined during these five years. Now, Sir, what excuse can be made for such a system, by what right were these 49,389 harmless women subjected to such a degrading ordeal, I am not astonished that 2,538 girls left the district, and where did they go? The Report says, it is believed that they have returned to their friends.

This is only, I am afraid, a *police illusion*, and very contrary to what we know of human nature and of the conduct of these unfortunate girls, who generally prefer every kind of privation and misery rather than go back to the locality where once they were innocent and blameless.

As for the clandestine prostitution having diminished, I rather suspect that it will be found by-and-by that it will be in that district, as in Vienna and Paris, and every town where this revolting police system is carried on, and where private prostitution is every year on the increase.

I think I read the greatest part of what has been written on the subject, and I am still of the opinion that nothing will tend so much to diminish prostitution as to put every *obstacle imaginable* in the way of the men who frequent these unfortunate women, such as medical inspections and the police regulations, which I mention in my former letters, they may be thought harsh and arbitrary, but they are not more so than those adopted against women, and we must consider that the men would become the objects of it of their own accord, and without being forced to it by any of the circumstances which influence these poor unfortunate women, such as seduction first, then desertion, misery, want of work, and starvation.

I have the honour, &c.,

E. L.

BABY-FARMING.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I entirely agree with the spirit of Dr. Waring-Curran's remarks in your journal to day. The feeling of the public has been all wrong with reference to the crimes of seduction and infanticide, the seducer is regarded too leniently, and in some circles, with shame be it said, his profligacy is considered a feather in his cap! The poor victim bears all the blame, as well as all the sorrow and hardship of her fall, until driven to desperation she adds child-murder to the catalogue of her wrong doings, then Society feeling repentant at its harshness, begs the law to withold its hand; thus infanticide goes unpunished, so seduction and baby-farming and child-murder thrive.

The only way to stop all this, at least to check the evil in some measure, is to make seduction a crime. A society for the "protection of infant life" is talked of, it is to be hoped that no half-measures will be attempted; such a society may do much good if in earnest, it should hunt up and expose the "gentlemen-scoundrels," who are the pests of society, a few exposures of names would strike terror into their midst, for although they are well known in their own set, they manage to keep a fair side of their character to the public view, and to be "black-balled" by a conviction, which would ruin their social prospects. This is the most terrible deterrent that can be held out to them. The following paragraph is from the *Pall Mall Gazette*, and it is so much in accordance with my own views on this subject, that I will conclude my letter with the extract.

"The confession of the wretched woman Margaret Waters discloses a state of affairs sufficiently humiliating to our pride of civilization; but its disclosures, supposing the whole of them to have been made public, have not involved the aristocracy in that disgrace and scandal which the readers of the 'penny dreadfuls' were led fondly to expect. The stories of handkerchief marked with coronets and aristocratic female names having been found among Margaret Waters' effects have melted into thin air. There has been a notable absence of the wicked earl. The clientèle of Margaret Waters, so far as it has been at present investigated, appears to have paused at the level of the upper middle class. 'Among her clients,' we are informed, were a chancery barrister, a well-known gentleman in another profession, and a gentleman whose name was very much before the public in connection with another matter. The two latter gentlemen will, we imagine, have little difficulty in maintaining their incognito under this description."

I am, Sir, yours obediently,

October 19th. PRUDENTIA ET JUSTITIA.

AMMONIA IN HYDROPHOBIA.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I have reason to think that ammonia will cure the affection or disease, called water-fear or hydrophobia. The poison appears to act chiefly upon the nervous system, upon which ammonia has a powerful effect. I would rub the throat and chest with a strong solution, and also throw it up the rectum, and if possible give it by the mouth. I think ammonia will be serviceable in "Tetanus, &c." I had a case of this latter at Maderia in 1831, from an accident. The officer, a middy of nineteen, was thrown from a pony and received several scratches, superficial tetanus succeeded, his brother was one of my assistants; I held a consultation, and opium was our dependence; I applied ammonia to the nose, and it appeared to relieve the spasms, but it did not appear to me then to have any particular influence; consideration and reflection has induced me to believe that ammonia will prove serviceable, at all events it is worth trying.

I throw out the suggestion, and hope and trust effectually,

Yours, &c.,

ALEXANDER LANE, M.D., R.N.

Clun Salop, October, 1870.

THE VICTIMS TO SEDUCTION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Observing a letter in your last issue on the subject of "Punishing the Seducer," I wish to make some comment on it, which may startle a little those who, like many clergy, we hear occasionally denouncing "the monster" with all the earnestness of truth, indulge in the flowery rapsody of your correspondent, who has discovered "the unmarried well-looking squire ever on the *qui vive* to betray and to destroy?" If such an animal exists, and I conclude your fervid correspondent supposes that every village must possess a few, he certainly should be caged

and exposed; but though the theory may be very plausible, that "we all know the seducer—no town or country village," according to the writer, "is without him," and that "the root of the evil exists with the men," I do not by any means allow it; or, that though passion may, no doubt, warp and overpower man's better nature and feelings, can I agree with your correspondent that the maneater, in such a shape as he has depicted, lurks about our towns and villages. Nor can I at all admit, in this country at all events, the truth of the proposition, "that all this time Seducer, Esq., is at large, boasting, perhaps, over his exploits, and hailed by his admirers as a hero." No doubt, to a great extent, this is the popular view, this looks very like what might be the case; but unfortunately for the denouncers of "the squire who is ever on the *qui vive*," the theory is but a theory, and exists with but a few exceptions only in the excited imaginations of old ladies, good natured clergy, and some like your frothy correspondent, who hastily have recourse to anathematizing an imaginary monster. Let us view the subject calmly and practically. As I have been connected with an institution which admits many hundreds of these "victims" annually, I may claim some attention, and avert from our sex some of the execrations that have been invoked on the "hero," "who is fawned on by his friends, and enthusiastically received into society with open arms," so says your correspondent, conferring certainly not a very graceful compliment on his neighbours, or the country which supports him.

The practical fact is, that the chief seducers are women and dress — woman is still the Eve, even of her own sex, it may seem very hard to say so—and may seem very contrary to all her attributes of kindness and solicitude, but such is the fact, and such can be proved beyond question in very numerous instances.

The tale is often repeated, I might say in nine cases out of twelve, a girl living at home with her family, or earning her bread honestly, through perhaps hardly, meets with a female companion, perhaps by chance, perhaps in the course of her business or trade; this companion has herself fallen; directly she sets to undermine the happiness of her friend, *she* instils the poison, shows her that her trade or her business is too hard, that confinement is irksome, and that she may easily escape it. Incredible as it may appear, she often makes the preliminary arrangement for her destruction, and lures her hitherto virtuous companion to a place of preconcerted meeting, or to some concourse where she will be sure to fall; nay, more, she will share the spoil of her ruin.

This is the great cause of the fall of many young servants and work girls, specially where congregated together; one or two black sheep will do incalculable mischief, and each fresh victim who falls becomes in turn a seducer, and that of the most dangerous and insidious character. No doubt the man is the instrument, and those are easily to be found who are but too prone to indulge their licentious habits. While I join in reprobating, I must absolve him from the more detestable crime of silently and assiduously undermining the moral difficulties in the unhappy creatures who fall. "Evil communications corrupt good manners," and a young girl once fallen, *as she may long be undetected*, becomes one of the most subtle elements in the destruction of her sex.

Again, it is by no means very unusual, and admitted by many who have fallen, that they have left home and deliberately went on the town *proprio motu*, sometimes from the influence of recklessness; sometimes, and not unfrequently, from their homes being rendered unhappy by a stepmother, or from some domestic difference, they determine this course.

The love of dress is a most powerful influence—which the present fashion seems specially to favour, from its style, and from the opportunities afforded of showing off the natural endowments of hair, good figure, good feet, &c.; the facility for imitating and appearing "the lady," offers great and irresistible attractions.

In neither of these circumstances does the monster "Seducer, Esq.," or "the squire on the constant *qui vive*," play any conspicuous part.

Let us take another source of destruction, where woman is still the instrument—such cases as these actually have come within my knowledge during the last few months. A virtuous country girl living at home is induced by a neighbouring, and perhaps undetected, girl to rob her father of his savings of 10*l.* and 12*l.* to go to America. They proceed to Dublin; the inducer brings the innocent girl to a lodging of what turns out doubtful character; she takes care of the stolen sum; they go to bed—but by morning the inducer has disappeared, taking her victim's money and even her clothes; her fall is soon secured by the inmates, her own sex. She becomes a mother and is logged for life.

Another young girl of seventeen robs her father of 30*l.*; her inducer, a girl, accompanies her to Liverpool, takes the money to secure their passage and berths for America, tells the as yet innocent victim to wait for her in the street, where, of course, she is left, friendless, pennyless, and victimized. She cannot return home—and falls.

Here, the seducer, man, was not present to exercise his *qui vive*; woman sacrificed one of her own sex for her selfish purposes.

Let us take examples of another kind, where the greatest and most affectionate efforts have been made to prevent or reclaim this unhappy tendency.

A young girl of seventeen was taken back by her parents, well-to-do people, who found her on the town; fearing her again returning, till suitable arrangements were made they locked her in her bed room without any clothing but her chemise, nevertheless she escaped in this condition out of the window, and, with a few shillings she had secreted, got dress sufficient in a neighbouring dealers as enabled her to return to her associates.

Another girl, the daughter of respectable people, was induced to go home. She was allowed no money in the hope that she might remain; but she escaped, and sold her hair to a fashionable hairdresser for such a price as enabled her to refit and launch out again.

Here, there was no seducer, nor inducement held out to continue an evil course, but a home was tenderly afforded by parents in rather respectable ranks of life.

What is to be said about married women who leave their husbands or deceive them?

What about widows who not unfrequently fall? What about mother and daughter? Not long since a mother had three daughters at this institution; at present a mother and daughter are inmates. There was no "silken woven web here to entangle the victims." The question is not one to be disussed theoretically, nor by "blowing off" against the gentleman "well to do in the world—gifted in the art of pleasing, and blessed by nature with good personal appearance." This may be a very good stage property for a heartless deceiver, but the frequent existence of this monster is, I conceive, eminently theoretical, and unsubstantial; and "that such a man is fawned on by his friends," is simply, as my experience goes, preposterous, and certainly with us, I am happy to say, is untrue.

I do not for a moment suppose that there are not very bad and licentious men, and men who are, to a great extent, the slaves of their passions; but that these are the men that cause the fall of so many of the opposite sex I deny; the fact is there is a moral want. There is a *mal au fond* with some girls, often manifesting itself when they are very young, that we cannot well explain. How is it otherwise that there will be five daughters, one will go wrong and nothing will reclaim her, and the four could not be induced to err; or, a virtuous mother will have an only daughter, and yet she will fall and be irreclaimable. How is it that so few, indeed, I doubt if any, cases of real and heartfelt reformation occur, and that even after years of restraint they will again lapse and become more corrupt than ever. There is a moral defect which, much as it may be lamented, is very difficult to combat, and the same deficiency which led to their early fall still swerves them from virtue's path, when to all appearance some hope may have been awakened as to their security.

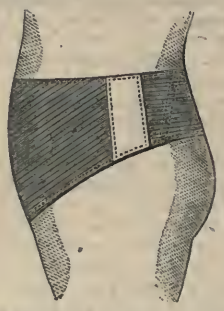
The great want is education—"Just as the twig is bent the tree's inclined." No doubt, "cæteris paribus," the better the education the greater is the security from falling into the ways of degradation, or giving way to the temptations of idleness—sloth and dress. Yet there is doubtless an inexplicable leaven which ferments with some to their destruction, while others are so guarded by the sanctity of modesty, that even your correspondent's incarnation of the Seducer Esq., "though graced with polished manners and fine parts," would find thoroughly and certainly impregnable.

Yours, &c.,
"VERITAS."

The Berlin Society for Help to the Wounded dispatched a few days ago an ambulance from the capital of Prussia to Pont-à-Mousson, under the direction of Professor Virchow. They carry warm clothing for the troops, medicines, and disnfecting agents.

MILLER'S IMPROVED ABDOMINAL BELT.

We have inspected a new belt for ladies, devised by Mr. Miller of Leicester square, of which the following engraving will convey an accurate idea :—



The principal advantage is, that the front elastic being woven diagonally, there is no necessity for extra lifts from below. The belt is, therefore, much lighter in weight and consequently cooler in wear, and we fancy that when once tried, it will be preferred by ladies to any other form.

Medical News.

The Midland Medical Society.—At the opening of the session in the Midland Institute, Birmingham, on Wednesday, the Council Report told unmistakably of increased usefulness and prosperity. Nineteen Fellows were added during the past session, and the resignations had never been so few. It was admitted on all hands that the retiring president, Mr. S. A. Bindley, had powerfully contributed to the satisfactory state of things. Dr. Keyworth has been elected his successor. Mr. J. St. S. Wilders, the senior secretary, has retired, after holding the office very ably for five years. Dr. Sawyer and Mr. Slingsby Mann are now the secretaries of the Society.

The Cholera in St. Petersburg.—The *Golos* states that, up to Sept. 11th, there were 107 cholera patients in the Civil Hospital. From Sept. 11th to the 18th, the number increased to 151 ; from the 18th to the 24th it rose to 185. Out of these patients, 52 recovered, 89 died, and 44 were improving.

Dr. Wm. Johnson Smith, of Weymouth, has been placed on the Commission of the Peace for the county of Dorset.

Royal College of Surgeons in Ireland.—A vacancy has been created in the Council of the Royal College of Surgeons in Ireland by the resignation of Dr. James Barker, whose health, we regret to learn, obliges him to withdraw from the collegiate administration. The election of his successor is fixed for the 3rd of November, and several candidates are declared as likely to compete for the position. Dr. Mapother, Professor of Physiology in the College, and a former Councillor, and Dr. Robert Smith, Professor of Surgery in Trinity College, have announced their candidature, and in addition to these, Dr. Darby, President of the Irish Medical Association, and Dr. Kirkpatrick, Medical Officer of the North Dublin Union, are mentioned as probable claimants.

Garibaldi's Areopagus.—Garibaldi proposes to unite the civilized world in one grand republic under the government of the great powers of America and Europe, with Nice for its capital, and for its constitution—1st. War between nations an impossibility ; 2nd. All differences to be referred to the Areopagus at Nice for pacific adjudication.

Cholera.—From Zanzibar this disease appears to have spread to other places. Mostly in the caravan routes.

Small-Pox.—We hear that this disease is prevalent at Heunslow, and some other places. In Paris it is said by a correspondent to be about the same as before the siege. Some papers say it prevails at Genoa, and in other Italian towns.

Scarlet Fever.—This disease still increases in London. A letter from Edinburgh speaks of an epidemic there also.

Registration of Disease, and Poor-law Medical Reform.—The following propositions have been submitted to the President of the Poor-law Board, by a deputation from the Poor-law Medical Officers' Association, and the British Medical Association. 1. That medical relief and the sanitary care of the poorer classes, with which the registration of disease is indissolubly connected, are questions which ought not to be treated independently of each other, and that they require to be settled on improved principles by a connected and consistent scheme of legislation. 2. That with regard to medical relief under the Poor-law, it is desirable to establish in England and Wales a system of district dispensaries, similar in many respects to that which has been for some years in operation in Ireland (of which a system of registration of disease forms an important part), with great benefit not only to the sick poor, but also to the public health and the control of pauperism ; and that in every district medicine and other remedial appliances be provided under inspection at the cost of the local authorities. 3. That in order to secure efficient treatment of the sick poor, and adequate remuneration to their medical attendants, it is important that the area and population of medical districts and the salaries of the medical officers be resettled as far as practicable on a uniform basis, by a code of regulations or general orders having statutory force ; no local exemptions being permitted without the sanction of the central authority. 4. That the position, the tenure of office, the qualifications, and the duties of the medical officers be determined and regulated by the same code of regulations, and that the salaries of the medical officers be paid either wholly out of the Consolidated Fund, or partly from that Fund, and partly from a county rate. 5. That a general registration of disease be instituted, and that all new cases of sickness, &c., coming under treatment at the public cost, whether in union districts and workhouses or in public and charitable institutions, be returned every week, or oftener in times of pestilence (according to a uniform system of nomenclature and record), by the resident medical officers of such institutions and by the Poor-law medical officer, who should be fairly remunerated for this addition to their labours. 6. That the above returns of disease be collected and revised by a registration medical officer, or by a medical officer of health, acting as such in every superintendent registrar's district or group of districts, so as to constitute a register for the use of the local authorities, and that a copy thereof be forwarded at stated intervals to the central authority. 7. That certain preventive duties be performed by the Poor-law medical officers as deputy health officers, and that they be paid for such sanitary duties, on a scale to be determined, by the central authority. 8. That in order to rectify and prevent abuses, the medical and sanitary care of the poor in districts and workhouses be subjected to periodical inspection, either by the proposed chief officers of health debarred from private practice, or by medical inspectors under the central authority, or by both. 9. That in any re-arrangement of our sanitary organisation, resulting from the inquiry of the Royal Sanitary Commission, it is desirable that the foregoing propositions be embodied.

The King and Queen's College of Physicians in Ireland.—At the annual stated meeting, held on the 18th instant, the following officers were elected for the ensuing year :—President—Dr. Banks ; Censors—Dr. Gordon, V.P., Dr. Ringland, Dr. Hayden, Dr. Walter Smith ; Treasurer—Dr. Dwyer ; Examiners in Midwifery—Dr. Atthill, Dr. Johnston ; Professor of Medical Jurisprudence—Mr. Robert Travers ; Registrar—Dr. James Little.

Royal College of Surgeons of England.—The following is an abstract of the unconfirmed minutes of the last meeting of the Council of the College, on the 13th instant :—The Secretary was directed to inform Mr. Edwin Lowe of his removal from being a Member, owing to his having been convicted of felony, and to call upon him to return his diploma, as required by the by-laws, and, in compliance with the requirements of the Medical Act, to inform Dr. Hawkins of the fact.—A letter was read from Mr. E. Deas-Thomson, thanking the Council for the recognition of the Sydney Infirmary and Medical School ; whereupon a protest was read from Fellows and Members residing in Sydney against the recognition of such institution. The document was referred to the Court of Examiners for consideration.—A memorial was read from Mr. Thomas Monk, late Mayor of Preston, removed in 1858 from being a Member, in consequence of his having been convicted of forgery, and requesting to be restored to the Membership of the College. An answer was ordered to be sent, stating that the Council had not the power to entertain the request. —Letters were read from Sir William Fergusson, Bart., the President of the College, and Mr. Quain resigning their appointments as examiners, and from Mr. Skey declining again

to be put in nomination for the office of examiner; a letter from Mr. Curling was also read, declining, for reasons stated by him, at present to be put in nomination for the office of member of the Court of Examiners.—The following Fellows of the College were nominated for the office of examiner:—Messrs. G. V. Ellis and J. Marshall, of University College; Messrs. W. S. Savory, G. W. Callender, and H. Power, of St. Bartholomew's Hospital; Mr. Timothy Holmes, of St. George's Hospital; and Mr. J. Hutchinson, of the London Hospital. The President explained that, in accordance with the charter and by-laws, the choice of the Council would not be restricted to the Fellows nominated.

NOTICES TO CORRESPONDENTS.

☞ Correspondents requiring a reply in this column, are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Out of thousands of such persons it may cause enquiries so signed, on very various subjects much confusion.

We must also request our Correspondents to write only on one side of the paper and in *legible* characters. We are often compelled to consign MSS. to the waste-paper-basket merely because it is illegible.

Correspondents not answered in the current Number are requested to look to the Notices the following week.

A Traveller.—We recommend *Punch's* statement to you as follows:—"The climate of Madagascar has lately been subjected to a searching chemical analysis by three of the first physicians of the day; the result is most gratifying to every well-wisher of humanity. It is composed of unequal parts of oxygen, ozone, common salt, and the breath of popular app ause, and may be had in bottles for exportation."

Disinfectant.—Mr. Gamgee's new preparation is called chloralum, to distinguish it from chloral (hydrate), it is now proposed to write it as it is pronounced, chlor-alum. It might as well have been called alumchlor.

An Occasional Reader.—If you were a regular reader you would not need the information. The questions have been more thoroughly discussed in our colums than in any periodical.

Mr Brooks.—Our "Student's Number" may be obtained by you in Dublin at Messrs. Moffat, 6 D'Olier street.

G.—The *Medical Temperance Journal* is published by Tweedie, 337 Strand. The article you referred to from us appeared in their April Number, page 140.

Placebo.—Thanks. Your communications and everything coming from you will receive our attention.

MacMahon's Wound.—Will our Correspondent, just returned from Sedan, who writes to us on the Marshal's wound, be good enough to call at our London office if still in town.

C. G. A., Trowbridge.—The work is by Dr. Thudichum. He it is who talks about "Natural Tea-wine."

Dr. A.—With pleasure; but to ensure early insertion be brief, since the topic has been discussed already.

M.D., Manchester.—Accept our best thanks. The Press goes to the gentleman in the future you name. We want more friends like you to get us new subscribers in the Provioces.

Dr. Smith.—The coroner had no right to ignore medical testimony in the case. Write at once to the Home Secretary and obtain an order for exhuming the body and re-investigating the case, which must be through the coroner if he be not superseded.

Dr. Hind.—The case would probably be interesting.

J. G.—The paper has already appeared.

Clinical.—See our "Current Topics" last week.

A. J.—The extracts or abstracts would be inserted if sent.

Dr. Wakley.—The specimen sent has been subjected to careful analysis, and is found to be pure.

Juvenis.—We do not prescribe; consult your family attendant.

To the Editor of "The Medical Press and Circular."

Sir,—Having seen in your issue of October 12th, an account of a "Respirator invented by Dr. Waring-Curran," would you kindly inform me where such may be obtained, and its cost.

I am, your obedient Servant,
L.R.C.S.I., L.Q. and Q. Coll. Phys.

To the Editor of "The Medical Press and Circular."

Sir,—The Medical Officer's Superannuation Bill is hardly worthy of the name; left at the discretion of the Guardians (carried in the House by a majority of a 101), just like a poor man whose labour is done—and past age—applies for relief, and is probably, after a good deal of hemming, &c., granted 2/6 per week. This could never have been the meaning of Dr. Brady's Superannuation Bill!! to lower a man to such a status. Do endeavour to remedy this evil by your widely circulated Journal.

I am, dear Sir,
Your very obedient Servant.
October 19th, 1870. A Constant Reader.

The London Societies.—The following are the times of Meeting and the Papers announced to be read during the ensuing week:—

Hunterian, at 8 P.M., Wednesday 26th—Adjourned discussion on Mr. Bryant's Paper, "On Pyæmia."

Clinical, at 8½ P.M., Friday 28th—Dr. Sutton, "On two Cases of Scurvy," and Mr. Carter, "On Cases of Optic Neuritis."

Queckett Microscopical, at 8 P.M.—"On the Microscopical characters of Cannel Coal." by Mr. Slade.

Medical, at 8 P.M., Monday 31st.—Ordinary Meeting.

Pathological, at 8 P.M., Tuesday, November 1st.—Ordinary Meeting.

Received from Dr. Luther, communications "Upon the Use of Aconite in Loss of Voice, and in Veterinary Medicine." Dr. Francis McEvoy, "Case of Fracture of Thigh, with Punctured Bladder Recovery."

VACANCIES.

Bradford Infirmary.—Resident Medical Officer. Salary £100, with board.

Morpeth Dispensary.—House-Surgeon. Salary £100, with residence.

Eastern Dispensary, London.—Resident Medical Officer. Salary £100, with residence.

APPOINTMENTS.

Anderson, J., L.R.C.P.Ed., Surgeon to the Inveraray Prison.

Ashe, Isaac, M.B. and C.M., Trin. Coll., Dub., Consulting and Visiting Physician to the Donegal Lunatic Asylum, Letterkenny.

Bellis, E., L.K.Q.C.P.I., L.R.C.S.I., Demonstrator of Anatomy in the Ledwich School of Medicine, Dublin.

Cumberbatch, E., Mr. A. J. Hogg, Mr. P. B. Stoney, and Mr. A. Young, House-Surgeons to St. Bartholomew's Hospital.

Dunlop, W., L.R.C.P.Ed., Medical Officer to the Letterkenny Union.

Fiddes, David, M.D., Augus Fraser, M.D., and John R. Traill, M.D., Examiners for Gradation in Medicine at the University of Aberdeen.

Goude, H., Resident Obstetric Assistant at St. Bartholomew's Hospital.

Greene, R., L.R.C.P.Ed., Assistant Medical Officer to the Sussex Lunatic Asylum.

Ilott, J. J., Resident Medical Officer at the Whitechapel Union Workhouse.

Lloyd, A. E., M.R.C.S., House-Surgeon to the North Riding Infirmary.

Merson, J., A.M. C.M., M.B., Assistant Medical Officer at the Northumberland Lunatic Asylum, Cottingwood, Morpeth.

Norton, G. E., M.R.C.S., Chloroformist to the Middlesex Hospital.

Owen, A. L., B.A., Medical Officer to the Royal Portsmouth Hospital.

Richmond, Sylvester, M.D., M.R.C.S., Surgeon to the Northallerton Gaol.

Marriages.

Sinclair—Hamilton.—On the 1st ult., at Simla (from the house of Staff Surgeon T. M. Bleckly, M.A., M.D., LL.B., brother-in-law of the bride), Surgeon Ed. W. M. Sinclair, 20th Brigade Royal Artillery, to Anna Catherine, daughter of Andrew Hamilton, Esq., Dublin.

Smith—Hope.—On the 19th inst., at All Saints, Knightsbridge, Heywood Smith, M.A., M.B., of Portugal street, Grosvenor square, son of Dr. Protheroe Smith, to Emily Anne Gertrude, third daughter of the late Lieut. the Hon. James Hope and Lady Mary Hope.

Birth.

Clarke.—On the 18th of September, at Well Park, Oughterard, Galway, the wife of F. E. Clarke, M.B., of a son.

Deaths.

Coleman.—On the 11th inst., at Carlsruhe, Germany, Wm. St. John Coleman, L.R.C.P.Ed., of Miltown-Malbay, Co. Clare, aged 29.

Dawson.—On the 11th inst., at Portobello, Wm. O. Dawson, L.R.C.P.

Dewar.—On the 12th inst., at Little Dene, Burntisland, Andrew Dewar, L.R.C.S.Ed., late of Dunfermline, aged 78.

Henderson.—On the 13th inst., Wm. Henderson, M.D., of Rose terrace, Perth, aged 86.

Hughes.—On the 6th ult., at Corwen, W. E. Hughes, M.R.C.S., aged 32.

Paley.—On the 19th inst., at Addison Gerdens, North Kensington, James Paley, M.D., in the 52nd year of his age.

The Professional Calendar;

OR, WEEKLY REGISTER FOR GENTLEMEN REQUIRING ASSISTANTS, AND FOR ASSISTANTS SEEKING APPOINTMENTS.

A Qualified Surgeon and Accoucheur wants a Situation. Salary not so much an object as a comfortable home; good references.—Address, V. A., Medical, "General Advertiser," Dublin.

An Assistant, of long experience in Compounding and Medical Hall Practice, is open to an engagement; no objection to the country; excellent reference and testimonials.—Address, V. B. R., Medical, "General Advertiser" Office, Dublin.

Wanted, an Out-door qualified Assistant. Salary £100 per annum, with furnished apartments, gas, coal, and attendance. Must be able to speak Welsh.—Apply, E. J., Ty-mawr, Aberdare.

Wanted, by a Practitioner in China, a fully qualified Gentleman, to Assist in the Practice, on terms which may be learnt by application to Dakin Brothers, 2 and 3, Creechurch lane, Leadenhall street, London.

Wanted, an Out-door Assistant, to keep the books, dispense, visit, and attend midwifery. He must not be under 26 years of age, able to ride, and produce unexceptionable testimonials.—Apply, A. B., Post-office, Atherstone.

Wanted, by the Advertiser, aged 30, single, sine diploma, a Re-engagement as Out-door Assistant. Satisfactory references London or a town preferred. Address, Alpha M., General Post office, Halifax, Yorkshire.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 2, 1870.

CONTENTS.

Original Communications.

FEIGNED INSANITY.

By J. H. BALFOUR-BROWNE, Esq., Barrister-at-Law.

(*Continued from page* 303.)

4. *Mania.*—There is a method in all madness! But the method which is in mania, and is the result of the regular laws of unhealthy action, differs widely from the method which is imposed upon the incoherence of simulated madness by thought. The very close observation of mental disease by one of a sufficiently powerful intellect thoroughly to understand and appreciate its manifestations, might lead to such a deceptive reproduction of a number of symptoms as to puzzle many individuals, not trained to distinguish between very fine shades of expression, as indicative of varying springs of action. And the tendency which the human mind has to make real and earnest what may be begun in fun and frolic, or may be undertaken with the sole object of deceiving, is one thing which tends to complicate the investigation. Good acting will often give a shape to life. The story is told of Mrs. Siddons, that on one occasion after a successful representation of *Lady Macbeth*, she was found wandering about the passages which lie beneath and behind the stage, wringing her hands and muttering, "I can't get out,"—so does the ideal become the real! It is the history of the making of all things!

But it is to be remembered that those who have occasion to feign insanity are not those who are qualified to give a faithful representation of the whole life of an individual under the influence of mental disease, and that their opportunities have not been such as to enable them to become intimately acquainted with the whole of the manifestations of the abnormal state. And, owing to these circumstances, the difficulty of feigning insanity so as to deceive a physician well acquainted with the disease, is very great, so great, indeed, that Dr. Conolly affirms—"That he can hardly imagine a case which would be proof against an efficient system of observation."*

One observation which is of practical importance to those who are desirous of distinguishing the real from the imitated form of the disease is, that what the knowledge of the impostor lacks in extent, he invariably tries to compensate by the intensity of his acting. He over-acts the few symptoms with which he is familiar, while he neglects many other symptoms that have considerable diagnostic value. Where, therefore, a considerable exacerbation of prominent symptoms occurs, in conjunction with the absence of less easily observed manifestations, it gives, at least, a high probability of imposture. Where, also, there is considerable variation of the symptoms in the presence of different individuals—*ex. gr.*, where in the presence of a medical man, known to be such, the symptoms are more carefully produced, while in the presence of others they are produced in such a rough-hewn shape, as is calculated to carry, through a witness, to the medical man, the presumption is in favour of feigning. In most cases effort can be detected in all the assumed ravings—the effort of argument, for it is always the impostor's desire to prove to persons, who are present, and may be observers, that he is really mad; and, owing to this circumstance, the endeavour is not unlikely to fail: for persons really insane are, not unfrequently, in the presence of a stranger, calmer and quieter than at other times. There is always some assertion in the ravings of one who only feigns insanity. The manifestations are all prominent. Many discrepancies are to be found in assumed insanity. Mania is, really, the brain working under such high pressure that its ordinary action is interfered with. But there is no dulling of any of the faculties. Friends are almost invariably recognised; names, dates, occurrences, and places are remembered. The senses seem to be somewhat more acute than they were in times past. The impostor not unfrequently endeavours to make assurance doubly sure, and introduces a few symptoms of dementia into the stratagem, and so he is discovered! In simulated insanity, the memory is often found to be defective: recent events with which the individual has been connected seem to be entirely forgotten, the impression of the malingerer being that silence is a stronghold. The real maniac almost invariably remembers all the events with which he was con-

* "Inquiry concerning the Indications of Insanity." P 467.

cerned, although his disease may cause considerable distortion of some of the facts. Through the madman's delusions and their manifestations there runs a thread, which gives a sort of order and method even to the chaos of his thought; through the manifestations of him who would feign insanity this order is wanting. It is like the difference between a building which time, even while she beautified from her rouge pot, with lichens, tears down with slow inexorable fingers, and a building which the malice of mankind has razed to the ground and left not one stone upon another. The one has the order which a God-made chaos must have; it is pregnant with an order which will be born—the other is a chaos aforethought!

In the vagaries of the madman, there is one invariable recurrence to the main drift of the delusion; in the impostor's delusions there is an increasing changeableness. There is an earnestness in the madman; he believes what he says for the most part. The earnestness in the man who imitates is only to produce a certain impression upon his audience. He has no affection for the shape of his delusion; he will alter it much and often to bring it more nearly to correspond with what he considers best suited to attain the end he has in view. In most cases a careful observer might trace a distinction corresponding to the above explanation in the mode of manifestation. The one —whose delusions are objectless—whose erroneous beliefs are ends in themselves, is unhesitating in their expression, his utterance is usually rapid, and his incoherence trips merrily from his tongue. The other, whose delusions are buoys to which he clings to save him from the waves of circumstance, whose erroneous beliefs are means to an end, takes time, he has to consider whether this will do under the circumstances; his style differs from that of the real madman, he hesitates, and his incoherence has the appearance of being studied. All these circumstances are calculated to show where certain manifestations have their roots —in the sad truth, disease—where in the sad untruth, a lie.

Not unfrequently much light will be thrown on the question of feigned or unfeigned (?) by the state of the affections and desires of the individual. Every thought a man thinks is shaped and fashioned in a mould of feeling. Thought is, as it were, the shape of a vessel; and feeling, as it were, the figuring and embossing, or painting, of the same. Thought, the skeleton; and feelings, the flesh and blood of a body. Now, in mania many of the most prominent features which marked the character are lost. As magicians could change gold to lead, so does this magician —disease—change love to hatred. Very often those persons that were loved best, while the individual was in health, are hated worst, when the individual is diseased. If suspicion is on the wing it alights upon some intimate friend, or near relation—home ties seem changed from blessings to curses; and a former affection seems to be reason good for hostility and war. There is no more promising symptom of a remission of the disease than a return of the rivers of the heart to their old courses. The man, who would feign insanity, invariably shows much animosity, but it is usually directed not against those who love him, and now weep for him; he sees disadvantage in alienating affection, so his wrath is directed against some one who formerly injured him. If the madman has a delusion concerning a conspiracy, his wife, or children, or friends, will be looked upon as the conspirators, and loathed in consequence. If the same man sees reason to feign such a delusion, other persons will usually be regarded in the light of his persecutors. But, not merely are the affections diverted from their objects in mania, but many things cut into a man's heart by habit seem to be erased. A man or woman of the most scrupulously, pure, and refined habits will, under the influence of this disease, become insensible to the common decencies of life. Words and actions utterly strange to the individual's whole life and character, are the ordinary expressions of their insane vitality. All those actions which are most filthy and horrible have been, and will be again and again, made use of with the view of inducing a belief in the genuiness of assumed insanity; but the entire change of character under the influence of the disease from what it was in health, is not likely to be counterfeited. It is said that in mania the pulse is usually more frequent than in health; but although it is reported that, owing to this circumstance alone Dr. Rush was convinced of the unfeignedness of the insanity in a certain case, we would not be inclined to place implicit reliance upon this symptom. The sphymograph might write a man down an impostor. We have already in another connection alluded to the importance of physiognomical diagnosis, and we would only add that each disease has a distinct face-symptom, an invariable type of expression, running through the transient shades which are dependant upon an ever varying train of thought. The impostor can't really feign that. In mania, too, there is generally discoverable a slight febrile action, and a peculiar odour of the skin. The want of sleep is a symptom which is useful in the diagnosis of genuine mania. The impostor cannot stave off that enemy long. His exertions and feigned excitement, and the anxiety as to the success of his scheme, all weary him, and after a day or two at most, he will fall into a deep quiet sleep. The maniac on the other hand passes days, and sometimes weeks, without any apparent necessity for sleep; and when sleep does come it is restless and unhealthy sleep. The shutting of the doors of sense allows you to look into the heart, as it were. The restlessness of health with a purpose, is very easily distinguished from the purposeless and animal-like motions of disease. The madman will show the same indifference with regard to food that he does with regard to sleep; the appetite of the sane man will often betray him. The insensibility of individuals labouring under mania to certain drugs, such as opium, is a test of some value. The dose which would send an impostor to sleep, however determined to resist its influence, would have little or no effect upon a person really suffering from this disease. The same remark applies to certain other medicines, as purgatives and emetics. It requires a larger dose of tartar emetic to produce its depressant effects upon a madman than it does upon a sane person. But not only is the body insensible to the ordinary effects of certain drugs, but some of the senses appear to be insensible in such a high degree to the ordinary effects of over-simulation. It is said that the madman can, eagle-like, look full in the sun's face, and thus insensibility, in certain cases, to cold, is a well-marked peculiarity.

The genesis of mania ought, in all doubtful cases, to be carefully inquired into. The preliminary symptoms of a genuine attack of mania are not likely to be simulated. Feigned mania begins suddenly! Where the insanity is real, many instances of strange and, at the time, unaccountable conduct will be remembered. The inquiry as to the occurrence of the disease, should also extend to circumstances which might have predisposed to its invasion. The habits of the individual, the health or disease of other members of the family, the inherited or acquired peculiarities of constitutions, the previous tendencies of the individual to the disease, the temperament of the individual and the moral and physical circumstances which surround him should be made the subject of diligent and intelligent inquiry. The irritability of temper of the real maniac differs from the grand showy outbursts of the impostor. This is, however, a symptom of less importance, and it is somewhat easy of imitation. The periodicity of the attacks which has been remarked in real mania, will not occur in the feigned disease.

5. *Partial Intellectual Mania—Monomania—Melancholia.*—It is much more difficult to feign partial insanity, than to feign what is called mania. In proportion to the difficulty is the rarity with which it is simulated. In partial intellectual mania, many of the symptoms are present, which characterize the general disease, yet in most cases they are not so obtrusive, and a more careful examination

has to be conducted, before the fact of the insanity discloses itself.

Epilepsy can be, and is feigned. Beggars live by fits, and one detected in the act, confessed that he had been taught the trick by his father, who studied the symptoms in a book.* Would there, we wonder, be primogeniture in the property in a fit? would it go to the heir or next of kin. A case of well simulated epilepsy is mentioned in Legrand de Saulle.† To show that there is sometimes a difficulty in distinguishing between the simulated attack and the real disease, we may mention a case that came under the notice of Esquirol, who during one of those conferences, which took place during the clinique, boasted, that no cunning could deceive his power of diagnosing a case of assumed epilepsy. One of the pupils shortly afterwards fell suddenly, was convulsed and presented all the other symptoms of severe epilepsy. Esquirol, watching with deep anxiety, turned to those around saying, "Ah, poor boy, he is an epileptic." The boy sprang to his feet crying, "You see, my master, that we *can* simulate an attack of epilepsy."‡ That simulator was Calmiel, the greatest authority upon general paralysis, and still, although old, the physician of Charenton. Sailors who prefer deck-work to going aloft often feign epilepsy. An examination of the hands during the seizure will generally show whether it is real or not. The thumb of the real epileptic, is invariably held down into the palm by the other fingers. A practised ear ought to be able to distinguish the cry which, upon all occasions, accompanies the seizure. Occasionally, pretended epilepsy has passed into, or been merged in the real.‖ Many acts which have been planned by, will pass out of the domain of will. You can make a habit, but it masters you when it is made. It has been asserted with some reason, that the marvellous power which some insane persons have of simulating diseases may be due, not only to the perversion of muscular volition obtained by habitual exercise, but also to an exaltation of the powers of co-ordination due to the diseased condition.

The same prejudices, however, have possession of the mind, the same irritability of temper, the same unfounded likings and dislikings, affections and aversions, the same sleepless restlessness and insensibility to impression, and the operations of drugs, are to be found in this form of disease. The pretended monomaniac, will, however, parade those symptoms, while in the individual really suffering from partial mania, there will be a tendency and effort to conceal them from observation. He is generally quiet and reserved, but will become querulous, and sometimes violent in an argument. "A real monomaniac" says Marc, "is strongly prejudiced in favour of his opinions, the slightest contradiction excites his temper; while the simulator readily overlooks this essential point in his part, if the contradiction is skilfully managed. The taciturnity peculiar to the real subjects of monomania, frequently leaves simulators at fault, since the complaints of the latter were sure of being seen and heard, and their repugnance at dwelling in solicitude, are not met with, or at least not in the same degree in the others."

The forms of intellectual insanity in which it is most difficult to distinguish the real from the feigned, are those which are manifested by profound melancholy, or the possession by the mind of one fixed delusion! Here it is evident, that the marks of effort, of planned disorder, of occasional signs of healthy mental action and ordinary human interests, will not suffice as marks by which to know the true from the false. In many of the forms of partial intellectual mania, as we have before shown, irresponsibility should not be admitted, and in cases in which the delusion was connected with the crime of which the individual is accused, or where the melancholy is so profound, as to deprive the accused of any power of choice; in such cases a careful observation by medical men, extending over a considerable portion of time, with a view of marking the progress, which the disease—if unfeigned—will make in one direction or another, would not fail to discover an artifice, if it exists, or to establish the fact of real disease. In all cases the family and individual history, if it can be ascertained, will afford some presumption, which will be of use in the investigation.

In moral mania, which according to Hoffbaur "may exist uncomplicated with mental delusion, and is in fact, only a kind of mental exaltation (tollheit), a state in which the reason has lost its empire over the passions and actions by which they are manifested to such a degree, that the individual can neither express the former, nor abstain from the latter." In this kind of insanity, where the chief ground for believing in the existence of mental unsoundness, is the character of the acts committed, and very often nothing more than the character of the single act, of which the criminal is accused, the difficulty of distinguishing what is real from what is feigned, is exceedingly great. Up to the present time, courts of law have been very unwilling to admit moral mania, as proved only by the quality of the act of which the individual is accused, as a good plea in criminal cases. And it has done so upon what seems good grounds. That a criminal act may be the first symptom of insanity is true, but that the brutal quality of the act, should be admitted as sufficient proof, that it resulted from an insane impulse is absurd. The science of evidence may be superseded in time to come, but while it is still looked upon as a science, and still regarded as the only guide in the decision of all questions of criminality and responsibility, not to say, what would be true, all questions in life, to allow the act itself, with which an individual is charged, to be an all sufficient proof of the insanity of the accused is impossible. It may be true that the man is mad, as in many other cases it is true fatal blows have been struck in self-defence, but as in the latter case, if the self-defence could not be proved by facts other than the deed, so in the former case, the insanity cannot for a moment be permitted to be proved by the atrocity of the crime alone. The result of the admission of such a doctrine would be to add to the atrocity of every crime. And an individual who wished to commit murder on a neighbour, would, to secure his immunity from punishment, cut a few more throats. It is, however, in many cases, unlikely from other circumstances, that a sane man could commit a crime without any motive; it is certain that no sane man does anything without a motive, and although the motive may not be good, it is invariably rational. Where therefore these circumstances can be, and are brought out, as in a case where an individual in a good position in society, in circumstances which would lead most men to live easily contented suddenly kills another, never having seen him nor communicated with him before, by whose death he is in no way advantaged, and from the consequences of whose death, he sees no probability of escape; in such a case, even although there may be no delusion, the presumption of insanity is very strong, and upon suitable medical testimony the individual ought to be held irresponsible. Such cases, however, will not fall under the notice of him who is studying feigned insanity, and if capability of judging of motive is looked at as the only guide in deciding all questions of responsibility, although an occasional error may be committed as in all other inquiries—few persons will escape from punishment by simulating moral mania, unless they are very vigorously seconded in their efforts, by injudicious medical gentlemen.

* *Journal of Mental Science*, Vol. II., page 357.

† Page 442.

‡ Legrand de Saulle, page 353.

‖ Dr. Browne on the Mental Condition of Epileptics in Crichton Institution. Reports, 1853, page 12.

The next Meeting of the Pharmaceutical Society of London will be held at 17 Bloomsbury square this Evening. The following Papers will be read:—"On Some of the Infusions of the Pharmacopœia," by Mr. J. B. Barnes. "On the Purity of some of the Alkaloids of Commerce," by W. L. Scott, F.C.S.

ON THE TREATMENT OF DELIRIUM TREMENS.

By Dr. Ludwig Meyer, of Berlin.

(Translated specially for the Medical Press and Circular from the German, with a few Practical Observations added, by Dr. Thomas Bodkin, F.R.C.S., &c.)

Whilst the treatment of internal diseases has almost every where assumed a milder form, and the physicians of the so-called expectant method have acquired a greater range of influence, yet the more defined and intense, the more typical the form of disease manifests itself, so have the therapeutics of delirium tremens acquired up to the present day a heroism almost undisputed, as fresh and hopeful as is remembered of the olden physicians. The data connected with so energetic a medication will be more conceivable when the grounds of their first introduction are inquired into. The first diagnostic of delirium tremens developed itself on account of the injurious results that a yet old method of treatment had given rise to, it was in fact "a diagnosis ex nocentibus."

An apothecary in Kent, called Sutton, in the beginning of the present century, made the observation that a certain form of phrensey or phrenitis, which, with a grammatical exactness was treated with blood-letting, resulting almost invariably in the death of the patient, and that the few who happened to have survived, were those who happened to have slept. He gave up thenceforward, on account of the result, blood-letting, and took to opium, and Sutton had then connected with this method of treatment the required symptomatology and etiology; but the dependence of delirium tremens on alcoholism, was first forty years since generally known. The exclusive dominion of opium suffered, under the advocates of contra-stimulants, some damage. Barkhausen, second physician to the Bremer hospital, in 1828, more fully systematized the therapeutics of delirium tremens, indicating in the sthenic form the administration of tarter emetic, and in the asthenic, different form, opium. Later, instead of the tartar emetic according to Rademarcus's proposition, suggested by Wolf, the acetate of zinc was substituted and adopted in the Berlin Charity. This mode of treatment I retained in the Special and General Hospital, from October 1858 to the end of 1859, while an assistant to the lunatic asylum during the summer months, into which cases of delirium tremens were received for treatment, and also in the Catholic Hospital. The trials which were practiced in the Berlin Hospital, chloroform, tincture of digitalis in large doses (half-an-ounce), recommended by the English physicians, turned out so unfortunately, that, notwithstanding the support of such a number of authorities, it was given up. The numerous observations afforded by a considerable number of *post-mortem* examinations led to the conviction established—that delirium tremens is not of the nature of a violent acute condition peculiar to itself. Delirium tremens is partly, as far as is conceived, a manifestation of a not well understood condition, a peculiar exacerbation of chronic alcoholism, of a not to be mistaken typical development. If on the other hand there be present a chronic illness, a continuous degenerative process, engrafted on the constitution. The treatment hitherto pursued in delirium tremens may not be recommended, so it appears even contra-indicated on account of the tendency in every case towards collapse, which is the chief, indeed, exclusive danger to life. The generally small persistently wavering and often imperceptibility of the pulse; the quick alternating flushing and paleness; the profuse—the sudden cold clammy sweat; alternating placidness and dryness of skin; above all, the extremely severe seizures of epilepsy point out a threatning anæmia of brain, which is observed to be the next most frequently cause of death. It is certainly allowable to depart from a medication which, according to all rational supposition, was most calculated to increase the symptoms of impending danger.

Since the year 1860 a new practice has been introduced, the indication of a more vigorous diet, arising out of the suggested necessity of supporting the patient during the short duration of the stormy attack, thus supporting the strength notwithstanding the state of the pulse, and suiting the desire and inclination of the patient; therefore, light nourishment in the first instance, plentifully administered bouillon, milk and occasionally diluted wine (evunsuppe) to preserve the strength. If this suggested nourishment was insufficient, and symptoms of collapse advanced, port wine, but still in a dilute form, a table-spoonful to a glass of water, or selzter water, the extreme dilutions were better borne than pure wine, and lasted much longer in their effects, accordingly the doses were given three or four times daily or every intermediate hour, seldom at shorter intervals. In isolated instances, according to the existing symptoms, Portio Revire, mistura acidi sulph: mist. ammon.: and the like, occasionally warm chamomile stupes to the head, to the stomach, at the same time wine was ordered it not contra-indicated by the progress of the case; but as all most essential means were carried out, mechanical restraint was carefully avoided, mechanical restraint always acted as an incentive to resistance and quickly exhausted the strength of the patient. The inevitable effect of the strait waistcoat and poitral, which hindered the important motion of breathing; had it been necessary to restrain the patient in the severe surgical cases so was it the more necessary to have additional assistance at hand, the changing of position should be effected with the least possible force, and be done with the least possible delay.

Up to this time, about 500 accurately reported cases of delirium tremens treated in the General Hamburg Hospital, as the following statistical view will show, with a result as opposed to the old method of treatment must be observed to be exceedingly favourable, the mortality being three times less. It is of course already known that a different treatment in dangerous variations of delirium tremens should be adopted as suggested by Laycock of Edinburgh in the *Edinburgh Journal*, 1862. But hitherto the results of a more expectant method have occurred in too small a number of cases, so that the noticing of them would serve to little purpose. The facts of more extended observations, are wanting on exact data in the progress of delirium tremens over a greater space of time, yearly if possible. The distribution of cases noted during the extent of one year is most dissimilar, eight or fourteen days may elapse, sometimes a whole month, without a single case being presented for reception, whilst at other times the average proportion of a month is distributed over a few days. I could not discover a sufficient cause for this remarkable vicissitude, or the simultaneous cessation or existence, other than an outbreak of delirium tremens at a predisposing time, with the exception of traumatic cases, so that therefore, one is probably inclined to grant in the occurrence of the disease a certain epidemic element; there is, besides, in the mortality of this small epidemic a strange difference, while a very considerable number of cases occurred in succession without a single death; on another occasion, from one-third to one-half died, this higher mortality stood in no direct relation, with a relative intensity of the several cases, no regular proportion between the distribution of the latter, and the mortality was found to exist.

Thirteen per cent. died out of those cases which were received in the year 1861; this is the greatest mortality observed under any method of treatment—double as great as in the following years, although the number of severe complications, fractures, and pneumonia, fell off to almost less than other years. The proportion of mortality of delirium tremens, under the old method of treatment as shown by the statistics of the large hospitals, differ not much from each other. At Copenhagen, in Frederick's Hospital, either 54 or 30 per cent. out of 178 cases of delirium tremens died (Lend du del. trem.). In the Royal Infirmary of Edinburgh, 126 out of 481 died, or at the

rate of 26 per cent. (*Edinburgh Monthly Journal*, 1862). In the Berlin Charity Hospital, 25 per cent. (*Annal der Charatee*, 1861.)

The favourable influence of the new method of treatment is placed in a clear light as may be seen in the adjoining table; the complicated distinguished from the uncomplicated is made evident. It therefore appears that the greatest proportion of fatal cases near two-thirds in calculating these more dangerous and absolutely fatal complications is made apparent, whilst the mortality of the uncomplicated cases scarcely exceeds two per cent., against six per cent. of the old method of treatment.

1.—Old Method of Treatment.

	All descript'n of cases.	Of whom died.	Per cent.	Without compli-tions.	Of whom died.	Per cent.	With compli-tions.	Of whom died.	Per cent.	Pneu-monia.	Of whom died.	Fracture	Of whom died.
1857 - -	82	23	28	57	9	13	25	14	56	11	7	3	3
1858 - -	90	17	19	64	3	5	26	14	54	12	8	5	3
1859 - -	96	33	34	53	17	31	43	16	37	20	7	4	3
1857-59 -	268	73	27	174	29	16	94	44	47	43	22	12	2

2.—New Method of Treatment.

1860 - -	77	6	8	58	1	2	19	5	26	10	4	2	1
1861 - -	87	9	13	60	3	5	27	6	22	9	1	3	1
1862 - -	87	6	7	51	2	4	36	4	11	9	2	3	1
1863 - -	90	5	6	61	1	2	29	4	14	10	2	4	1
1864 - -	88	9	12	46	1	2	42	8	19	13	5	4	2
1865, up to October 10	74	4	5	48	0	0	27	4	15	3	2	2	1
1860-65, up to October 10	504	39	8	324	8	2	180	31	17	54	16	18	7

A fatal case of delirium tremens having lately occurred in my neighbourhood, the particulars of which I am not in a position to publish, has recalled my attention to the above article taken from the *Berlin Khlinische Wokenschrift*, read before the Society for Natural Philosophy and Medicine of Hanover by Dr. Ludwig Meyer.

Having had occasion to treat, during a period of upwards of thirty years, an amount of cases of delirium tremens, as much perhaps as falls to the lot of many, I may be allowed to venture on a few practical words on the subject.

The history, etiology, and pathology of delirium tremens is so thoroughly and exhaustively given in Copland's incomparable "Medical Dictionary," now twenty-six years since published, that nothing, I believe, is required to be added to that part of the subject. A graphic description of the symptoms, by Pliny Earl, M.D., of New York, although a little sensational, nevertheless true on the whole, will be found in the Medical Press (Vol. 19, No. 495, page 415, for June 1848); but the therapeutics of delirium tremens have since enjoyed a more extended and modified range. Opium is not now so exclusively relied on, nor is it given in such reckless and heroic doses, and although not entirely dispensed with, it is seldom used except sparingly and with caution. Need I say that to procure sleep by all fair means, without which, in delirium tremens, death is inevitable, is the one consummation to be sought for, and, of course, should occupy almost the exclusive attention of the medical attendant, inasmuch as when sound sleep sets in the doctor's triumph is secured —his patient from that moment is safe. The means to this happy end would, I presume, be threefold, all co-operating to induce sleep—viz., moral, dietetic, and medicinal. To carry out the first, not the least important, requires some sagacity and ingenuity in dealing with the morbidly excited, and the newly acquired eccentricity, of the patient's mind. His optical delusions being his convictions—if controverted or contradicted, causes increased excitement, angry and stormy opposition, he acts as if insulted, and is annoyed to have his veracity questioned; better to divert him by some topic foreign to his present expressed thoughts, such as presenting to his mind some pleasing former events of his life, to flatter his self esteem, to pretend to be his friend and his advocate in defending him against those whom he supposes frustrate his wishes, and who he angrily alleges are giving him such annoyance, and against whom he inveighs with bitterness and denunciations. By carrying out these suggestions, or the like, according to the morbid temper and peculiar tendencies of the patient's mind, a complete control will be acquired over him, so that he may be led like a child, and will almost do anything he may be required. On the question of physical restraint, I believe that Dr. Meyer is quite right. I have no doubt that death has been the result of physical restraint in many cases I am myself aware of an instance of a patient dying in the midst of his furious struggles, while tied down to his bed with ropes, and while guarded by police, and feel convinced he would have had more than a fair chance of his life had he been set at liberty, and allowed to walk out into the open air, accompanied with a steady attendant, a wish he so furiously struggled to accomplish, and which cost him his life in the refusal. When somewhat tired by the walk, and cooled down by the open fresh air and satisfied that he accomplished his desire, I have no doubt he would have retired in peace to his bed, would probably sleep with the aid of some slight hypnotic; such a happy result has frequently occurred to patients of mine with whom I have walked through the town even at the dead hour of night liberating my patient in a state of storming passion from the restraint of his keepers, and returning in an hour with him metamorphosed into a man of peace, like a lamb perfectly obedient to my wishes; a game of cards, if the patient is

so disposed or accustomed to play, I have found on several occasions, acts most surprisingly in dissipating optical illusions and calming excitement; at first sight, such a suggestion may appear ridiculous, nevertheless, it has frequently succeeded with me, and it would appear incredible to suppose that a game of cards could be so well, so attentively, and so cautiously played by a patient in such a state of mind, however, such is the fact. Although I have suggested, as a general rule, the advantage of allowing patients in delirium tremens to walk in the open air, yet exceptions in certain cases with extreme debility sufficiently characteristic occur, such as has happened in a case of mine a few years since, the man was strong built, aged about forty, he was daily drunk for a fortnight, I saw him six or seven days after the attack, he was jaundiced, his liver enlarged, his abdomen swelled, doughy, somewhat tense, intelligence quite confused, incapable of recognising acquaintances, countenance foolish tremor, pulse rapid and small. I emphatically ordered that he should on no account be allowed to leave his bed for a moment, that if he did so he would very probably drop dead; notwithstanding my strict injunctions, in my absence an attempt was made to remove him to another residence some hundreds of yards off in an inside car; he fell dead in the car when he was a few yards on his way.

It is scarcely necessary to allude to the dietetic treatment, the indications for carrying it out are so simple. I will only say that I have always given in every case more or less stimulants, even in cases arising from a recent debauch, whatever was the state of the pulse, convinced that the strength in these cases is more apparent than real. The living almost exclusively without food on stimulants for a lengthened period before the attack would assure the certainty of debility concealed under the excited state of the patient. Now, with regard to medicine, the indications, in my opinion, are just as simple, if the bowels are too free by all means astringe them, a tea-spoonful of the tincture of rhatany repeated occasionally with a little port wine and water generally succeeds; if confined, ten or twelve grains of calomel always answered my purpose; if slow in its action after five or six hours, a table-spoonful of castor-oil may be given, not otherwise. To procure sleep I have seldom for many years found it necessary to give opium in any shape, if I see the patient early and find him not much the worse for the want of sleep, that he takes sufficiency of food, his pulse in fair tone, I leave him, perhaps, for two or three nights without any artificial means to procure sleep, by so doing I have frequently found patients when sufficiently tired out, sleep naturally without artificial aid; if there is epileptic tendencies, a not unfrequent occurrence, the bromide of potassium in thirty grain doses with twenty minims of tincture of Indian Mixture in an ounce of water every sixth hour will be advisable; the chloral hydrate in thirty grain doses did well in my hands, repeated every eighth hour until sleep sets in, these hypnotics are best administered after the patient is somewhat tired after a walk, and settled in bed. When driven to opium, other sedatives failing, I give a draught of thirty minims of laudanum with twenty minims of tincture of digitalis with an ounce of water, this seldom has failed in my hands, and seldom required to be repeated, the complete successful result of either of these means mentioned above will, very much depend on having a steady rational attendant who will silently sit at the bedside, having the room darkened, and securing strict silence through the house, the attendant should soothe, encourage, and disabuse the patient's mind of his imaginary dangers, he should invariably speak to him in whispers, as the patient imitatively is almost sure from that forth to speak only in whispers, an evident advantage removing one of the elements of disturbance, loud talking, and thus tending to favour sleep; in fine, the ideas of calming, soothing, encouraging the unfortunate patient to sleep, and constantly impressing the necessity of sleep on his mind, should be the responsible duty of the attendant more particularly after a sleeping draught has been administered.

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the Medical Press.)

No. X.

TREATMENT OF SEWAGE BY SUBSIDENCE AND FILTRATION.

As an example of the effects of *spontaneous precipitation*, the sewage works at Birmingham may be referred to. They are situated at Saltley, about three miles to the east of Birmingham, and they consist of four sets of subsiding tanks in series, with weirs and floating boards to keep back the suspended solid matters. The arrangement of the tanks is as follows:—The sewage, which amounts to about 17,000,000 gallons a day, is discharged from the main sewer, through five openings, into a subsiding tank about ninety feet wide and fifty feet long; it then flows over a weir, guarded by floating boards, into a second tank of the same dimensions, and then it flows over a like weir into a third tank which is 150 feet long and 30 feet wide from which it passes over another weir into the fourth subsiding tank, which is about three times the capacity of the last, and, finally, it flows over a long surrounding weir, which is only half an inch below the level of the sewage water, into a channel which conveys it into the River Rea, at its junction with the River Tame. In this manner a large portion of the suspended matter of the sewage is retained, for it takes about two hours to pass through the whole series of tanks, and during this time a considerable subsidence of the insoluble matters must necessarily occur, but still the effluent water is very offensive, and is a cause of serious nuisance to those who have an interest in the river below the outfall. There are two sets of these tanks at the works, and when one set has been in operation about a fortnight, it is so charged with sedimentary matter as to require cleansing, and then the other set is brought into use. The sedimentary matter, in the form of a black sludge, is removed from the tanks by means of buckets on an endless chain worked by steam power, and it is run into properly prepared pits, where it consolidates by evaporation and soakage, so that in the course of twelve months it is fit for sale as manure. It then contains about 50 per cent. moisture and 17 per cent. of organic matter, and the farmers take it at the price of one pound sterling for a barge-load of from 25 to 30 tons. The whole of the works are in a very unsatisfactory condition, and are a serious nuisance to the neighbourhood.

The *combined system of sedimentation and filtration* is scarcely more successful. At Coventry, where it has been for a long time in use, the sewage from a population of 43,000 persons, is received into a tank about 150 feet long and 49 feet wide, and 9 feet deep. From this it passes through a lateral filter of coarse gravel running the whole length of the tank, and is received into a second tank of the same dimensions. From this it passes through a similar lateral filter of finer gravel into a third tank, and thence it passes over a weir into the tail brook. There are two sets of these tanks, and each works about a month, when the sedimentary sludge is taken out and mixed with the ashes and sweepings of the town, and sold for manure at the rate of 2s. per load of a cubic yard. The works were

nearly self-supporting, but the purification of the sewage was very imperfect, and hence it is to be abandoned.

At St. Thomas, which adjoins Exeter, the local Board have adopted a similar method of defæcation. The sewage, which amounts to about 200,000 gallons a day, flows to the works, which are about a quarter of a mile from the town, and there it receives a graduated dose of crude carbolic acid (about three-quarters of a gallon of carbolic acid, with a little lime and 250 gallons of water being so used every day). The sewage then flows into two subsiding tanks, and after passing through a coarse strainer of perforated iron, it is filtered through a lateral filter of coarse gravel about two feet thick, which forms the side boundary of the tanks. The effluent sewage is still turbid, but the presence of the carbolic acid completely prevents putrefactive decomposition, so that the effluent sewage passes alongside of the railway in an open channel for about a mile and a half, to the outfall into the tidal part of the River Exe, without causing the least annoyance. The tanks and filters are in duplicate, so that when one requires emptying the other is in use. Each tank works for about six weeks, and then the sedimentary matter is removed and mixed with the town refuse, and sold for manure at the rate of 5s. a ton. About 400 tons are thus obtained from the tanks every year, and as the effluent water is not a cause of offence the operations are successful. The effect of the carbolic acid in preventing the putrefactive decomposition of both the sludge and the effluent water was most remarkable, for even in the hot weather of last summer there was no offensive smell at the works.

At Uxbridge an attempt was made to purify the sewage of 10,000 persons by subsidence and subsequent filtration through charcoal before it was discharged into the River Colne. The sewage, which amounted to about 135,000 gallons a day, flowed to the works by gravitation, and after passing into a subsiding tank about 50 feet long and 15 feet wide and 4·5 feet deep, where the coarser solid matters were deposited, it was strained through a grating, and then filtered through twelve boxes of coarse vegetable charcoal, each four feet long, and two wide, and one deep. There were two sets of these filters, which were worked alternately, and when the filter ceased to act the charcoal, together with the solid matters, was removed and mixed with the town refuse and sold for four shillings per cubic yard. The process was so imperfect that it was abandoned in the year 1857, in consequence of a motion to the Court of Chancery for a breach of the injunction granted in 1855, restraining the Local Board of Health from discharging sewage into the River Colne, "otherwise than in a state deodorised and free from anything offensive." The original sewage, at the time of our examinations in 1857, contained forty-one grains of solid matter per gallon, of which 6·75 were organic; and the filtered sewage contained thirty-six grains per gallon, 5·4 of which were organic. The filters, therefore, removed about five grains of solid matter, of which 1·35 were organic.

Very dilute sewage, with only a small quantity of suspended matter, is still less affected by filtration, unless the filters are well constructed. An example of this came under our notice, in 1866, at the little town of Alton in Hampshire. The population at that time was about 3,800, and the average quantity of sewage was 60,000 gallons a day, the town being very well sewered and drained. On its way to the works, which are on the banks of the River Wey, about 1,000 yards from the town, the sewage received nearly sixteen times its volume of subsoil water, making a total quantity of not less than 1,000,000 gallons of diluted sewage. This was received at the works into two large subsiding tanks, each twenty feet long and seven wide, divided into two compartments by floating planks which kept back the scum. After the separation of the coarser suspended matters, the sewage passed through a series of five filters, composed of coarse shingle, and then it was discharged into the river. The chief constituents of the sewage before and after this treatment were as follows:

Constituents per gallon.	Before Treatment.	After Treatment.
	Grains.	Grains.
Solid matter in solution . .	25·3	24·9
Organic matter . . .	4·8	3·3
Mineral ditto . . .	20·5	21·6
Oxygen required for oxydation	0·300	0·225
Matters in suspension . .	1·7	1·4
Organic matter . . .	1·1	1·0
Mineral ditto . . .	0·6	0·4

The scum was removed daily, and altogether it was found that about ten tons of solid matters were thus separated from the sewage every month.

Transactions of Societies.

THE MEDICAL SOCIETY OF LONDON.

OCTOBER 17, 1870.

THE PRESIDENT'S ADDRESS.

THE LIMITATIONS OF SURGICAL ART.*

MR. GAY began his address by an allusion to the war and its lessons; but these had, so far, been but few in number, and those by no means of a novel character, for perhaps the most striking fact, in relation to its appliances, had been reiterated, as the results of war experience since the middle of last century, viz., that in reference to the advantage of "hut or tent hospitals," over the ordinary institutions of that character for its accidents and other eventualites. We are told that in these battle-fields "the miraculous effects of fresh air have, *for the first time*, been fully exemplified in preserving the wounded soldiers from pyæmia, erysipelas, gangrene, and diseases of a like nature, which diseases are still incidental to the casualities of the surgical wards of our Metropolitan Hospitals. Now, in 1755, Dr. Hume observed that a malignant fever which broke out in an American man-of-war, was suddenly and effectually stopped by placing the men so attacked in *old sheltered houses, that admitted air freely*, and in 1764, Dr. Brocklesby, an Army physician, also observed that *sheds covered* over head *that open at the sides*, the exact prototypes of our hut hospitals were the most salubrious hospitals; and the records of more recent wars than of the Peninsula—the Crimean and Austrian—have reiterated and vouched for the same important truth. And yet such is the disinclination of generations, like men to profit by these lessons of a previous century, that apparently this one lesson had to be learnt, if not to be discovered again in our time. Having asserted the proposition

* Abstract of Address, delivered before the Medical Society of London. By J. Gay, Esq., F.R.C.S., President.

that surgical art is behind its privileges, that in other words, it has not attained those limits of therapeutical success to which it might fairly have aspired, Mr. Gay proceeded to discuss the hindrances which have stood in the way of its legitimate advance. Amongst these was, first perhaps, an undue estimate of the strictly mechanical resources of the surgeon. Dexterity and tact in manipulation and the performance of operations are unquestionably of the utmost importance, but they are not *all*-important. They are only successfully employed when they maintain due relation to the exact amount of healing and reparative powers with which the organism happens to be endowed. It is by the admission of this truth, that surgical art gives the lie to that empirical view of it, which makes it essentially "curative;" and it asserts its real nobility when it disdains to appeal to the silliness of mankind by arrogating to itself any such pretensions. A *cure* is a *miracle*, and, in the advancement of our science, we are taught more and more the encouraging truth of inspiration that "*healing* comes from above." The power of the surgeon's art is liable to be defeated by other, and a somewhat large and imposing array of hostile forces. Of these, some appertain to the injury inflicted whether accidental or designed; others to the individual; a third set to the states of the system as affected by organic lesions, such as albuminuria, diabetes; whilst a fourth embraces those disorders, chiefly of zymotic origin, which succeed to the injury, as erysipelas, pyæmia, gangrene, &c. Of these, some are fixed and inevitable, such as age, sex, and temperament, the nature of the injury, and the contingencies of the second and some of the third class; others are also fixed and determinate, but the obvious results of agencies that are preventible or depraved states of constitution; whilst those of the zymotic class may be said to be foreign to the injury, and induced by causes that are also in a very great degree, beneath control. It is to some of the preventible or controliable enemies of surgical art that the following remarks are intended to apply. A wound made in an operation, comes to a certain extent under this category. What makes one wound more hazardous than another? Certainly not size, nor, abstractly, proximity to the trunk, although as a matter of fact, wounds characterized by the latter peculiarity are more formidable than wounds remote from it. At the same time, some small wounds on the trunk, are infinitely more hazardous than large ones, and some large ones are less hazardous in the limbs than smaller ones. On taking wounds generally, comprising those that are accidental as well as designed, it would appear that the source of their relative danger or peril, lies *in their proximity to, or more especially as they involve parts or organs that are supplied by the sympathetic system of nerves*, or the nerves of organic life, wounds of organs, and more especially still, wounds involving the *large* vessels of the trunk are much more hazardous than other wound. The brain-tissue may be wounded with comparative impunity, especially in its upper regions; but wounds of the dura mater and along the tract of its large vessels, independently of hæmorrhage, are very serious, and it is to diseases along these tracts, with which some of the most severe and insidious diseases, such as convulsions and diabetes are found to be closely associated. Dr. Crisp, from his laborious statistical enquiries, tells us that the ligature of large arteries, although unattended with large wounds, are preeminently fatal, and that from pyæmia, erysipelas, &c., &c. The peril attending the opening of serous sacs, appear to be derived from their continued potency rather than to the wound. If it be immediately sealed up, as in the operation for the removal of a loose cartilage from the knee-joint, no harm whatever usually ensues. Exposed to the air, the serous membrane becomes pyogenetic and itself degenerates, a change sometimes utilized. The same result does not follow the prolonged opening of mucous cavities, such as of the stomach and bladder, showing that the change in the former is due to causes inherent and peculiar to the organisation of the membranous tissue, and not to foreign agency conveyed through the admission of the atmosphere. The mode of making a wound too seriously compromises the issues, locally as well as systematically. A clean cut is less perilous to the system, and less difficult of repair, than a laceration. The different extensibility and retractibility of the various tissues implicated, constitute the source of its hazard. The surfaces defy exact coaptation, the essential condition of primary or adhesive union; whilst the exposure of nerve-fibres through the greater retractibility of muscular, elastic, and other textures, and often the irritation of foreign bodies, causing the laceration, such as an impacted splinter of wood, are sources of considerable and independent danger. A wound should be made by the sharpest knife and the finest saw, and by a few deliberate rather than by a number of higgling and heedless cuts. No part of a wound, in a surgical operation, should be made by tearing. In lithotomy, the principal cause of its present state of mortality arises from tearing the prostate and neck of the bladder. The healing of a clean made wound by first intention is, in Mr. Gay's experience, furthered by sealing them up, for which purpose the external application of a compound of tannin, zylidine (made by the action of nitric acid on starch), and ether. Dr. Richardson's "styptic colloid" is exceedingly well adapted. Fresh lacerated wounds should be adjusted whilst the blood is oozing from their surfaces. The irregularities are thus filled up by organizable material, and the wound, in some respects, reduced to the physical condition of one that has been evenly cut, whilst the exposed nerve and other fibrils are thereby protected as by the finest wool, and kept alive by the best elaborated nourishment. The écraseur should, for these reasons, be condemned. Its power of restraining hæmorrhage is questionable in the highest degree. Mr. Gay, in his experience, does not remember an instance of *dangerous* hæmorrhage from a deep, but healthy wound, otherwise than from a vessel which, according to the canon of surgery, it would be unsafe to wound, unless its trunk had been previously secured, —a vessel for which the écraseur would not of itself prove an insufficient deterrent. In order to secure large vessels, the ligature must maintain its pre-eminence over acupressure and torsion. It has yet to be shown that the risks of secondary hæmorrhage are greater after the silken ligature than after the other methods referred to; or that it specially interferes with the immediate action of a wound. Mr. Gay has been in the habit of using small silk ligatures, and of cutting them off short, and he has not had reason to be dissatisfied with the results. The antiseptic animal ligature of Mr. Lister seems to be a very valuable material for delegation. As to secondary hæmorrhage after the use of ligatures made of silk it is exceedingly doubtful, to say the least of it, that it is due to the material itself. As far as the records of cases inform us, secondary hæmorrhage arises rather from some degeneration of the coats of the vessel and follows acupressure and torsion as well as ligature. Pyæmia has been known to follow the one, as either of the other modes of securing the vessel. Tension on the side of an excavated wound, for the ostensible purpose of reducing them as nearly as possible to the condition of a simple incised wound is unfavourable to their healing, as it really creates that objectionable kind of wound in which there is depth and breadth at the base, with a narrow outlet—a wound which in surgery, when immediate action is not intended, as, for instance, in opening the knee-joint, in lithotomy, or hernia, should be avoided. Mr. Gay then treated of pyogenesis in reference to wounds, with the view of showing that in healthy open wounds it was a normal process; and strikingly in contrast with that by which pus is formed in chronic abscesses or disorders associated with depraved constitutions. In both, pyogenesis results from a waste of blastematous products: in the former by the differentiation of blastema (whatever that may be) from its ordinary resultant tissue cells, into normal pus cells; in the latter by the like process of differentiation, but into unhealthy products, akin to normal pus cells, but *only akin* to them. There appears to be some truth in the observations that have been made with regard to the development of putrefactive processes on new surfaces by the instrumentality of organ germ cells—a subject that is exciting considerable attention on all sides. And the subject is of the highest consequence to the surgeon, as it affects questions which are at the foundation of some of the most important issues of his art. Such germs have been found in abundance in the immediate vicinity of a patient with hospital gangrene, and collected from the dust of a ward so inhabited. Now, hospital gangrene has been shown to be an essentially contagious disease. Separate other patients from one from whom these germ cells are obviously being eliminated and the disease ceases to spread. Moreover, Mr. Lister informs us that by the antiseptic destruction of these germ cells, or, at all events, by using antiseptic measures in the dressing of wounds, the mortality after wounds and operation in the Royal Infirmary in Glasgow has been very greatly reduced. The inference from this syllogism is very strongly in favour of the position sought to be established—viz., that many of the diseases which follow the infliction of wounds is due to the

results of germ-producing putrefactive processes in their exposed surfaces. The influences of season, temperature, barometrical pressure, the electrical condition of the air, moisture, and even of the force and direction of the wind, next came under review; and reference was made to a very able memoir on this subject by Dr. Richardson, in which the rules of favourable and adverse interference were clearly laid down. Mr. Gay then passed to the consideration of those acquired states of the constitution which affect the tolerance of wounds and other injuries; and referred at length to the influence of long exposure to vitiated air, of unwholesome and inadequate food, depraved habits, depressing passions and emotions, particularizing more especially the habits of the drunkard and debauchee. No skill could prevail against a "nutmeg" liver, or a "tuberculated" kidney. The effects of alcoholic stimulants has been shown by some experiments by Parkes and Wallowicz (reported in the *Transactions* of the Royal Society), and also by Dr. Richardson, to fall most seriously and directly on the heart and the large blood vessels. Taken continuously they lead to disease of the coats of these vessels, and to intermittent action. The habit of taking stimulants with the persuasion that in health they *save*, and in disease *cure*, is becoming, *under the sanction of the Profession*, a serious evil; since it is gradually spreading, almost as a fashion, through the middle and higher classes of society. The champagne, the port wine, and the brandy bottles are beginning to be as much an habitual resort under temporary ennui or languor, whether from indolence, dissipation, or indisposition, as the gin flask to depraved poverty under the maddening burdens of remorse and despair. The same false views of the value of alcoholic stimulants, and as well as strong nitrogenous beverages, has led to another mischievous practice—one that is eminently unfavourable to surgical art—viz., that of urging a patient, labouring under long chronic disease, and especially in prospect of a severe operation, to swallow as much brandy and beef-tea as he can be got to take in. The condition resulting from this practice, indicated by a black, dry tongue, a brick-dust, sallow face, a feeble, oft intermittent pulse, and an incessant drain on the bowels, vainly attempted to be checked by quarts of chalk mixture is of all conditions most unfavourable to surgical success. It is the exact reverse of this state—viz., the absence of all excitement and casual disorder to the system that leaves the resources of nature most free to act beneficently in times of her greatest need; and that should, if possible, be secured on all such occasions. The subjects of pyæmia, hospital gangrene, erysipelas, and other diseases, principally of the zymotic class, contingent upon wounds, next came severally under review; and the advantages of fresh air and healthy exposed situations were insisted upon as being most likely to exempt the surgeon from the too frequent failures of his art, consequent upon the supervention of these diseases. War, and the management of troops, have proved indisputably that men can endure fatigue and the extremes of climate better without than with the use of alcoholic stimulants; and they have also reiterated the lesson as to the paramount benefits of fresh air. These several diseases are not, perhaps, so formidable from the *number* of the cases in which they respectively present themselves in the Metropolitan Hospitals, as from their relative *high rate of mortality*. Although there has been an interesting contest between the late Sir James Simpson and Messrs. Holmes and Callender on the subject of our present hospital system—Sir James insisting that it is not calculated from the need which it enforces of overcrowding, &c., to ensure that amount of freedom from them which is met with in the small rural hospitals, yet there can be no doubt that the important facts elicited in the course of the contest, and admitted on both sides, lead precisely to the same results. The facts contributed show incontestably that in *large hospitals*, in crowded cities, pyæmia is very apt to arise after surgical operations; whilst gangrene and erysipelas are most frequently imported into them from the "fever-dens" of ill-regulated houses and filthy neighbourhoods; that, in short, overcrowding and the absence of an abundant supply of wholesome air, are the sources of those malign diseases which are so adverse to the success of surgical art. It is time that our large hospitals should, in imitation of the example of Greece two thousand years ago, as recorded by Plutarch, and in accordance with the lessons taught by our modern battlefields, and by still more modern science, bestow a portion of their large resources in order to provide establishments, or, as they were called in ancient times, "Temples of Health," for those exceptional cases which are known to be most unfavourably affected by impure air and crowding, in high situations where the air is wholesome. The heights around London are all that can be desired for such establishments, both in respect to air and convenience of transit. To neglect these lessons on the part of our hospital authorities is to be obtuse to all the inculcations of experience and true wisdom. Modern nursing is an immense advance upon the old system, and the air of cheerfulness and the inspiration of hope —"hope that, not surfeited to death, stands in bold care"— that usually pervade the wards now in consequence of it, go far in sustaining patients, and carrying them successfully through severe trials. It was a noble act and example that of one of our Princesses, in giving pictures wherewith to enliven the wards of a Royal Hospital. After commenting upon other related topics, Mr. Gay concluded his address thus:— "I have in this avowedly simple and discursive address said nothing new. I have merely brought under your notice some old facts and experiences; the more valuable, perhaps, because, like old wine, they have stood the test of time, and have been refined by it too. I have repeated them, not only because I am desirous that the principles which they represent should be utilized by us on every available opportunity, and with all our power, but that we should start on the pathway of new and further research from the platform which they have erected. I have repeated them, because I feel assured they help us to the solution of difficulties which beset the surgeon in his endeavours to attain for his labours that full measure of reward to which he is entitled to look; and, finally, because I would awaken that earnest jealousy for the repute of our art which will brook no rest, no content, until it ceases to suffer from the stigma of unattained, but attainable, success."

DIALECTICAL SOCIETY OF LONDON.—Oct. 5.

At a meeting of the above society, Dr. C. R. Drysdale in the chair, a paper was read by Thompson Dickson, Esq., M.D., M.A. Cantab., on "Baby-farming." After the reading of this paper, which will be found in our last issue,

Dr. Edmunds gave an interesting account of the result of a prolonged interview which he had just had with the woman Waters, at that time under sentence of death. According to the statement made by that woman, she had never actually intended to take away the life of any child confided to her care; but, for the most part, she received the children and gave them away again to other advertising women at a smaller sum than she received. In some instances she placed infants in the arms of boys or children in the street and then absconded, when the children were taken off to the workhouse by the policeman. When a child died she often wrapped it up in paper to save the expense of burial, and put it in some out-of-the-way place. Dr. Edmunds thought that it would be a great mistake if the sentence of the law was carried out in this case, as he was convinced that the woman was not guilty of murder.

Mr. Levy thought that the people of England were now imitating those ancient people, who were in the habit of first gorging themselves with food and then taking purges and emetics to get rid of the surfeit. We made a number of bad laws and then punished those persons who infringed laws which should not have been made. The great safeguard of infant life, he maintained, resided, not in laws, but in sentiment. The infant is so dependant that it was not necessary that anything more than neglect should take place for it to die. Parental affection is the great guard of infant life, especially, too, maternal affection. And how does society act, he asked, in cases of maiden mothers? Does it stimulate maternal affection, so as to protect the child? By no means. The mother finds all doors barred against her, and is soon not only disgraced, but starved. The father is received into society, and has only to pay about 4½d. a day. Illegitimacy laws are foolish. There is nothing in nature to indicate illegitimacy. The bastardy law ought to be abolished. Mr. Levy said that he heard in a neighbourhood in the East-end, where plenty of legitimate children were wished dead by their parents. It was not likely, too, that women could care much for their infants when their husbands were hateful to them, and thus the present marriage laws were a great cause of infanticide. Again, if people only had children when they desired to have them, there would be far less infanticide. Servant girls, for instance, only got children because they knew no better. He doubted much whether the registration suggested by Dr. Dickson would do any good.

Mr. Wilson was of opinion that the State interfered already too much in the care of children by their parents, and

thought that until an infant was of one year of age it should be looked on as the property of its parents.

Mr. GEARY said that the grounds on which we prohibited child-murder were those of utility to the State. The State wanted to have plenty of persons for the business of defence and for labour. With regard to Mr. Levy's views, he urged that if it were acknowledged to be good to prevent the birth of children, it would logically follow that the fatal effects of baby-farming were not to be deprecated. The theory of Mr. Levy and Mr. Wilson was, in fact, against the notion of preservation of infant life.

Mr. LEVY remarked that the sanctity of human life forbade infanticide, whilst it by no means forbade the having of only that number of children which could be comfortably brought up by the parents.

Mr. REED thought that the views of Mr. Levy were the most humane, and that the indiscriminate way in which children were procreated in this country, only to suffer and die, was disgraceful to civilisation. Mr. Levy's views were at the root of the whole question; but he thought that some supervision of nursing establishments would do good.

Mrs. BOON thought it a hard case that children were looked on as a luxury in one class and a disgrace and a sorrow in another. There did not exist a greater prudential Malthusian in England than herself (for Mr. Malthus' own remedies were impracticable). It was a sin and shame that some women were not allowed to have children all their life, because of their circumstances. Every woman should be allowed to be a wife and mother. Medical men often told rich married women without children that a baby would do their health good. Was this only true for rich women? She was greatly distressed to see so many feeding-bottles in the shop-windows now-a-days. And thought that people should not ill-treat maiden mothers, as they do now, if they wanted to get rid of baby-farming or infanticide. Baby-farms ought to be inspected.

Dr. RUSSELL ROBERTS said there were two points for consideration—(1), what were the remedial measures that could be used at once? and (2), what was the radical cure of the disease? The phenomenon of over-population was of course at the root of the matter; but they might also invent some measure which should tend towards diminishing the evil, by acting on the will of the public.

Dr. CHAPMAN said the great majority of children in baby-farms in London were, he presumed, illegitimate. He greatly objected to State aid in this question, as in many others. External defence of the country and the administration of justice are the sole legitimate provinces of the State. The more that children can be kept at home the better, and the chief cause of baby-farming resides in a fundamentally wrong feeling with regard to woman's conduct in respect to her partnership with the other sex. If an unmarried woman has any sexual contract out of that prescribed by law it is now looked on as one of the most grievous of evils. The fact was, women were regarded as property; and the sin of the woman was in reality a sin against the man who was some time to become her owner. Until women became more pecuniarily independent, little would be accomplished to do away with baby-farming, &c. He was opposed to Government inspection, as it would only tend to increase baby-farming and child-murder. Discussion was the thing needed.

Mr. GATE agreed with Mr. Geary, and thought that Mr. Wilson's views gave the right to the parents over the life of their infants. He could not even agree with Mr. Levy's prudential views.

Mr. ACTON was greatly interested in the views expressed by Mrs. Boon, which had struck him as so novel and curious, emanating as they did from a lady, that he hoped that Mrs. Boon would not object that they should be published.

Mrs. BOON replied that she was in such a position in life that she was not afraid of the criticism of any person so long as she said what she believed to be true, and she had no objection to her ideas being published.

Mr. ACTON asked whether any of the members of the society were aware what class of women received the benefits of the Foundling Hospital in Great Coram street. He had made inquiries everywhere to no purpose. He heard it suggested that lady's maids' babies were the chief part of the inmates, but it was very difficult to arrive at the truth.

Dr. C. R. DRYSDALE said that, on the evening of the adjournment of this debate, he proposed to give an account of the phenomenon of baby-farming in Paris, where 14,000 infants were annually put out to nurse by the married and unmarried women of that city. Mr. R. Harte will open that debate, which was adjourned until the evening of Wednesday, the 2nd of November, at 8 p.m., at the Society's Rooms, No. 1 Adam street, Adelphi, Strand. Members of the Medical Profession interested in such questions are invited to attend.

ARMY MEDICO-CHIRURGICAL SOCIETY OF PORTSMOUTH.

DR. CLARKE, R.N., communicated the following:—Four instances of injury of the spine have been brought under my observation and treatment during the last few months. They all presented features of great interest, and differed so much in their nature as to make each one an instructive example of some of the various accidents to which the spinal column and its contents are exposed. I shall, however, only incidentally allude to three of the number, for my object in claiming your indulgence for a few minutes is to detail the history of the fourth and only fatal case, as I consider it to be one of more than ordinary character. In two of the survivors, the blow or fall produced concussion and possibly some laceration of the cord or subacute inflammation, for in them paraplegia is more or less present, the functions of the bladder and rectum are disordered, and the constitutional disturbance is considerable.

In the third case, a mass of clay fell a height of twelve feet upon the back of the man, and, as he said, doubled him up, and the result was a dislocation of the last three lumbar vertebræ, with marked angular curvature, the most prominent process being that of the fourth vertebra. In this man retention of urine required the use of the catheter for four days, and enemata were required to empty the bowels; there was partial loss of sensation and of motion, with troublesome cramp in the legs. All these symptoms, together with pyrexia, gradually subsided and he is now, after the lapse of five weeks from the date of the accident, capable of progression with the aid of crutches. The case proves the remarkable power of recovery, or I might say of accommodation or readjustment possessed by the cord after injuries and displacements from which it sometimes suffers. It recalls to my memory an example of restoration which much more strikingly than this, points to the necessity for a guarded prognosis in cases of injury to the spine. I refer to a man who was captain of one of the tops in the second commission of the gun brig *Daring*. He fell from the top, and when I saw him, a pensioner in Greenwich Hospital, he was absolutely paraplegic, the distortion of the spine in the lumbar and lower dorsal regions was so great as to preclude, it was supposed, any chance of recovery, and yet that man after being bed-ridden for a long time, subsequently got about on crutches, and finally dispensed with their aid altogether.

To the case, however, for which I invite your particular attention; the man from whom, *post-mortem*, the portions of bone now on the table were removed, was forty-two years of age, and described as a sailor. He was employed on the morning of the 25th of February, in assisting to roof a shed adjoining one of the basins of the Dockyard. From the neglect of some precaution, on his own part, in slackening a rope of which he had charge, he fell from a height of twenty feet. I saw him within a few minutes after his fall; he was then sensible, but confused, and his memory for a few hours continued to be impaired. I found a long scalp wound extending downwards and backwards from the left parietal to the occipital bone, and a fracture with depression of the parietal at its posterior superior angle. The only other mark of injury was a patch of ecchymosis about the size of the hand over the right buttock. A very few hours elapsed before he recovered his consciousness, and although he wandered at times, his intellect generally speaking was unimpaired to the last, so that operative interference with the skull was not indicated, and I presumed that the fracture was either confined to the outer table, or that the depression, if any, was extremely slight. To his back he referred most of his discomfort, and his suffering seemed to be intense, either on the effort to turn him on his side or when he coughed. I had known the man as a frequent applicant for relief from lumbago, and in the absence of paraplegia or of any external sign of injury to the back, I was at first inclined to attribute his lumbar pain to an increase of the old disorder. However a train of symptoms set in that pointed to deep seated and yet obscure injury. Rigors, œdema of feet, meteorism, distressing singultus, dyspnœa, fluttering and bounding pulse, followed each other

in regular order, and death ensued from exhaustion and such symptoms of cardiac oppression as may be observed in hydrops pericardii.

The record of the changes in his condition from day to day is minute and valuable, for as we read of the sudden accession of rigor and incessant hiccough at midnight on the 27th of February, we can trace the origin of suppuration, and then the progress of pus upwards, exciting irritability of the stomach. Singultus and interference with the functions of the diaphragm by pressure on the phrenic nerve, and finally dyspnœa with laborious action of the heart, while the pressure of pus also as it took a downward course impeded the circulation in the vena cava, and gave rise to œdema in the feet. I have already referred to the absence of any external sign of injury to the spine, but we had abundant proof, inferentially, that the lumbar region was the seat of serious mischief; thus on the 7th of March, it was noted, that he felt to use his own words, as if the spine of his back was coming in two.

On the 8th, the spinous processes were all tender on pressure, but chiefly so in the lumbar region. On the 9th, he stated that he had not any power in his loins. I was summoned to him at 8.30 on the night of March 15, and found that his life was in imminent danger; the pupils were much contracted, his pulse was small and fluttering, deglutition difficult, and he died at 10.50 p.m. I have little to say about the *post-mortem* appearances, for the parts that are presented for your inspection, plainly exhibit the formidable lesion of the spinal column, and account for many of the symptoms which were observed during life.

The fracture of the parietal bone was stellated, and extended to the inner table, but the depression was slight and uniform; was in fact a bulging if I may say so. The area of the fracture will be found to occupy the interval between the main branches of the middle meningeal artery. The brain of course was uninjured, there was not any sign of inflammation, and the healing process had been going on satisfactorily. On lifting the sternum from the thorax, the anterior mediastinum was seen to be full of pus, which was in contact with the pericardium. It was then traced under the crura of the diaphragm downwards as far as the crest of the ilium, and among the muscles in the loins.

The exposure of the lumbar vertebra soon laid bare the peculiar and yet conspicuous breach in the body of the second bone. The fracture, which was comminuted on its upper edge, extended from the root of the transverse process on the right side obliquely across the body of the bone, terminated on the left side a little to the left of the median line, and penetrated into the cancellated tissue, but left the spinal cord intact. It was, in fact, what may be termed a green fracture, such as is seen occasionally in the broken bones of children, and must have been produced by a forcible wrench or flexure of the two extremities of the column backwards. The cord was perfectly healthy; the canal smooth and free from any unusual appearance, except on the left side corresponding with the second and third lumbar vertebra, where there were two small patches of ecchymosis between the meninges and the canal, so thin however, as to have exerted but little pressure on the cord, and it is probable that the slight formication in the legs and feet, of which he complained, as well as the peculiar impression produced by the contact of one foot with the other (the feet felt, he said, as if they did not belong to him) may have been the result of the pressure from those minute effusions.

Royal College of Physicians of London.—At an extraordinary meeting of the College on Monday, the 17th ult., the following gentlemen, having conformed to the by-laws and regulations, and passed the required examinations, were granted Licences to practice Physic, including therein the practice of Medicine, Surgery and Midwifery.—Arthur Cooper, M.R.C.S., 25 Stamford street, S.E.; Alfred Stanbanks Drew, M.R.C.S., Stow-on-the-Wold.; Laurence John Halket, The Infirmary, Newcastle-on-Tyne.; Arthur Harris, George Rawson, Thames Side, Staines, W.; David Mathias, M.R.C.S., Cardigan.; William Paulson, 11 Falmouth road, S.E.; Henry Edward Symons, M.R.C.S., St. Bartholomew's Hospital, E.C.; Charles Tanfield Vachell, M.R.C.S., King's College Hospital, W.C. The following Candidates having passed in Medicine and Midwifery, will receive the College Licence on their obtaining Qualifications in Surgery recognized by the College:—Francis John Crane Parsons, 5 Heathcote street, Mecklenburgh square, W.C.; Charles Lyon Vasey, 5 Cavendish Place, W.

Registered for Transmission Abroad.

THE
MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
,, If Paid in Advance 1 1 8

. Post-office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London, W.C.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 2, 1870.

MR. GOSCHEN ON CUBIC SPACE AND UNIFORMITY OF RATING.

Last Session, owing to the squabbles among the Guardians of St. Pancras and the Poor-law Board, an Act, called the "Metropolitan Poor Amendment Act," was passed, and this Act came into operation, it seems, at the beginning of the month of October. It will be doubtless interesting to all medical men to know how far this Act is likely to prove in unison with what are known to be facts in the science of hygiene. The first provision of the Act is intended to prevent the over-crowding of workhouses; and henceforward the cost of the maintenance of indoor paupers in the metropolis is to be paid out of the Common Poor Fund, and the Guardians will be required to draw the monies they pay away from the central treasury, in the shape of repayments, at the rate of 5d. a day for each inmate. The Poor-law Board will now have the whole of the indoor poor of London under their control. Each workhouse and asylum has been surveyed, and the number of inmates which it can fitly receive is accurately known; so that local guardians can never draw for more money than their workhouses will sanction. It seems, however, that there are two dangers yet to be apprehended. Firstly, children under sixteen years of age may be retained in the workhouses, instead of being sent off to the school: and some guardians may huddle together the whole of the inmates allowed to their workhouse in but a few of the wards, instead of distributing them over the whole area of the house. The first of these evils is guarded against by a regulation that, although in case of asylums the guardians may claim for the maintenance of every pauper, they are not entitled to demand repayment for the maintenance of children of school age.

As to the over-crowding of wards, there is a regulation to the effect that, in case of re-distribution of the internal space of a workhouse being necessary, the guardians shall communicate with the Poor-law Board before making it. Allowance is to be made, however, for the difficulties of guardians in building new workhouses; and there is a certain indication that the Board will not be too hard

upon guardians when in difficulties. Perhaps, indeed, it may be urged that the Poor-law Board is too lenient in its commands to the guardians; but, after all, we must all of us "allow for friction," as the student of theoretical mechanics is obliged so often to do.

The principle on which the Board has estimated the capacity of workhouse wards is that embodied in the scale recommended by the "Cubic Space Committee," viz. :—"For the sick, 850 cubic feet; for lying-in women, 1,200 cubic feet; sick cases of an unusually offensive character, 1,200 cubic feet; infirm persons occupying the same room day and night, 700 cubic feet; infirm persons able to leave their dormitories during the day, 500 cubic feet; healthy persons, 300 cubic feet. For the two last classes day room accommodation is required, in addition to the amount of 500 cubic feet and 300 cubic feet allotted to them as sleeping accommodation." One or two observations occur to us with regard to these figures. In the first place, we think the allowance of only 300 cubic feet for healthy persons is rather apt to turn them into sick ones; and so long as they are condemned by want to dwell in the workhouse, to render them liable to have tuberculosis engendered. Why should the limit of 600 cubic feet, the minimum required for soldiers, not be required for paupers? Everyone knows that a soldier's life would soon be greatly deteriorated if he had to sleep in such a small cubic space as 300 cubic feet. On what grounds then, has the "Cubic Space Committee" come to the conclusion that paupers will bear the deprivation of wholesome air better than soldiers? The real fact is, they will bear it less well than soldiers, because they are under-fed and in the very conditions which engender fevers and tuberculosis.

Again, with regard to lying-in women, we cannot help thinking that such cases should not be taken into the workhouse at all, or in very small numbers at any rate. The majority of cases, we presume, where women seek the workhouse to be confined, are those of maiden-mothers; but even then we cannot see why a system of help at the patient's own lodging could not be instituted, instead of taking them into hospital. No amount of cubic space can ever make lying-in wards free from danger. We don't exactly understand the rule about 1,200 cubic feet for patients whose sickness is of an unusually offensive character. We presume such cases will only be found in workhouse infirmaries. If so, there are many such where this cubic space would be far too restricted, and where, as in cases of sloughing phagedæna and erysipelas, there would require to be at least 2,000 cubic feet, with constant renewal of the air, afforded to the patient.

But, with these criticisms, we cannot help expressing our high satisfaction at the new system of charging the maintenance of paupers and the salaries and rations of the officers entrusted to their charge to a common fund for the whole of the metropolis. We predict that this will work admirably in London, and are of opinion that all of our cities should be regulated in the same manner. It has long been a scandal to us all, that wealthy parishes in the West-End have contributed almost nothing to the care of the very poor, by whose labours many of the inhabitants were maintained in affluence. There should also, of course, be one uniform rating for the whole metropolis. This will, we doubt not, tend to arouse the attention of even the most thoughtless of the richer classes of the metropolis to the evils resulting from the sea of pauperism with which this great city is being invaded, and may, perchance, make some of them agree with one of the characters in Mr. Disraeli's "Lothair," where he says that the great problem of this time is, how poverty may be extinguished. These questions are not only very important, they are even quite soluble, if attacked with the firm determination to understand them.

THE APPROACHING ELECTION FOR COUNCILLOR IN THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

The election to the vacancy created by the resignation of Dr. James Barker is fixed for Thursday, November the 3rd, and the approach of that day is regarded with much interest in Dublin.

In addition to those Fellows of the College who may have merely sent their names to the Registrar, there are four actual candidates in the field who will each go to the poll with hope of success:—Dr. Mapother, Professor of Physiology in the College, and for some years a member of its Council; Dr. Robert Smith, Professor of Surgery in the University of Dublin, and Surgeon to the Richmond Hospital; Dr. Darby, of Bray, Medical Officer to the Rathdown Union Hospital, and President of the Irish Medical Association; and Dr. Kirkpatrick, Surgeon to the North Dublin Union Hospital, are candidates, and we refrain from doing more than simply epitomizing the grounds of their claims for the suffrages of the Fellows.

Dr. Mapother has already given guarantees for his opinions on medical politics and his future conduct by some years' service in the Council, and the position which he occupies as a Professor in the College should be a hostage for his fidelity to its interests in the future. Dr. Smith's name is identified with great learning and much eloquence in the teaching of surgery, and the respect which he has acquired will secure to him an active support from those who have been connected with the University which he represents. Dr. Darby is a thoroughly honest and energetic exponent of the views of the Poor-law medical men of Ireland, in whose service he has been untiring and undismayed under the pressure of many discouragements, Dr. Kirkpatrick is also himself a Poor-law Medical Officer, and has been for many years a surgeon of note in Dublin.

The only advice which we feel justified in giving to the electors is that they shall allow no consideration to cause them to swerve from their allegiance to their College. These are not the times for a halting or half-warm policy. The life of the College depends on the loyalty of its Council, and any Fellow who, by his vote, will strengthen the hands of its assailants, already confident and active as they are, will incur the responsibility of sacrificing it to its powerful besiegers. "The College in its integrity, and nothing but the College." Let that be the motto of its Fellows, and it has, as an institution, nothing to fear from the onset which the approaching Parliamentary Session promises us.

Notes on Current Topics.

About the War and Wounded

We remarked last week on the danger to which the neutral badge was exposed. Col. Lindsay who has returned from his mission and given a long account of what he saw and did, confirms very fully all we have said. On this point he writes:

"To preserve to the red cross flag the respect in which it is now held must be our aim and object; but, as I said before, laxity of rules and scandalous abuse of privileges threaten to bring ruin and destruction upon the institution. As our Government has signed the Convention of Geneva, I consider

it only right to ask them to aid in the proper working of the rules which they have agreed to, and this can best be done by some explanations and agreements between the Governments of the various countries, or their representatives. The explanations or agreements should be somewhat as follows:—A recognized badge and paper, signed and stamped by the authorities, should always be carried both by surgeons and lay agents, and this paper and badge should be demanded before giving employment to surgeons or other people. All those who have been sent out by the London committee have both paper and badge, but I regret to say that neither one nor other is, as a rule, ever asked for, and there is nothing to prevent a swindler from wearing a red cross and walking into a hospital and demanding employment as a surgeon, or undertaking to deliver stores, which he may purloin for his own use. The abuse of the red cross in Paris by men who have no right to it has produced the most indignant remonstrance on the part of the newspapers there. An article which I noticed, headed 'Parasites of the Red Cross, describes these men as continuing to wear the badge on their casquettes notwithstanding the disdain and contempt with which they are regarded by all honest men, and thus saving their precious skins from the fatigue and danger of active service. The newspapers demand a most severe law to deal with these impostors. A real service might be done by our Government by helping to clear away the discreditable excrescences which have grown up rapidly upon a noble institution. The abuses, I am sorry to say, are not confined to the *personnel*, but extended even more largely to the *matériel*. Sham hospitals are arranged, or rather houses not hospitals at all pretend to be so, having neither sick nor wounded, nor any preparation for their reception; they mount the red cross flag, and thus escape all billeting of soldiers and imposts of that character. A board stating the number of sick being cared for and the number of beds prepared for their reception should be placed outside the windows. Indignant remonstrances, I foresee, will be made when the war is over on the working of the Red Cross Society."

Again, the gallant colonel confirms all we have written respecting the condition of the sick, the wounded, and the rank and file of the besieging armies of Germany. Here is a revelation:—

"I believe it to be the established system throughout the German army, but it will astonish English surgeons and English people to learn that with the army now before Paris there is no provision whatever for the extra care and comfort of the sick and wounded. No tents, no hospital diet, no blankets, no hospital suits of clothing, no slippers, no underclothing. The old blood-stained uniforms are worn in the hospitals, and again when discharged from them. The men walk about with naked feet and scanty clothes, their rations are issued as usual, and are made the most of. Everything else is supplied by voluntary contribution: and I state it as a fact, and am prepared to prove it if necessary, that thousands of French and German soldiers have had the necessaries of life given them by English contributors to the National Fund. If the Germans err on one side, I am convinced the English err as much on the other. The number of things demanded by the War Office Ambulance for their proper equipment, the Committee are aware, was quite appalling, and yet they were all laid down in the regulations. An English ambulance for 200 beds must cost four times as much as that of any other nation. The harness is heavy and cumbrous, and the waggons require four horses to draw them there is no box from which a man can drive, but every other horse must be ridden, which is a great inconvenience and waste of strength and power. The best ambulance-waggons which I saw were the Americans, which were adapted for two horses, and were, in my opinion, models of arrangement."

***

The donation of £20,000 to the Germans was easily arranged for. It is doubtful if the Parisians would have got their £20,000 unless Col. Lindsay had refused his offer to the Germans, except on the just condition that he should be permitted to enter Paris and give them an equal sum. This is how he arranged in Paris, and why:—

"From the fact of there being no less than fifteen different societies engaged in giving such aid, and each society having its own separate fund, and distributing it for the benefit of its own sick and wounded soldiers, I found it impossible to lodge the money with any one person, not even with the Minister of War, for had I done so, the money would have gone entirely to the military hospitals, to the exclusion of the much more numerous hospitals prepared for the reception of the wounded and sick of the whole male population of Paris, numbering nearly 500,000 men, now under arms in defence of their town. The plan adopted for the distribution of the 20,000*l.* will be seen set forth in letter from General Le Flo, which I herewith enclose. The committee which was formed for the management and distribution of the fund is as given below:—Count Flavigny, President of the International Society; Doctor Ricord, President of the Société de la Presse Francaise; an Intendant of the Military Hospitals; a doctor of the hospitals of Paris; Count Claremont, Dr. Gordon, Surgeon-Major Wyatt, medical officers sent by the War-Office to report on French system."

***

Having said so much of Col. Lindsay's mission, we now proceed to give an account of the other sums spent by the Committee over which he presides. Here are the figures:—

MONEY DISBURSED.

German wounded in the army round Paris, per the Crown Prince of Prussia	£20,000
French wounded in the hospitals in Paris, per General Trochu	20,000
Remittances to various hospitals and persons, principally in the neighbourhood of the Rhine and throughout the Seat of War in France	31,500
Food	8,750
Medical Stores	5,680
Surgical Instruments	5,300
Clothing and bedding	9,160
Surgeons', dressers', and nurses' wages	2,500
French ambulance, cut off from its natural source of supply by the operations of war, and kept in activity by subsidy from this Society	4,000
Ambulance under charge of Dr. Frank, already provided with large stores from this Society	2,500
Large English army ambulance, now at Versailles, first payment on account	6,000
Cost of maintaining depôts under Major-General Sir Vincent Eyre in France, and Captain Brackenbury on the borders of Belgium, Luxemburg, and Germany	6,000
Credits for various purposes, through Captain Brackenbury, our general agent	10,000
Loan to American ambulance at Pasis	800
Salaries, wages, &c.	1,000
Printing, stationery, telegrams, postage	1,000
Carriage of parcels, freight, &c	800
Advertisements in the *Times* and other papers	6,000

OUTSTANDING DEMANDS AND LIABILITIES.—ESTIMATE.

1. Surgeons, dressers, nurses, and lay agents employed throughout the Seat of War, in number about 250, maintained at a cost of more than £200 per day for 30 days	6,000
2. Army Ambulance for transporting sick and wounded, consisting of 12 waggons, store carts, horses, &c.	15,000
3. Complete Field Hospital attached to above, arranged for 200 patients, with tents, surgical appliances, food, &c. The whole under command of Dr. Guy, Deputy Inspector of Military Hospitals, assisted by 12 Army Surgeons	20,000
4. Cost of maintaining depôts under Major-General Sir Vincent Eyre in France, and Captain Brackenbury on the borders of Belgium, Luxemburg, and Germany	10,000
5. Money and stores in course of distribution from time to time to hospitals and ambulances whose funds are exhausted, and who come to the English Society for aid to enable them to continue their work	10,000
6. General expenses of the whole establishment and final cost of winding up	20,000
7. Cost of stores, chiefly food and clothing, to be sent out in readiness for the sick and wounded in Metz and other places	15,000
8. Balance still available to cover all further contingencies and demands	26,000
Present amount of subscriptions	£262,990

STORES FORWARDED.

There have been distributed throughout the whole Seat of War during the month of September, 1,700 boxes and bales; from the 1st to 22nd of October, 1,531 boxes and bales; total number of boxes and bales despatched during the last seven weeks, 3,231. These stores consist principally of contributed articles:—1, Clothing and bedding of all kinds; 2, provisions; 3, medicals; 4, surgical instruments; 5, brandy, wine, and porter. This department is almost entirely under the management of the ladies's committee, whose arrangements have been admirable, and the efficiency and value of whose services are beyond all praise.

Chilblains and Chapped Hands.

THE returning cold, damp weather brings in its train the seasonable series of complaints, such as chilblains, chapped hands and lips, &c. These appear to be most prevalent just now, amongst those exposed to the inclemency of changeable weather, who possess a fair complexion, delicate skin, and other constitutional predispositons. To those specially liable to these tiresome and painful affections, we recommend as a preventitive wearing kid skin gloves lined with wool, which not only keep out the cold, but absorb any moisture that may be upon the hands; and to rub over the hands before washing a small quantity of glycerine, which should be allowed to dry or become absorbed to a partial extent. When chilblains do manifest themselves, the best remedy not only for preventing them ulcerating, but overcoming the tingling, itching pain and stimulating the circulation of the part to healthy action, is the liniment of belladonna (two drachms), the liniment of aconite (one drachm), carbolic acid (ten drops), to collodion flexile (one ounce), painted with a camel's-hair pencil over their surface. When the chilblains vesicate, ulcerate, or slough, it is better to omit the aconite, and apply the other components of the liniment without it. The collodion flexile forms a coating or protecting film, which excludes the air, whilst the sedative liniments allay the irritation generally of no trivial nature. For chapped hands, we advise the free use of glycerine and good olive oil in the proportion of two parts of the former to four of the latter; after this has been well rubbed into the hands and allowed to remain for a little time, and the hands subsequently washed with Castile soap and tepid water, we recommend the belladonna and collodion flexile to be painted, and the protective film allowed to permanently remain. These complaints not unfrequently invade persons of languid circulation and relaxed habit, who should be put on a generous regimen and treated with ferruginous tonics. Obstinate cases are occasionallly met with which no local application will remedy, until some disordered state of system is removed, or the general condition of the patient's health improved. Chapped lips are also benefited by the stimulating form of application we advocate, but the aconite must not be allowed to get on the lips or a disagreeable tingling results.

The Country Doctor and his Work.

THE country doctor's work is for the most part hidden toil, veiled from the public because performed in the dark, and unappreciated because its exact nature and intricacies are unknown. Some of our correspondents living secluded lives in the central part of a district mapped out for them by an ungenerous Poor-law Board, may well shiver at the approach of winter, which is the commencement of fresh danger to them, whether viewed in the light of contracting disease whilst returning from the bed-side, whereat hour after hour there has been anxious ministration in completing an *accouchment*, from the miasmata arising from ill-drained marshes these leaden mornings, or the direct danger to life through accident in travelling in the dark. Last winter we referred to the death of a respected Sussex surgeon, Mr. Noakes, of Newhaven, who, in going to a midwifery case, accidentally fell into a well and was drowned. Not a winter passes but we are called upon to herald the painful intelligence of some worthy member of our body, some hard working, under-paid surgeon, forfeiting his life in the discharge of his duty—duties unrecognised and unappreciated in the broad daylight—sneered at by the vulgar, and envied by others who believe the doctor waddles for ever in clover; because they know nothing of the gullies, the wells, the ill-protected quarry, the headway at night against rain, and sleet, and wind, whose breath and vision are taken away whilst on the dangerous mission of ill-requited mercy, for all, the majority of our brethren, cannot ride in carriages. Down hill, over dale, through treacherous gaps to the house of suffering, and home again to find, perhaps, a journey equivalent in danger and distance to be undertaken in another direction forthwith, and all this exposure to the inclemency of the night, and risk to life, for a few shillings, paid as a rule grudgingly and murmuringly. There should be no better friend to the public than the man who, at all times, in all seasons, is ready to risk his own life in trying to save theirs, and for which no money, so to speak, should be as an equivalent. The members of no other profession will incur the same dangers, or expose themselves to the same casualties. The doctor wants but the word and the nature of his calling not only prompts, but necessitates immediate action. He wanders over heavy roads, through newly-ploughed fields, and upon his patient's case brings to bear his experience and professional abilities. He must never in his own person evince discomfort, or complain in the house of a patient, whilst shivering with cold, or suffering from the effects of exposure, broken rest and irregular meals; he must dissemble, cloak his own troubles, and assume perfect health and power in order to inspire confidence and rally his patients, for none need a broken-spirited, down-hearted, pain-enduring physician to come near unto them in the hour of travail and pain. These remarks are forced upon us because of the complaints which reach us time after time from our brethren scattered through the provinces, and because, we know, before the winter passes, and summer again cometh, that many of those who read our words will have nobly fallen where duty points, in the harness of some ungenerous service such as the Poor-law, or in the ranks of some equally miserly clique. We read thrilling tales of the soldier dying in battle, of warriors who expose their lives in their country's service, being rewarded by promotions and distinctions, but for him who hazards his life in the fever-stricken hovel, and who exposes himself not alone to contagion, but to the infliction of injuries in removing a malignant growth, as in the case of Maurice Collis, there are no rewards, no distinctions—not even the acknowledgment, so encouraging for work well done, for courage brave as any soldiers, and for risks to limb and life which country doctors alone have taught them in their bleak, solitary marches at night, whilst others sleep peacefully in their beds; and for this nightwork there is

no additional rest by day as in other trades involving loss of sleep. The doctor must be at his post, and go through the routine of his work with the calm resignation and placid countenance of an angel. Men certainly know something of all this before commencing the profession of medicine, but what they do not calculate on until they experience it, is the cold indifference of the public, the ill-requited return from patients, who should be generous and thankful, the miserly treatment by beggarly boards of guardians, and the underhand dealings of the clergy who tamper with disease, and invade the doctor's work so thoughtlessly and unbecoming, not unfrequently so disastrously.

Tramps.

The pest of country towns appears to be the tramp—a nuisance to the people whose alms he solicits, and when refused upon whom he heaps a hoard of abuse, which only the professional tramp commands; a worry to the relieving officer whose house he besieges late in the evening that he may obtain an order for a night's lodging and some provisions, for the tramp steers clear of a certain class of well regulated workhouses where they are required to do in return for the meal and lodging a certain amount of work, and a bother to the parish doctor. When the weather is severe, and travelling irksome, the tramp feigns illness and pests the doctor. If a man complains of a certain pain, it is difficult to say he does not suffer from it, but the question should at once arise, is the diseased tramp removeable to the house or hospital? We knew a clean, well regulated village once infected with a malignant and infectious fever, introduced through a female tramp, and propagated by those who, through humanity, waited upon her, whereby out of a population of one hundred and fifty people, before the progress of the fever was arrested and its virulence stayed, twenty-five deaths occurred. The parish doctor was blamed, and disagreeable accusations preferred against him, which was as uncharitable as they were ridiculous; but that in his humanity trying to keep the tramp and carry her through the fever, he was imprudent, there could be no question of doubt. We advise all diseased tramps to be sent at once to the nearest union or hospital, if fit to bear the fatigue of removal, and that the aroused morbid sensibility of a few local philanthropists' opinion should not be permitted to sway the doctor's advice in this important essential. We have known tramps carry infectious diseases from town to town, and from affected to previously disaffected districts, and thus we are only too well aware that their dirty rags propagate and foster more epidemic disease than is generally believed. Scarlatina is carried by these from town to town, as is only too often experienced by our provincial brethren, and the question arises how are these tramps to be regulated and prevented doing, not unfrequently, dire mischief. We believe a system of registration would effect this, whereby the police and relieving officer would have additional duties to perform. Let a permit or pass be given with each tramp from the place where he last obtained relief, and that it be incumbent for him to produce it when needed. We are particular that cattle disease should not spread, and that no traffic should be carried on through infected localities—surely we should be also particular over the still more important subject of the spread of disease through human agency.

Hepatic Rheumatism.

We are favoured by a correspondent with a long letter on the subject of hepatic rheumatism. He illustrates what he is pleased to call hepatic rheumatism—rheumatism supervening upon some disease of the liver, as cirrhosis, abscess, or simple congestion of this viscus—with the particulars of several cases. One especially, his own man servant, a pensioner, who had been resident in India several years, was invalided home, and suffered from repeated attacks of liver complaint, each seizure being followed by well-marked arthritic complications. The same patient had abscess of the liver successfully treated after the method recommended by Waring-Curran, described by that gentleman in a paper published in these pages, and extensively reprinted into the foreign journals from us. Several medical men have been shown this particular patient during the stage of liver derangement, and afterwards when suffering from the hepatic rheumatism, depending on a vitiated condition of blood. The only medicine, we are told, of the least service in the rheumatic stage was the iodide of ammonium, and its properties in checking and eventually overcoming the rheumatism were readily appreciable. The other patients who suffered also from hepatic lesions, followed in due course by rheumatism, either of the joints or muscles, were also treated with the same drug—iodide of ammonium—with the same satisfactory result. We are reminded the iodide of ammonium was first employed, and its virtues extolled in rheumatism, as in the eruptive stages of syphilis, by Dr. Waring-Curran—a medicine which that gentleman considers of greater therapeutic power and importance than the iodide of potassium, in the treatment of diseases which have their seat essentially in the blood vessels.

Army Medical Department.

Staff Surg. M'Nab, M.D., has been ordered from Dublin to York, to take over the duties of the recruiting district from Staff Surg.-Major Fowler. Staff Assist-Surg. A. S. Walker arrived at Portsmouth from Gibraltar in medical charge of invalids in the steam-ship London on the 16th ult. Staff Assist-Surg. West is under orders for India. Staff Assist-Surg. Blake has arrived in Dublin for duty at the General Hospital. Staff Assist-Surg. Haines has arrived at Athlone for duty. Staff Assist-Surg. Ferguson and Mrs. Ferguson will embark in the s.s. *Tagus* at Gravesend on Thursday next for conveyance to India. There will be an examination in January next for three Assistant-Surgeons who may be desirous of qualifying for promotion.

Myelitis.

Dr. Oxley, of Liverpool, mentions a case of Idiopathic Myelitis, in which the patient, a boy of eleven, had pains commencing in the small of the back round to the umbilicus. The pains were worse at night. Micturition frequent, walking gave great pain; pulse 120; bowels, costive; skin red over lower dorsal vertebra. Priapism, and incontinence of urine was followed by paraplegia and anæsthesia extending to seventh intercostal space. Bedsores over sacrum and trochanters. On *post-mortem* examination, inflammatory lymph, extending over lower portion of spinal cord was found. Nothing abnormal was observed, on laying open membranes, but a longitudinal incision of the

cord showed white softening for half an inch, opposite fifth dorsal vertebra, and on section, whitish fluid exuded. The bladder firmly contracted, had an abscess at its upper part. Ureters much dilated, and pelvis of kidney enlarged and ulcerated. This is a very interesting case.

Treatment of Aneurism of the Femoral Artery.

Mr. Russell, of Newcastle-on-Tyne Infirmary, desires to keep before the profession, the treatment of aneurism of the femoral artery by means of rapid pressure; and to this effect, mentions the case of a man, aged thirty-eight, with pulsating tumour of the left groin. After two days' rest in bed, digital compression was made by the hospital staff, in turns of twenty minutes each, for twenty-four hours, commencing at 2.40 p.m. The temperature of the affected limb fell from 90 deg., to 84 deg. On patient complaining of great pain, two grains of opium and two and a half of morphia were administered: and the pupils became contracted. Pressure was made over external iliac. This plan failed. He was then put under chloroform and a horse-shoe tourniquet applied over left common iliac artery at 10.45 a.m. Chloroform was kept up all day and at 7.55 the tumour had ceased to pulsate. He took thirty-five drachms of chloroform. The plan of treatment was successful, and is far less dangerous than tying the artery in such a case, according to Mr. Russell.

Obstetrical Society.

At a meeting of the Obstetrical Society of London, on October 5th, Dr. Grailly Hewitt in the chair, Dr. Protheroe Smith exhibited a specimen of Carcinoma uteri, in which the disease was limited to the fundus. The cervix was not implicated and the uterus was movable. Dr. Martin, of Melbourne, read a case of "Hard Fibrous Tumour of the Ovary, removed by Ovariotomy," which recovered. Mr. S. Wells and others, thought that this tumour was in reality a fibrous tumour of the uterus. Dr. Copeman, of Norwich, mentioned a case of pelvic tumour impeding delivery. Dr. Barnes said that if such tumours contained fluid, it should be drawn off: but this was sometimes impossible. In the latter case, Cæsarian section might be required. Mr. Lowe (Burton on Trent), read a paper on "Hæmorrhage from retained Placenta, after Abortion." The patient retained the placenta for some weeks, and died of pyæmia. The secundines should therefore be removed in all cases of abortion. Dr. Hewitt thought that the membranes, &c., should always be removed as soon as possible.

Clinical Society.

At the first meeting of the Clinical Society, on Friday October 14th, Mr. Spencer Watson brought forward four cases of Parenchymatous Keratitis in young persons under the age of nineteen. He thought medicines which did good to rheumatism, might be useful in such cases. Mr. Croft said that a case like this had got well under iodide of potassium. Dr. John Harley mentioned a case of injury to the liver, resulting from Abscess, in an old man, aged sixty-nine. There was interrupted discharge of pus by the rectum up to the 112th day. There was a tumour in the epigastrium, which occasionally disappeared, this being followed by hectic and jaundice. Dr. Ogle related a case of tetanus in a boy, whose thumb was bruised, and three days afterwards he had stiff neck and gradually all the symptoms of tetanus. He was put fully under the influence of belladonna and chloral at night. The patient recovered. He suspected that, in all cases of tetanus, the temperature increased in the evening. Dr. Chunder Roy mentioned that in India some cases recovered without any medicine, and there were some in which it was of no use.

Heifer and Human Vaccination.

The Medical Department of the Privy Council evinced a very praiseworthy alertness in dealing with the question of animal vaccination, and by a careful investigation conducted in the localities where experience on the subject may most readily be sought for, has weighed and found wanting the process of inoculation direct from the heifer.

In last October Dr. Leaton was directed to visit various parts of the Continent with a view of ascertaining how far cowpox might be transferred from animal to animal without difficulty, the character and course of the disease produced in the human subject by inoculation with animal lymph, the degree of success attending the inoculation, and the extent into which the attempt to preserve the lymph taken from heifers in an active state sufficiently long for purposes of vaccination has been successful.

The results of this enquiry are contained in the last report, and they prove very conclusively that, assuming that there are great advantages in the transfer of vaccinia direct from the cow, yet the difficulties of effecting the inoculation are so great as to make the process all but impossible on the large scale.

The drawbacks to the use of heifer lymph are recapitulated in the Privy Council Report as follows:—

First, that apparently even able and painstaking operators may find it impossible to transmit successive vaccination from calf to calf without very frequent recurrence of failures and interruptions; secondly, that the transference of infection from the calf to the human subject even under the most favourable circumstances (*i.e.*, by experienced operators and with lancet direct from calf to arm) has in it such risks of failure, that, for instance, at Rotterdam, the proportion of unsuccess was nearly twenty times as great as in the ordinary arm-to-arm vaccinations; and, thirdly, that the calf lymph; as compared with ordinary lymph, is peculiarly apt to spoil with keeping, and in the form of tube-preserved lymph can so little be relied on, that the Rotterdam establishment in distributing supplies of lymph now uses only lymph from the human subject. Evidently, then, in the present state of knowledge, a system of animal vaccination would have in it an extreme uncertainty of operation; and this uncertainty would, for obvious reasons, be so conclusive against our preferring the system on its own merits for purposes of public vaccination, that practically we have only to consider whether our own system has demerits entitling it to any considerable mistrust.

It has never been established that arm-to-arm vaccination is objectionable, and the alleged transmission of syphilis and other diseases by it is, as yet, quite unproved. It is not even shown that the specific virus of one contagion is *capable* of containing the spore of another, and until the preliminary step of showing that there is really some danger to be avoided is achieved, it would be ridiculous to incur the certainty of unsuccess in many cases in the hope of thereby avoiding an imaginary shortcoming of the existing system of vaccination.

The Liverpool Epidemic.

The condition of the health of Liverpool to which we have alluded from week to week is becoming very alarming, the severe epidemic of relapsing fever being now supplemented by frequent cases of scarlatina and small-pox hourly increasing in number. Last week there was no room in the workhouse hospital for a single case, and it was found necessary to put twenty-four patients suffering from scarlatina and small-pox in an old timber-shed, and, when it was full, to refuse applicants altogether.

The Medical staff are labouring night and day, having 1,500 cases in hospital, and 314 in their own homes to look after, besides private patients. One of them, Dr. Clements, has already given way and is in the General Hospital. The dilemma is really a serious one, for the Guardians have really done their duty to the utmost in providing accommodation, and yet there is a prospect of their being altogether overwhelmed in their efforts by the flood of cases pouring in on them.

American Medicine.

We publish to-day a most important letter from our special Canadian correspondent on the Act just passed in that colony for the control of the profession. Next week we purpose to report a lecture on "American Medicine," delivered last Monday in Dublin by Professor Mapother, who has recently travelled through that country. In it he contrasted many of the licensing bodies with those of the United Kingdom, and decided in favour of the latter. The amalgamation of licensing bodies and the suppression of quackery, subjects which, as far as regards home, he had fully discussed in his "Carmichael Essay," were the other topics of Dr. Mapother's address.

Prussian Military Punishments.

The mistaken persons in our own country who cannot distinguish philanthropy from maudlin sympathy with culprits who are submitted to the punishments set down by the law will, perhaps, think better of the mild discipline to which English prisoners are subjected, when they compare their treatment with that to which soldiers are submitted in the Prussian army. It appears that, in time of peace, severe arrest consists of confinement in black darkness, with the ground for a bed. Bread and water is the fare in each case. It cannot be ordered for more than five weeks, it being reckoned that longer confinement of the kind is calculated to undermine the constitution. Severe arrest is impracticable in war time in the enemy's country. For it is substituted the punishment of "tying to a tree." Two hours on the tree is reckoned equivalent to twenty-four hours' severe arrest, and the maximum of this punishment is also four days. The punishment undoubtedly is severe. The prisoner is tied round the tree by the arms, by the waist, and by the feet, so as to be unable to touch the ground as a support; and his face is turned to the tree that he might see nothing.

The *Lancet* criticises the disposition to refer everything to "debility." This hobby has certainly been ridden rather hard by the new school and there is danger of the reaction being too violent.

There is a talk of a "Hospital Sunday" for the parish of Marylebone.

The Brighton Guardians have granted a superannuation allowance to Mr. Richardson.

Miss Garrett, M.D., is a candidate for a place on the London School Board.

Miss Emily Bovill has obtained Lady Amberley's scholarship at Edinburgh.

The staff of the Birmingham General Hospital is about to be enlarged.

Yellow Fever continues at New York. Some of the cases have been of a very malignant type.

The salary of their Medical Officer of Health has been reduced by the Birkenhead Commissioners some £200 a-year. Is not this a step in the wrong direction?

Scarlet Fever still increases in London. More than half of the deaths in this epidemic are those of children under five years old.

At Leeds twenty-eight new students have entered. The same number at Liverpool. The other schools have the following entries: Manchester, 36; Sheffield, 7; Bristol, 9; Birmingham, 18; Newcastle, 23.

Dr. Thorpe, of Todmorden, recommends, in cases of obstinate constipation, the throwing up of a pint of warm water into the rectum, by O'Beirne's long tube passed up about sixteen inches into the bowel.

The Royal Society of Medicine seems never likely to be constituted. It has again been referred back to the Committee, and that at a stage when it was thought only formalities remained to be gone through. Verily, we English are slow to change even a name.

SCOTLAND.

Dr. Thomas Anderson, Director of the Royal Botanic Gardens, Calcutta, died at Edinburgh, on Wednesday last. Dr. Anderson, whose failing health necessitated his return to Scotland some months ago, was a most distinguished student and graduate of Edinburgh University.

University of Edinburgh.—The half-yearly meeting of General Council was held on Friday, when the following subjects, specially interesting to the profession, were disposed of:—

Medical Education of Women.—The Vice-chancellor stated that an address from 160 students of medicine had been forwarded to him. (The address conveyed thanks to the members of Council who had opposed the admission of female students into the medical classes.)

Professor Crum Brown moved, and Professor Tait seconded—"That whereas last year a resolution was passed in favour of the medical education of women in the University; and whereas it is found that under the present regulations of the University Court such education is practically impossible, the General Council represent to the University Court the desirableness of so far modifying the regulations as to afford to women the same advantages as to other medical students."

Professor Turner, seconded by Professor Lister, proposed a negative motion. Professor Turner's motion was carried by forty-seven to forty-five. (The discussion which took place will appear in our next).

Constitution of the Board of Curators.—The following motion by Professor Calderwood was unanimously adopted :—"That a committee be appointed to consider what changes may be desirable in the constitution of the Board of Curators, to prepare a definite plan, and to submit the same to next meeting, with a view to further steps by this Council."

Professor Simpson's inaugural lecture will be delivered to-day (Wednesday) in the Chemistry Classroom at two p.m.

SPECIAL CORRESPONDENCE.

[letter from our own correspondent.]

Toronto, Ontario, Canada,
September, 1870.

The operation and intent of our Medical Bill ought to be better understood. A great deal of misapprehension exists with reference to its influences and power. In the first place, it establishes a Central Board for the province of Ontario, and that is the only portal through which persons can become *legally* qualified to practise medicine in this Province.

Quebec, however, retains all her old boards and licensing institutions; and because our Bill shuts out her licentiates from Ontario, unless they pass our Board, her graduating institutions and their organs have become our implacable enemies.

In the next place, we had in Ontario, prior to the passing of the Medical Bill, six institutions empowered to grant licenses or degrees on behalf of the orthodox profession, besides the Homœopathic and Eclectic Boards.

The licentiates of the two latter boards were entitled to all the privileges and immunities which the law conferred upon the licentiates of the six former, but the Ontario Medical Act completely abrogates the licensing power of the whole eight. The medical degree is now, therefore, simply honorary, having no connection with, and not commanding the licences, nor do the licences command the degree, the latter being obtainable only by an examination before examiners appointed by the several graduating bodies.

With reference to the homœopathic and eclectic classes a great deal of misapprehension and misrepresentation exist. The Profession, generally, opposed their introduction, but since these sects have been brought so completely under the influence of the Council by the Bill, many persons think it has been a good thing for the Profession, as well as for the people. They are so completely under control that not one person has passed as a homœopath or eclectic since the passage of the Bill.

Formerly, many timid and imperfectly prepared candidates preferred going before these boards, because, as they said, they could get through much easier, and when they obtained their license they could practise whatever system they liked, and nobody would know what board they had passed.

It is said by some that our Bill makes them all members of the regular profession by making them members of the College of Physicians, &c., of Ontario, but it does nothing of the kind. The term "Member of the College of Physicians and Surgeons, Ontario," signifies nothing more than the old term, "Licensed Practitioner," by which homœopath, eclectic, and orthodox were all equally known before the passing of the Medical Act, and moreover they must all now register the system or sect according to which they wish to pass or practise, thereby maintaining the distinction between us as broadly as ever, while the Register which was formerly kept in the Provincial Secretary's office at the capital, is now periodically published, and sold in the most public manner, so that everybody may know who is regular and who is irregular.

The meeting in the Council requires no recognition of the principles of homœopathy or eclecticism, or any discussion of their peculiar dogmas.

The members of Council have simply to carry out the law, insist that certain examinations be faithfully undergone, that students pass honestly through a certain curriculum, which they have the power of making as stringent as they please in all departments, save the preliminary which is fixed by law. The members of Council and members of the Profession are not required to, and do not, recognise or meet homœopaths or eclectics, any more than they did prior to the existence of the Medical Act.

We feel that while we cannot strike the sects out of existence, they having been (improperly) recognised by law here for many years, we have them so completely under *our* control, as long as the present Bill exists, that they cannot flood the country with *illiterate* members as heretofore, and we believe that while we accord them the privileges of passing and registering as homœopaths and eclectics, that comparatively few will claim that *privilege ??* when *all* have to come up to a certain equal standard and pass the same examination on so many branches held in common.

Some defects exist in the Bill, particularly in the penal clauses, but these will be remedied in time, but the principal features of the Bill, the one portal for all, we intend to hold on to if possible.

As you are all engaged in the effort to secure a new Bill, giving the Central Board, I have thought it might prove of some interest to know something of the spirit and interest of our Act, about which so much bitterness has arisen.

As the sects are not legalised with you there is not likely to arise the same difficulty as with us. We could not get rid of them, and hence accepted the Bill, which brought them under subjection.

New Preparations.

SYRUP OF THE LACTO-PHOSPHATE OF LIME.

The French, in their days of peace, had brought pharmacy to such a state of perfection that the Parisian *Pharmacien* was a man of importance, and his preparations were frequently sold and prescribed amongst the English Profession. The inventive faculties of the pharmacist, although frequently abused, more frequently showed the marked culture that they had received in their art. The *Codex* of 1866 shows evidence of these remarks—although, in that work, they do not always steer clear of what might be called the gastronomic department of medicine.

Nine-tenths of the pharmacy of this country, unfortunately, consists in advertising nostrums and secret medicines, in which no art is used except in carrying on a monster system of puffing. Outside the question of the relative merit of the individual preparation over others, all such preparations as the above syrup deserves careful trial, and every encouragement to its originator. Its name speaks for itself, and the compound is based upon a sound and scientific construction. M. Dusart, of Paris, says that phosphate of lime is the natural exciting agent in the functions of nutrition, that it induces the albuminoid matter to assume the cellular shape, and that it controls the formation of tissues. When animals are made to feed much upon the phosphates they absorb more food, and increase rapidly in weight, owing to the transforma-

tion of the albuminoid matter contained in the food into muscular fibre.

As regards the chemistry of the lacto-phosphate of lime, the actual composition is probably not known. Pure and recently precipitated phosphate of calcium is, however, perfectly soluble in lactic acid, or what comes to the same thing; lactate of calcium is soluble in an equivalent quantity of phosphoric acid. Lactic acid, or *milchsäure*, as the Germans call it, may be viewed as one of the chief acid secretions of the human body, therefore, if phosphate of lime, which is an insoluble salt, has itself any therapeutic value, it is probably due to the fact that this lacto-phosphate, or a similar compound, must be first formed in the animal economy before it is first assimilated. The syrup, as made by Dr. Evans, of Dublin, is a palatable and elegant form of exhibiting this salt of calcium, and it is only pleasantly acidulous.

VERIFICATION OF CERTIFICATES IN DUBLIN.

The following important regulations have been promulgated since our last issue by the Medical Registrar of the University of Dublin :—

Trinity College, Dublin, School of Physic.

Regulations Respecting Certificates for Medical and Surgical Degrees.

1. In future, all Certificates of Lectures, or Hospital Lectures, must state the Attendance of the Student; and no Certificate of Lectures or Hospitals will be accepted for Degrees in Medicine or Surgery which does not guarantee the following *minimum* Attendances :—

1. Winter Course	. .	42 Attendances.
2. Summer Course	. .	30 „
3. Hospital Lectures	. .	48 „

2. Candidates for the Degree of Bachelor in Medicine are required to produce, in addition to the General Hospital Certificates, a Certificate of Personal Attendance on Fever Cases; such Certificate to be signed by the Clinical Physician under whose superintendence the Student took charge of the cases, and to contain the names, addresses, dates, and nature of Fever, of the several cases.

N.B.—Blank Forms of Fever Certificate will be furnished to the Hospital Physicians on application to the Medical Registrar of Trinity College, Dublin.

11th October, 1870.

The second proviso of the foregoing was received by many of the hospital physicians and surgeons of Dublin with much dissatisfaction, and immediately on its being made public, it was resolved that a public protest against it should be made. Accordingly, the following circular note was forwarded to the physicians and surgeons of the Dublin Hospitals :—

"Sir,—You are requested to attend a meeting of the Physicians and Surgeons of the Clinical Hospitals of Dublin, on Thursday, the 27th instant, at the Royal College of Surgeons, at four o'clock, p.m., to take into consideration a notice issued by the Board of Trinity College, Dublin, on October 11, 1870.

"Your attention is specially directed to the second paragraph of the notice, of which a copy is enclosed.

"Albert J. Walsh.
"Charles Benson.
"Alfred Hudson.
"Henry H. Head.
"Thomas Hayden.
"Samuel Gordon.
"Francis T. B. Qninlan.
"Stephen M. Mac Swiney.
"Henry Eames.
"Thomas W. Grimshaw.

"24th October, 1870."

In response to this notification a meeting was held on Thursday last, at which all the signatories and a considerable number of the medical men of Dublin assembled. A resolution was moved by Dr. Head, denunciatory of the second regulation, on the ground that it impugned the veracity of hospital physicians, and was an unwarrantable interference with the privacy of patients. After some discussion the resolution was adopted.

It is, in our opinion, a very laudable object in the Board of Trinity College to make the attendance of students at their Hospital a reality and not a pretence. It would be disingenuous to represent that Hospital attendance is necessarily what it professes to be, or that in a large number of instances it is other than a deception, or that clinical or lecture certificates are reliable testimony of the diligence of the student. It is quite proper, to our mind, that a University should impose such restrictions with the view of preserving the purity of its degrees, and we are assured that the necessity of some such regulation is well recognised by Hospital Physicians, and the necessity for its enforcement against idle students or inconsiderate teachers well understood.

The Physicians of Dublin Hospitals are, nevertheless, to our mind, quite justified in protesting against a system of surveillance alike impracticable and unfair.

If the Board of Trinity College sees fit to require that each Hospital Physician shall personally pledge himself to the accuracy of the number of attendances, they ask as much as they have a right to demand, or as any Physician is bound to give, and any detail of names, addresses, dates, and diseases of the patients would afford no higher guarantee, and such requirement would dishonour the gentleman to whom it referred, and leave their practice open to a very objectionable examination.

We understand that the objectionable portion of the second clause has been withdrawn, and the Board has thus manifested its feeling that it was impracticable and unnecessary.

THE DUBLIN INTRODUCTORIES.

The schools and hospitals of Dublin inaugurate the session this week. On Monday Dr. Mapother delivered a most interesting address on American Medicine at St. Vincent's Hospital. The prizes were distributed at Steeven's Hospital, and Mr. Morgan opened the session at the College of Surgeons, on Tuesday, Dr. Little delivered the Introductory at the Ledwich School, and Dr. Hewitt at the City of Dublin Hospital; to-morrow Mr. Hayes will address the students of the Mater Misericordia Hospital, and Mr. Tyrrell those of the Catholic University, and on the following Monday, Mr. Martin and Mr. Richardson, will open the session at the Meath and Adelaide Hospitals. We hope to present our readers with abstracts of these addresses next week.

CONFERENCE OF THE IRISH LICENSING BODIES.

We learn that a resolution has been adopted by the Fellows of the Kings' and Queens' College of Physicians in Ireland, which declares it is desirable in regard of the probability of approaching legislation on medical matters, that a conference shall be held of the several Universities and other Corporate Bodies in Ireland authorised to

grant degrees or licenses in Medicine or Surgery, with the object, if possible, of laying down principles or views as the united opinion of several bodies. In accordance with this resolution the several licensing bodies in Ireland have been requested to name three delegates, and the 7th of November at 4 o'clock, has been named for the first meeting. The Royal College of Surgeons has, we understand, decided to co-operate in the movement, and the Council has named the President, Dr. Walsh; the Vice President, Dr. Wharton and Mr. Macnamara to represent the College.

Correspondence.

CHLORAL.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—I quite agree with a "Dublin Physician" (Oct. 19th), in looking on chloral hydrate as an over-rated medicine, and have been disappointed frequently in its action; yet it has done me good service, and I would be slow to join in such a sweeping denunciation as his of all that is new. This very week I got six hours' good sleep for a patient with this chloral hydrate, where morphia and black drop had proved injurious.

He asks, what about podophyllin, pancreatic emulsion, carbolic oil, carbolic silk, carbolised ligature? I will try and answer him. Any careful clinical observer will tell him that podophyllin has valuable properties, but that it requires tact, knowledge and judgment, to turn them to account; that pancreatic emulsion in a great many cases is still proved to be of great value; that the value of carbolic oil, carbolic silk, &c., is still great, and would be greater were it not for the care, patience, and zeal, required in those who use them; and that all these remedies will in twelve months and twelve years maintain their place on the shelf of the man who will exercise judgment in their use, without letting himself be carried away by the zest of novelty, to setting undue value on them, or any other therapeutic remedy. Be slow to receive, yet try every newly proposed remedy. Let your trial be careful and impartial, and the value being found estimate it accordingly.

I am, Sir, yours, &c.,
Jas. Martin, M.D.

Portlaw.

THE WOUNDED IN THE WAR.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Some weeks ago ago I sent a short note to you, which I received from my son who went out to attend on some of the wounded in a Prussian town, intending to have followed it up by any communication, which he might send me, but in the performance of his duties he caught scarlatina which prevented him with furnishing me with much interesting material. He now writes—"Our wounded here, about two hundred in number and forty in a neighbouring village, are nearly all recovered. There has been only four deaths, one of which might have been avoided had the patient submitted in the first instance to have the tracheal artery tied, or to amputation at a more advanced period. In Dusseldorf and Cologne erysipelas, typhus and hospital gangrene have been rife, and the mortality after amputation very great, but the patients are now being moved into hut hospital and tents. The government, by some strange stupidity, have refused to send any more patients to the small town hospitals, notwithstanding the good result that has been had up to this in these institutions. They say to avoid confusion, but it appears to me to be a more likely way to incur it.

"As to your question, most of the wounds are in the upper extremities and on the left side. I can tell you nothing of wounds inflicted by the needle-gun, having seen none but those caused by the chassepot. The latter does not seem to me to cause severe wounds, the balls being easily diverted from their course, and not shattering bones except they impinge straight upon them. The mitrailleuse ball is larger, and the wound from it, of course, more severe, but not differing in character. When three or four, however, strike a limb it is thoroughly shattered. The wounds, however, inflicted by pieces of shell are the worst and most difficult to heal. There is great difficulty in inducing the patients to submit to free ventilation in the wards, and it is a delicate matter to deal successfully with the prejudices of the country. I find the patients, however, very grateful, and on my first visit to the hospital after my recovery, I was received with warm expressions of their pleasure at seeing me again. I will shortly move on towards Strasburg, and see what is doing, and then perhaps may join some of the large hospitals in Dusseldorf or Cologne."

I am, Sir, your obedient servant,
J. Martin.

THE "MEDICAL PRESS" AND INDEPENDENCE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—You denounce, in your "Notices to Correspondents," my communication as libellous—which it is not, but a truthful *ex parte* statement on an important professional topic—and with your charming air of independence, fear to insert it. Your correspondents cringe to your independence, and worship your impartiality. Is your refusing my letter publication a fair sample of that independence and impartiality?

I am, &c.,
Cantharides.

October 17th, 1870.

*** Your letter, in the form in which you sent it us, is certainly libellous; but you will find us as independent as you are yourself. If, then, your statements be accurate and just, append your name, and give us an implicit undertaking that, printing your letter, you will take all the responsibility of it in case of after proceedings. We have neither the time nor the inclination for making ourselves a scapegoat for lawyers over a trivial matter. Nevertheless, regardless of your letter, we do claim for these columns independence and impartiality. —[Ed. M. P. and C.]

BABY-FARMING.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Will you permit me space to make a few concluding remarks in reply to the letter of "Veritas," published in your present issue? He tells us that he has been connected with an institution which admits many hundreds of "*victims to seduction*" annually, and at once then claims attention for his strictures. Where are his statistics to prove that the seducers of women "*are women and dress?*" The essence of "Veritas'" letter, as far as my humble comprehension goes, is to prove that men do not seduce except on very rare occasions, but that one girl makes the preliminary arrangements for the destruction of her female friends. What will "Veritas" say to the following, from the *Times* of Monday?:—

"At Southwark, a respectable-looking young woman, 30 years of age, was placed at the bar, charged with being found destitute in the public street, creating a disturbance, and refusing to leave the steps of a house in Blackman street. Police-constable 142 M said that between 11 and 12 o'clock at night he found the prisoner sitting on the step of a door in Blackman street, screaming. She said she had been ejected from the house and would not go away. He was compelled to take her to the station-house, when she gave the following account of herself to Inspector Fox, who took her statement down in writing:—'I am a native of Weymouth, where my friends reside. About twelve months ago, an insurance agent courted me and decoyed me from my home under the promise of marriage. We came to live in Trinity square, Borough, as man and wife. My family are respectable and in independent circumstances. The man obtained large sums of money from me, and when I pressed him to marry me I found he had a wife, and he turned me out. His wife died two months ago, and on the night in question I went to his house to know what his intentions were towards me, when he called a constable to eject me. I do not want to injure him. All I want is to die on the doorstep. If you let me go, I shall go back and lie there till I die. I went to a chemist in the evening, and had he supplied me with what I wanted I should have been dead by this time, and all my sorrows forgotten.' The magistrate asked if the prisoner was sober. The constable replied that she was, but was very much excited. In answer to the charge, the prisoner said it was quite true what

the inspector had taken down. She was seduced under promise of marriage, and she was ashamed to go home to her friends. She would rather die in the streets. The magistrate directed the constable to take the prisoner to the office of the Rescue Society and see what could be done for her."

What does he say to the handkerchiefs marked with coronets, to the wicked Earls, to the Chancery barristers, to the well-known gentlemen of another profession, commented upon by our powerful ally, the *Pall Mall?* Not always women tempters and seducers in dress!!!

If I don't compliment my neighbours, it is because I cannot; and I take his sneer for what it is worth respecting the country which supports me. I work for that support. "Veritas" asks "What is said about married women who leave their husbands or deceive them?" Poor Captain Vivian, or, better still, the virtuous Marquis, *et hoc genus omne*, can answer this better than I.

I cannot accept as truth the literal translation of "Veritas," unless he brings to bear statistics to show, that "women and dress" are the seducers in greater proportion, and that the men, as a majority, are innocent.

I do tell "Veritas," very honestly, very plainly, and without umbrage, that there does exist such systematic monsters as men-seducers, who live to betray and to destroy, and I am rather astonished his experience is so limited as not to know it too.

In the communication of "Prudentia et Justitia," I am very proud, if I judge aright the valued source of the letter, to find so clever, so enlightened, and gifted an authoress with me on the point of making seduction a criminal act, and ascribing it as the foundation all of abortion-mongers, infanticide, or baby-farming, call it what you will. Dr. Green, in a letter addressed to the editor of the organ of the British Medical Association in reply to Dr. Drysdale's communication, also requires seduction to be made felonious.

In conclusion, with regard to making seduction a criminal act, I may apply to "Veritas" the following words, contained in an article written in *The Saturday Review* a few weeks ago, and adapted to the case of Margaret Waters:—"Criminal law, after all, only embodies morality. If a criminal says that he has no evil intention, it may only be because, in fact, he has no sense of morality. What the law says is,—We regard not your views of morality or your intention, but we act upon what mankind has agreed to consider morality." What is "Veritas'" sense of morality?

I am, &c.,
J. Waring-Curran.

Osman House, Sutton-in-Ashfield, Notts,
Oct. 27th, 1870.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In May Dr. Hanrahan, of Castletown, Mountrath, sent me £5, the amount of subscriptions collected by him for the Medical Benevolent Fund Society. This sum was duly added to the funds, and appears in the auditor's abstract as subscriptions from Queen's County; the list of subscribers has not, however, I find been printed in the report; I hope you will be so good as to publish it, and, at the same time, permit me to acknowledge £1 1s. from Dr. Darley, of Coolock, which only reached me to-day, but was sent by that gentleman some time ago, and should have appeared in the report.

I am, Sir, yours truly,
James Little, Treasurer.

Queen's County Branch Subscriptions for 1870.

Dr. Fisher, Mountrath, £1; Dr. Percival, Stradbally, £1; Dr. Hobson, Ballylinan, £1; Dr. White, Borris-in-Ossory, £1; Dr. Hanrahan, Castletown, £1.—Total £5.

Civil Surgeons for the German Army.—The German Secretary of War has called upon civil medical men to join the Hospital Reserve of the Army. Surgeons are more and more needed among the invading troops. The *Allg. Centr. Zeit.*, gives a list of medical officers who meet with wounds or death during the campaign.

Medical News.

Royal College of Surgeons.—At the special meeting of the council on Thursday last, the 27th Oct., the following gentlemen were elected members of the Court of Examiners, in the vacancies occasioned by the resignations of Mr. Richard Quain, F.R.S., and of Sir William Fergusson, Bart., the President of the College, and by the expiration of the term of office of Mr. F. C. Skey, C.B., F.R.S., who declined being put in nomination for re-election: Mr. Henry Hancock, Vice-President of the College, and Senior Surgeon to the Charing-cross Hospital; Mr. Frederick Le Gros Clark, Surgeon and Lecturer on Surgery to St. Thomas's Hospital; and Mr. William Scovell Savory, F.R.S., Surgeon and Lecturer on Surgery to St. Bartholomew's Hospital. Mr. Gray has given notice of the following motions, which will be considered at the Council meeting of Nov. 3rd:—1. That, in the opinion of this Council, the Royal College of Surgeons of England, is entitled to a greater number of representatives in the General Council of Medical Education and Registration of the United Kingdom than that which is assigned to it by the Medical Act of 1858. 2. That, in any increase of the number, provision should be made that one, at least, of the representatives of the College should be elected by the Fellows and Members. 3. That a copy of the foregoing resolutions be forwarded to the Lord President of the Privy Council.

Natural Science at Oxford.—The following lectures are to be given this term. 1. University Lectures: Professor Phillips, F.R.S., "On the Composition and Structure of the External Parts of the Earth." Professor Lawson, "On the Minute Anatomy of Plants." Professor Rolleston, F.R.S., "On Anatomy and Physiology." Professor Pritchard, F.R.S., "On Astronomy." Professor Clifton, F.R.S., "On Elementary Statistics," and a continuation of his lectures "On Heat." Mr. Wyndham, for the Professor of Chemistry, "On Elementary Principles of Chemistry." The Professor of Zoology will give assistance to all who are working at the Articulata, the collection of which he is arranging. All these are free public lectures, and are illustrated by experiments, and are all largely attended. 2. College Lectures, &c.: Mr. A. V. Harcourt, F.R.S., Lees Reader in Chemistry, "On the Chemistry of the Metals," at Christ Church. Mr. A. W. Reinold, Lees Reader in Physics, "On Hydromechanics and Heat," at Christ Church. Mr. J. B. Thompson, Lees Reader in Anatomy, "On Comparative Osteology," at Christ Church. Mr. Heathcote Wyndham, "On Chemical Philosophy," at Merton. Mr. Abbay, "On Elementary Physics," at Merton. Mr. Chapman, "On Anatomy and Physiology," at Magdalen.

Unhealthy Dwellings.—Much has lately been said about the unhealthy buildings occupied by the labouring classes. Public opinion in Lincoln has lately been directed to the state of the dwellings of the poorer classes of society by the Government enquiry, and the publicity given by the press to one particular instance where a working man died of fever, in a house quite unfit for habitable purposes. Now, besides the great power given to Boards of Guardians, Town Councils, &c., by the Sanitary Act of 1866, there is an Act to provide better dwellings for artizans and labourers, called "The Artizans' and Labourers' Dwelling Act, 1868," which enables local authorities to demolish such places as are unfit for habitation if the defects in any premises cannot be remedied by structural alterations and improvements or otherwise. It cannot be denied that there are many houses in Lincoln thoroughly unfit for habitation, yet to demolish these (without providing adequate house-room for those ejected) would be to turn many an honest family either into the streets, or away to seek shelter in country districts, probably far away from the scene of their daily occupations. To demolish these would also bring down upon the local authorities the fierce denunciation of certain tenement holders—the greatest opposers to all improved sanitary measures—who (as a rule ignorant) are fond of airing their fancied eloquence before the public; and whilst announcing the wrongs of the working men, are not above taking their few shillings as rent for places used as habitations, though in many instances unfit for pigsties. It seems strange that the people of this country—a country at peace with the world—a country whose stack-yards and barns are overflowing with the abundant harvest the Almighty has been pleased to

provide, a country whose philanthropy has lately sent abroad hundreds of tons of clothing, and hundreds of thousands of pounds to succour the wounded and sick of foreign nations—should be content to allow their fellow creatures to be huddled together in houses unfit for habitation. Stranger still, that within a stone's throw of our splendid Cathedral, a human being should be allowed to die of a preventible disease, in a little place, if any better than a hovel, surrounded by all the necessaries for fostering and propagating disease, and with scarcely a rag to cover him.—*Lincolnshire Chronicle.*

Post-mortems at Hospitals.—The Governors of Guy's Hospital have placed in a conspicuous position the following notice:—"*Notice to Friends and Relatives of Deceased Patients.*—The Governors reserve to themselves, in the interest of the public and as one of the conditions of admission to the hospital, the right of causing a *post-mortem* examination to be made of the body of every patient who dies within the hospital, by the Pathologist or his representative, for the purpose of accurately determining the causes of death. In the event of the friends or nearest relatives being opposed to such an examination, they are to communicate their wishes to the Superintendent, who will submit their objections to the medical officer who had charge of the deceased patient, and if he is of opinion that there is no urgent need for a *post-mortem* examination, the Superintendent is authorised to dispense with it.—Jno. Chas. Steele, Superintendent."

The Guards.—According to the *Army and Navy Gazette*, Staff Assistant-Surgeon W. Collins, M.D., has been selected to fill the vacancy amongst the medical officers of the Brigade of Guards caused by the death of Assistant-Surgeon H. Turner, Scots Fusiliers. Dr. Collins, it will be remembered, took first place at the competitive examination of the Army Medical Department in October, 1866. He has since served in Canada, and was recently attached to the 1st Life Guards.

Dr. Bolton, of Newcastle.—A very handsome testimonial was, a few days since, presented to Dr. Bolton, late house-surgeon of the infirmary at Newcastle-on-Tyne, consisting of a framed illuminated address, a silver salver, and a purse containing one hundred and twenty sovereigns.

Mr. Greene, of Morpeth.—The attendants at the Morpeth County Lunatic Asylum, on learning that Mr. R. Greene, the Assistant-Surgeon, was about to take an appointment at the Sussex County Asylum, presented him, on his departure, with a testimonial in the shape of a silver cup, suitably inscribed.

Dr. Wallace, of Trim.—On the 10th ult., a deputation of gentlemen of Trim, waited on Dr. Wallace, to present him with an address and testimonial upon his retiring from the office of medical officer to the Trim Dispensary. The testimonial consisted of a superb silver tea and coffee service, from the eminent firm of Waterhouse and Co.

Royal College of Surgeons in Ireland.—At the quarterly examination held on the 19th ult., the following gentlemen passed the preliminary examination of the College,—viz.; William Alfred, John Armstrong, Penrose J. Barcroft, Richard E. Biddulph, Abraham Blundun, George D. Bourke, Alfred H. Bullen, John E. Connelly, William A. Cooper, Eyre S. Dalton, Francis Day, John E. I. Deane, Alexander Dempsey, Samuel F. Dooley, James Doyle, James H. Dunne, Patrick I. S. English, Joshua S. Grubb, Ernest C. Hamilton, Hans L. E. Hamilton, William H. De Burgh Hoctor, John J. Hincks, William P. Hourigan, John C. Kempston, Patrick Kennedy, William Keys, Thomas P. O'Leary, Stewart Partridge, Nicholas C. B. Parsley, Alfred Patterson, Patrick Phelan, John J. Poett, James Ross, Henry A. Sampson, Samuel Sharp, Abbot G. Shelton, George F. Skirving, Edmond Tully, Rueben Turner, Nathaniel Vicary, Patrick F. Walsh, and Lancelot O. W. Weire.—At the quarterly examination held on the 25th and 26th ults., the following gentlemen passed their second and third examination for the letters testimonial, and were admitted licentiates of the College—viz.: Alexander Barber, Robert Barry, Daniel O'Connel Boyle, James B. I. Brady, Samuel W. Brown, Patrick Butler, John S. Carleton, John Clancy, Paul S. Connelly, Charles Little, John G. Little, George W. Mac Ilwee, Patrick J. Macnamara, Joseph W. Neligan, Thomas Reardon, John Redmond, Francis Legravr, William H. S. Westropp, Henry F. L. White, and Thomas Wills.

The Edinburgh Chair of Natural History.—We understand that Professor Wyville Thomson, who for the last eight or nine years, has occupied the chair of Natural History in the Queen's College, Belfast, has been appointed by the Crown successor to Professor Allman in the corresponding chair in Edinburgh University. Professor Thomson is well known in connection with his deep-sea researches. In 1868 and 1869 he was associated with Dr. Carpenter in making investigations into the temperature and animal life at great depths in the North Atlantic, a work undertaken at the request of the Royal Society of London.

NOTICES TO CORRESPONDENTS.

☞ Correspondents requiring a reply in this column, are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Out of thousands of such persons it may cause enquiries so signed, on very various subjects much confusion.

⁂ We must also request our Correspondents to write only on one side of the paper and in *legible* characters. We are often compelled to consign MSS. to the waste-paper-basket merely because it is illegible.

Correspondents not answered in the current Number are requested to look to the Notices the following week.

Inquirer does not state how long the patient lingered, but, from his note, we judge that death was very speedy. In that case the enquiry suggests itself as to whether there could have been any exposure to the contagion of scarlet-fever. There are undoubted cases of that disease which terminate with awful rapidity. The patients seem struck down by the poison and sink at once, before the usual symptoms have time to develop. Similar cases have been noticed in epidemics of diphtheria and other diseases. At the same time, all other causes of rapid death should be considered. It is a pity no *post-mortem* was made.

F.R.C.S. Lond.—Write to the secretary of the University, who will at once give you a reply.

THE LONDON MEDICAL SOCIETIES.

Wednesday, Nov. 2.

Obstetrical Society of London, 8 p.m., Dr. W. Martyn, "On the Management of Childbed with a view to Promote successful Suckling." Mr. Coward (Christchurch, New Zealand), "A Case of Inversion of the Uterus." Dr. Tracey, "A Short History and Description of the Lying-in-Hospital at Melbourne, Australia;" and other papers.

Thursday, Nov. 3.

Harveian Society of London.—8 p.m.

Monday, Nov. 7.

Medical Society, at 8 p.m.—General Meeting.

Tuesday, Nov. 8.

Royal Medico-Chirurgical, at 8½ p.m.

APPOINTMENTS.

Ashe, Isaac, M.B. and C.M., Trin. Coll., Dub., Consulting and Visiting Physician to the Donegal Lunatic Asylum, Letterkenny.

Browne, T., L.R.C.P., House-Surgeon to the West London Hospital.

Buck, T. A., M.B., M.R.C.S., Senior Medical Assistant to the Gloucestershire Lunatic Asylum, near Gloucester.

Crean, R., L.K.Q.C.P.I., House-Surgeon to the Clayton Hospital.

Davidson, A., M.A., M.B., Lecturer on Pathology to the Liverpool Royal Infirmary School of Medicine.

Lee, E. S., M.R.C.S., Assistant House-Surgeon to the West London Hospital.

Mackenzie, S., M.R.C.S., Resident Medical Officer to the London Hospital.

Richmond, S M.D., M.R.C.S., Surgeon to the Northallerton Gaol.

Rigden, W., M.R.C.S., House-Physician to the Hospital for Women.

Saunders, T. D., L.R.C.P., Medical Officer District No. 4 of the West Ashford Union, Kent.

Wilkin, T., L.K.Q.C.P.I., Medical Officer to the Lisbellaw Dispensary District of the Enniskillen Union.

VACANCIES.

Middlesex Hospital.—Assistant Physician. Application before the 15th inst.

Western Dispensary, Marylebone.—The Officers of Physician, Accoucheur, and Surgeon in Ordinary. Application for either appointment by the 7th inst.

Liverpool Southern Hospital.—House-Surgeon. Salary £100, with board.

West Sussex Infirmary.—Surgeon. Election on the 17th inst.

Liverpool Royal Infirmary, School of Medicine.—Lectureship on Comparative Anatomy and Zoology. Application by the 5th.

Stafford Infirmary.—House-Surgeon. Salary £25, with board, &c.

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

A System of Surgery. Fifth Edition. By Sir William Ferguson, Bart., F.R.S. London: John Churchill and Sons.

An Introduction to the Osteology of the Mammalia. By Wm. H. Flower, F.R.S., F.R.C.S. London: Macmillan and Co.

A Book about Shams. By Dr. Lory Marsh. London: Ward, Lock, and Tyler.

Life and Writings of Robert Knox. By Henry Lonsdale. London: Macmillan and Co.

The New York Medical Journal; Nature; Boston Medical Journal; New York Medical Gazette.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 9, 1870.

CONTENTS.

Introductory Lecture

ROYAL COLLEGE OF SURGEONS, IRELAND.

SESSION, 1870-71.

INTRODUCTORY LECTURE DELIVERED BY MR. MORGAN, F.R.C.S.I.,

Professor of Surgical and Descriptive Anatomy, &c.

THE PRESIDENT OF THE COLLEGE IN THE CHAIR.

AFTER some introductory observations, Mr. Morgan proceeded to say:—The splendid success of the Associations for the "Relief of the Sick and Wounded" speaks volumes for the kind and anxious feelings of the general public to soothe, in even a small degree, the miseries entailed. Yet, what are its efforts as compared with the sacrifices made by members of the medical services, where not merely the aid of the medical skill is so taxed, that we hear of twenty hours out of twenty-four being occupied in active attendance by the surgeon, but the personal risks also of danger on the field, and the greater ones arising from epidemic influences are disregarded in the excitement incidental to the "circumstance of war." These conditions have been beyond doubt most trying and harassing, yet do we ever hear of the members of the medical staffs failing in their duty? When urgency is appealed to, do we read of those who have volunteered their services sparing themselves, or neglecting their dying and suffering fellow creatures? No, gentlemen. We are surely entitled to say, without fear of contradiction, that our profession has never been accused of remissness, where suffering was to be allayed, or where in sudden and appalling emergency from war or epidemic inroads, its members have been called on to aid the State or the public in combating the woes such afflictions necessarily entail. We read such paragraphs as the following constantly in our medical journals; I will take a recent one—"Amongst the victims of the war, we regret to announce the decease of Dr. Rigaud, resulting from over fatigue in attending on the wounded. M. Rigaud was well known in the south of France, and his untimely death will be deplored by all who knew him. He went, on the outbreak of the war, to serve his wounded countrymen, and laboured among them with such devotion as to sacrifice his own life." Such incidents as these are frequent. So accustomed do we become to them that beyond a passing tribute of praise and regret for one who deserved so well, we enroll the name as another in the long list of those who when duty called, or the noble nature of his sentiments were appealed to, literally "worked himself to death," to aid his fellow man —*ex uno disce omnes*. Yet such examples can be too frequently reiterated as, both here and abroad, our fever and cholera epidemics testify. Again, we read as a professional episode of the war, that 500 surgeons fought at Sedan, leaving 200 of their number in the field; while we must give every credit to these for personal courage and *élan*, yet I think you will agree with me, that the epitaph "Died from over-fatigue in attending on the wounded," stands in monumental simplicity, as one preminently suited to a member of our order, fallen in so good a cause. Indeed, the most attractive feature almost in our profession, is the happy combination of the pursuit of a science with the sympathetic sentiments engendered by fellow feeling with our own fellow creature. The necessary relation of the conditions of mind and body is a subject which never fails to give *verve* and interest in the exercise of our art. Let us take examples, just now too frequent, and I doubt not most potent emotional stimulants to exertions in the ambulance hospitals. We read in the newspapers of so many thousands being wounded, they seem as nothing in proportion to the slain, but each of these have, with anything of a serious wound, gone through a stage known to surgeons as "*the shock of an injury.*" Picture to yourself a young man, healthy, vigorous, full of life, energy, courage, and determination—he is struck down, he falls disabled, and then ensues the shock to his nervous system. He is directly brought in pale, all but pulseless, insensible, and faint, presenting in its details the appearance so well

depicted by the artists to our illustrated newspapers. In proportion to the intensity of this appearance of shock, are our sympathies awakened. I am myself pretty certain that nothing has done more to soften the heart, and lead to a responsive result with the public, than these graphic, silent, but irresistible appeals in the journals—all of them, no doubt, taken from reality. The abjectness and total dejection of the sufferers, the accompaniments of crowding, hurrying, and emergency, are made familiar to all. The presence of the clergy to sooth those whose shock is probably irrecoverable, and the tender assiduity of the volunteer nurse are all carried out with faithfulness and attention to detail. If these affect and rouse non-professionals, and those who are ignorant of the true significance of the expression and "*the shock of an injury*, what will it be with the surgeon. Not only will his feelings, as a human being, be as acutely influenced as others, but it will be his important duty to gauge the extent of his danger, to judge how far the shock is irremediable, to pass the painful verdict—mortal ; or, whisper the hopeful one—recoverable. Now, in the deciding of such important questions, I need hardly tell you the greatest perfection of our knowledge is needed, and the most accurate acquaintance with the principles of our art is most essential, combined with that self-reliance which can only be assured the surgeon by perfect self-confidence, and a consciousness of his possessing *within himself* the resources necessary for any emergency. From these exemplifications of the important demands on the surgeon's knowledge, acquirements, and judgment, which may arise at any moment, the question very naturally arises in your mind as to how you may best become masters of that art, which can be of so great utility to our fellow man, and which can, humanly speaking, preserve so many valuable lives, and relieve so much suffering— where by the well trained hand of the surgeon, the knife can be guided with certainty, or the physician skilled in the laws of hygienic aids, meets the inroad of epidemics themselves more fatal than the clash of armies, and seeks to combat the malignant influence of infections by which camps, cities, and even whole countries have been devastated. No doubt, the question is a very interesting one for you how you will best become an adept in an art such as this, by which if we cannot always cure, we are happily enabled to alleviate the all chastening influence of pain—a power from which "in all its sad variety" neither wealth or poverty can hope for exemption, and which forms the great bond of sympathy between all classes. I shall, therefore, endeavour succinctly to explain to you, how you will best proceed to attain your end. The institution in which we are now assembled has always directed its best efforts to carry out such a truly efficient mode of education and training as would best serve the interests of the public and the State ; and would best sustain the character which has marked its conduct from its earliest date, in providing "properly educated surgeons."

The Charter granted to this College by King George Third, sets forth its objects, and reflects credit on its members, *even at that early period*, in establishing it as an institution for the improving of the Profession of Surgery. From thence, it has had but the one object in view, and, from time to time, has modified its method of education, as best would suit the necessities of the public and the Profession.

Now, with the incoming year, the additional test of clinical examination has been added in conformity with the wishes of the public, and of the Profession at large.

The number of licentiates on the roll of the College now amounts to over 2,000. They are spread over the face of the world. In the memorable expedition of the "Fox" to the Arctic Regions the health of that heroic crew was entrusted to a licentiate of the College. Just now, the Chef d'Ambulance at Sedan, who has reflected so much credit on Irish Surgery, is a F.R.C.S.I. The Crimea, India and the Colonies have acknowledged the services of our members ; and I may ask, can anything testify more to the care taken by the College in perfecting a practical and careful training for the Profession of Surgery, and the carrying out of its charter, than the success of the services rendered by the Poor-law Medical Officers throughout Ireland, amounting to about 1,000, the vast number of them having been *alumni* of the institution in which we are assembled. "Surely, we have done the State some service," and have not betrayed the trust confided in chartering an Institution for the "Improving the Profession of Surgery," when such men have been supplied for the public as have succeeded, by increasing care and precaution, in so far combating, as absolutely to banish the terrible scourge of small-pox from this country. Such is the success of the vaccination system, that small-pox is now actually unknown in Ireland—in perhaps no country in the world is the medical relief of the poor so efficiently carried out —or have the medical officers been more remarkable for assiduity and self-disregard.

A return has been recently presented to the House of Commons which compares the number of deaths in the three kingdoms, and classifies them under various headings. The main result may be inferred from the simple statement that to bring the deaths of Ireland up to the level of England or Scotland, some 301,000 more persons should die annually in that country ; or, we may say, that, taking the last year in the return, 1868, the number of deaths in England to every million of population was over 22,000, and in Ireland under 15,000. Taking, again, the number of small-pox cases, we find that in England the number fell off considerably during the years 1864 to 1868, the deaths attributable to that disease being 7,684 in the first of these years, and only 2,052 in the last. In Ireland, however, the case was far more remarkable. There were 854 deaths from small-pox in 1864, and only 23 in 1868.

It is plain that the maintenance of the health of the inhabitants of the rural districts of Ireland is absolutely dependent on the efforts and talents of the Poor-law Medical Officers. On the 7th April, 1861, the day on which the last census was taken, there were 46,141 persons sick at their own homes in Ireland, or about 50 persons sick at their own homes on that day to each of the dispensary medical officers. The average population under each medical officer's charge is 7,400, or as a sixth of the population are attended by the dispensary doctors during the year, the average number attended by each will be over 1,200. Such results speak for themselves. Again, we find from a non-medical source the highest testimony incidentally paid to the benevolent and indefatigable efforts of members of the Poor-law Medical Service.

Mr. Trench, in "Realities of Irish Life," gives the following graphic account of some incidents of his visit with the Doctor at the time of the famine fever. In one house which I entered Dr. Sweetman proceeded to a dark corner, and feeling with his hand, told me there were six in the bed—father, mother, and four children—all unable to rise. I was particularly struck with the question put to the poor people by the Doctor—Are there any dead here? In another house, four in fever ; in another, father dead, wife and daughter alive. In another house—"a dying man and woman, and a boy with dropsy." It would be unnecessary to quote further proof of the ability, devotion, and self-sacrifice of the members of the Profession and of this College, who occupy positions so important to the community as the Poor-law Medical Officer's. The amount of good done, of ready help, and perfect medical aid afforded, is incalculable, reflecting such credit on this Institution and its members that, on an occasion such as this, I could not omit, on the part of this College, referring to these practical results as entitling it to the combined confidence of the State, and as deserving the gratitude of the public.

Education.—The tripod—I may so express it—of surgical education on which this College has based its system, is formed of Anatomy, Physiology, and Surgery, as being the great essentials. Indeed, the relation of surgery to anatomy is so essential that at all times anatomical studies

have formed one of the great anxieties of the Profession, and the State has arranged such facilities for its study as will render it unpardonable in you, gentlemen, not to be expert and thoroughly conversant with its details, and you may be convinced that your first and greatest attention should be paid to its acquirements—it is a study which must be steadily pursued—with perseverance you will master its details.

Original Communications.

ON THE FORCIBLE INTROSPECTION OF WOMEN BY GOVERNMENTS.

By Chas. Bell Taylor, M.D., F.R.C.S.E.

Mr. Holmes Coote, the well-known Surgeon to St. Bartholomew's Hospital, remarks—"That the philanthropist who would attempt to deal with prostitution on other principles than those of Him who uttered this warning and advice, 'Let him that is without sin amongst you cast the first stone,' must needs be both a bold and ignorant man; bold, because he attempts in defiance of such warning to do that which has failed in every known clime and age; ignorant, because he has yet to learn that in the sight of their Maker men and women stand with equal rights, and that no blessing will attend legislation which presses unequally on one sex to the supposed advantage of the other." As I entirely concur in these views I shall, with your permission, first question the right of the State to interfere for the prevention of venereal disease by the forcible introspection of women. There are certain natural rights belonging to every woman, even the most outcast, that, in my opinion, men born of women are bound under all circumstances to respect. The attempt to enforce such laws as are embodied in the Contagious Diseases Acts of 1866 and 1869, will assuredly fail in their professed object, and undoubtedly tend, in many ways, to injure and weaken the Government that sanctions them. I make these observations with the more confidence because, as I am informed, a British Parliament is the first legislative assembly in the world that has ever legalized such violations of the person, and because it is clear these Acts were smuggled through the House under a misleading title, unknown to the constituencies, and unknown to the vast majority of members themselves.

I am quite prepared to admit that, in times of great public danger, in cases of sudden pestilence, or when from various causes a large portion of the population, for no fault of their own, are threatened with calamity, that a pure despotism may not only be needful, but ought to be tolerated by a free State; but three essentials are requisite. In the first place, the necessity must be undoubted; in the second, the law must be limited to the shortest possible period; and above all, it must be impartially applied—not limited to one sex only. The Editor of the *Medico-Chirurgical Review* remarks—"Even where considerable danger exists to a section of the population, against which it cannot protect itself, legislation ought to be slow to interfere—where the dangers apprehended arise out of those natural Divine Laws which affix trouble, or even death, as the penalty of transgression." That these penalties extend beyond the first transgressor is not a circumstance that will warrant the exceptional intervention of the State. It is not venereal affections only, but all kinds of calamities—the penalties of sin or folly in a parent that are visited on his children and connections. "It must be admitted," says Mr. Simon, "that the living a loose life, and catching disease, are private voluntary acts, from which no citizen has any right to call upon Government to protect him." If it be urged that the evil does not stop with the first sufferer, but may spread to the innocent, the same may be said of every misdeed and misfortune; and to constitute grounds for State interference it must be shown, *First*, that the damage done by venereal disease is so gigantic as to altogether over-rule the sound general policy of non-interference; *second*, that such interference would be, at least, effectual (which is positively denied); and *third*, also that the good to be attained would be worth the cost.

The Association which has been formed to extend this Act to the whole of the women of this country, holds that sufferers under any kind of contagious diseases, are dangerous members of society, and should be prevented from communicating their maladies to others, which is a very simple and easy method of settling the whole question.

But let us consider for a moment—if we admit this principle, where is it to end? We must seize and shut up every man, woman, and child affected with any kind of contagious or infectious malady. We must separate the seriously ill or dying husband from the wife; the sick wife from the husband; children from their parents and friends; break up all familiy ties in times of misfortune and affliction, and at moments when they are most needed and most endearing. The author already quoted remarks that, "Even confining the question to venereal diseases, are we prepared to allow the interference of the State? Can we bring ourselves to imagine the State interfering in the case of every man, woman, and child, to prevent the extension of these diseases to others?" The Association, previously referred to, places no limit nor condition upon the duty of the State in preventing contagious diseases. Let us try and put this straight. Two principles may be laid down upon the basis of which the question of State interference may be answered; for it is obvious that a population of Englishmen are not to be treated as children who are entirely unable to take care of themselves. And the first principle of British legislation may be thus expressed, that the State shall only interfere where there exists a considerable danger to a large section of the public, against which the exercise of ordinary care and prudence will not suffice for protection. We may illustrate this by instancing the provisions made by law for the safety of travellers by railway, or by ships, for the disinfection of public conveyances, and generally for the abatement of nuisances upon premises over which the sufferer has no control. Now, it certainly cannot be said that the exercise of ordinary care and prudence will not protect a man from venereal disease. If he deliberately puts his head into the lion's mouth, he is very properly left to take the natural consequences of his folly; and the fornicator has less right to ask for protection because his conduct is immoral, although not legally criminal, and public and private immorality is a state of things against which good government ever sets its face. A gallant colonel, who spoke recently at a public meeting in favour of the Acts, remarked that—"Women had no right to communicate disease"—an *ad captandum* argument. all very well so far as it goes; but it does not go far enough. Surely, *men* have no right to communicate disease, and there is abundant evidence to show that of the two sharers in a common offence, even so far as the spread of disease is concerned, the men (notably soldiers and sailors) are equal, if not greater sinners. Now, Sir, I don't find any mention of men in the Contagious Diseases Acts, which are for women only as distinguished from men and animals. Moreover, the man who deliberately inoculates himself during the commission of an immoral act, is alone to blame for his misfortune. It is not just to say *only* that women communicate disease, as though they had spontaneously generated an affection, which must have been previously communicated by a man, and as though the woman came to her partner without his knowledge or consent, when it is clearly the male who deliberately seeks out the female, and wilfully contracts the malady with his eyes open, and well aware of the risk he incurs. I think, also, Sir, that in apportioning the penalties for this fault, we ought to remember, as a matter of manly feeling, that the man is tempted only by lust, while the woman is constantly urged by suffering, by bribes, by cruel, biting poverty, and absolute want of the necessaries of life. We

are told that women make a trade of their persons, and that Government has a right to regulate trades—in fact, to supervise the persons of prostitutes in order that the fornicator may have a good article for his money. Well, Sir, the trade in question is an immoral trade, and if Government is to avoid implication in its immorality, I humbly conceive that it must avoid, either virtually or actually, licensing or regulating it at all.

In fact, the less Government has to do with prostitution—except in the way of suppression, keeping it within decent limits—the better.

What should we say if a deputation of prostitutes waited on Parliament, demanding despotic and indecent laws to be directed only against men, on the ground that they—the men—communicated disease to them and their children! A sanitary law applicable to one sex only is an absurdity. Let me follow out this trade argument to its legitimate conclusion. There can be no trade without a buyer and a seller. If the trade be infamous, both are guilty; if not infamous, why punish the woman? If you say you don't punish her, then I say that the periodical examination, at the option of police spies, of those who are not diseased is pure torture, and utterly indefensible on any plea. Moreover, in this case, it is clearly the demand which creates the supply, and the male sinner is most to blame. Who pays for the rouge, the finery, and the wine? Who seduces, keeps, abandons, and then indiscriminately patronises these poor women? and who when they turn to honest labour, employs them on starvation wages? Why, Sir, according to the last census, there were 20,000 needle-women in London alone, who were unable to earn more than from two to five shillings a week, and the *Times* of the same period tells us that well-born women were dying from want while making shirts at two shillings a week. Let us not forget while visiting all the penalties upon the weaker—the less erring and more tempted of two sharers in a common offence—that the Eros of our streets is the child not of Venus, but the offspring of misery and starvation. But what shall you say when I tell you that the law is not confined to prostitutes; that it is not limited to the class who are said to make a trade of their persons; but that it entirely abolishes legal safeguards for *all* women, and places the freedom, honour, and sacred personal rights of all (certainly all of humble station) under the brutal control of the lowest executives, whose duty it is to spy—who are disguised in plain clothes—and who make offensive overtures to decent women in order to multiply the number of apparent cases falling within the scope of the acts? No slander is so cruel as an attack upon a woman's reputation, and if you do not share the indignation with which I have read the following scraps of Parliamentary evidence, I have strangely mistaken the noble Profession to which I have the honour to belong. The Chairman of the Committee says to the examining Surgeon:—

"Suppose the police bring up a woman who is a modest woman, surely she would decline to submit?" The reply is—"No, for this reason: the police, acting on their own impressions" (mark the phrase!), "say, if you don't submit, you go before the bench." Let us realise the situation for one moment. A policeman, in plain clothes, takes into custody a respectable girl or woman, and tells her that unless she submits to have her person violated with a surgical instrument, periodically for a year, that he shall take her before a bench of magistrates, and swear that he—the moral policeman!—thinks something; for that is all that is required. In fact, we have evidence to show that they ignore magistrates altogether, and threaten them with three months' imprisonment if they refuse to submit to immediate registration as common prostitutes. Why do these modest women submit? Because they are frightened, ignorant, and friendless. They don't understand the law. They have no counsel to speak for them. They dread the bench and the police; they know that such an accusation before the magistrates means loss of situation and character—in short, means ruin; they know also that they have no chance against the only witness, who is the man paid to accuse them! and we are told that "*they trust instinctively to the kindliness of the doctor.*" So they are laid out, registered, and their persons exposed and examined with the speculum, after which delicate operation they are told to come again in a few days for a repetition of the process. *This* is called with grim irony "the voluntary submission!"

Dr. Barr, of Aldershot, being asked respecting some women that the police had been "searching" for, as to what class of life they belonged to, replied,—"Dressmakers, married women, the wives of labourers and small tradesmen, and domestic servants *of course.*" Further, he is asked about the village of Frimley, near Sandhurst, and replies—"Occasionally I get a labourer's wife." Mr. Parson's being asked how it was that modest women submitted, replied—"Why, if they go to the Magistrate's Court it is known all over the town, and the husband and friends become acquainted with it." Fancy, a common prostitute with husband and friends ignorant of her mode of life! Again, Mr. Parsons is asked—"Have you had many cases of virtuous women brought up by the police?" He replies—"No, not many." "Have you had half-a-dozen such cases?" Observe the cautious reply—"I should think less than that." The Act had not been in operation quite five months when he was examined. He continues—"The Committee are aware that women have the power of appeal, but of that they will not avail themselves, because if they are obliged to go into court it is at once known to their friends. Consequently, he says, they prefer to come to me for a periodical examination, rather than go before a bench of magistrates, although either alternative is a very *painful* one. Out of many thousands that I have examined, there were not above three or four orders from a magistrate." Dr. Brewer asks—"Has any woman been brought by false acusations?" Mr. Parson replies—"Yes," and goes on to say, "One or two women have offered to take their oaths that they were modest women, and nobody has any power to release them but the magistrate, to whom they are unwilling to go." The chairman says—"Were they brought up by the police?" Answer—"*They were ! !*" The examiner continues—"So, then *modest* women submit for fear of being taken before the magistrates?" Answer—"*Ungestionably ! !*" Further, we read of a virgin denounced out of spite, and discovered to be such on examination; and of children brought up by the police, crying so like babies that the humane examiner sends for their mothers (who cry too) before—before what? Why before he introspects the children's genital organs. Mr. Percy Wyndham asks—"What course is taken with reference to girls, milliners, dressmakers, and others, who are at work all day, and who supplement (*i.e.*, are supposed to supplement) their earnings by prostitution?" The answer is—"They are classed as common prostitutes for the purposes of the Act!" Further, Mr. Parsons in reply to Dr. Brewer, says—"If you confine the Act to women, who are prostitutes—*i.e.*, who get their living by it, it would not be of the slightest use." Again, in reply to Mr. Tipping, he remarks, that—"Before the Act came into operation the Government applied to the Metropolitan Police to supply them with some statistics as to the number of women. They went through all those large towns, Portsmouth, Plymouth, Devonport, and so on, and found out from the brothel-keepers, publicans, and others, the number of women gaining a livelihood by prostitution. I know very well (he adds) that *now that number is doubled*, and I believe the increase has arisen from the discovery of persons who are *attempting clandestine* prostitution, whatever that may mean, because the openly avowed common prostitute is as well known as any one else." What is Mr. Berkeley Hill's oft repeated and widely circulated assertion, that the law only applies to "notoriously vicious women—women who *seduce* for gain," worth in the face of evidence such as this? In fact, the law makes women prostitutes by enforced registration, who never were and

never would have been but for its cruel and unjust provisions. Thus, it is evident that this law is applied to the utter debasement of a class of women who are merely *suspected* of incontinence by policemen; and if I am told that there is no class among men analogous to the women who trade in their person, I reply that there are plenty suspected of incontinence, who seduce, debauch, and disease women, and who are just counterparts of the poor girls who are herded like cattle and periodically violated at the present moment in our garrison towns, in order that such men may be vicious with impunity—not that I would defend the application of the law to men, because I look upon the whole thing, applied to either sex, as both a crime and a blunder. So much for the social effects of a law which is clearly unjust in principle, obscene in practice, and, in my opinion, demoralizing to all concerned. It remains now to consider how far it is defensible on purely sanitary grounds, and in briefly considering this portion of my subject, I shall first deny *in toto* that there is any necessity for exceptional legislation on the subject of contagious venereal diseases. The unanimous testimony of all surgeons, both civil and military, goes to show, that these diseases have for the last two centuries been declining both in extent and virulence, both in the army and out of it, until we can scarcely recognise them as the maladies described by our forefathers. Dr. Balfour, head of the statistical branch of the Medical Board, says, "It may be stated generally, that prior to the introduction of the Act there had been a progressive decrease at all the military stations in the amount of this class of diseases," and I find from a reference to the same gentleman's tables given in the appendix to the evidence of Lords and Common's Committees, that venereal diseases were falling off in the following proportion among the soldiers and sailors prior to the adoption of this measure. At Devonport and Plymouth there was a reduction of 151 cases per 1,000; at Chatham and Sheerness of 59; at Thorncliffe of 108; at Woolwich of 269; at Aldershot of 106; at Portsmouth of 174 per 1,000, without any interference whatever. Surgeon-Major Wyatt of the Coldstreams, speaking before the Act had passed, says—"We never see now the ravages formerly committed on the appearance and aspect of the men. The cases we see are of an exceedingly mild type." Mr. Byrne, of the Dublin Lock Hospital, states—"There is not nearly so much syphilis as there used to be; formerly, we used to see daily in the streets persons who had lost their noses from syphilis; now, you will not see such a case for years." Mr. Syme says—"None of the serious effects formerly derived from syphilis ever appear, and even the trivial ones comparatively seldom present themselves;" and Mr. Simon remarks that—"Even the worst form of venereal affection, true syphilis, is not in an *enormous* majority of cases of more than transient importance to the persons attacked." The best authorities state that prostitutes who suffer most from such affections are as a rule rather healthier and longer lived than married women or female operatives, who lead orderly lives; and English soldiers and sailors who are said to suffer to an almost equal extent are certainly the finest body of men in the world. Dr. Druitt said that—"The cases of syphilis seen in London in the present day, are unimportant and soon got over." And out of twenty of the leading practitioners in the Metropolis, eighteen declared that they did not meet with the after effects of that disease in the cases coming under their care. Many surgeons who have been in practice from twenty to forty years have assured me that they have never seen a severe case of syphilis in the whole time; and the editor of the *British Medical Journal*, in a recent article, remarked that even taking the notched teeth and other signs attributed to inherited syphilis, they certainly did not occur in one of 5,000 of our population. I need not dwell on these facts. No one denies them. And it is an unquestionable fact, that there is less necessity for legislation now than there ever has been any time during the last two centuries.

We are told by the Association for extending this Act to the whole of the women of this country, that the venereal disease (mark the term!) is a disease of the gravest character, constantly transmitted from parent to offspring. Now, about fourteen-fifteenths of these cases are entirely local affections—gonorrhœa and non-infecting sores of no consequence, either to the patients themselves or any body else—certainly not diseases of grave character; and there is no disease whatever of venereal origin that is constantly transmitted from parent to offspring. Only one case in fourteen or fifteen, where the constitution becomes affected, is truly syphilitic, and this is the only affection which can be considered a matter of State concern. Yet, M. Fournier tells us that if this worst form is judiciously treated, not more than five persons in 100 affected would be seriously injured. In fact, we all know that the vast majority of cases, even of true syphilis, are readily and permanently cured, never afterwards troubling the patient, or affecting his offspring; and it is a fact that, the milder affections, gonorrhœa and soft sores, though unimportant of themselves are still great checks upon incontinence, and consequently the means of saving thousands from the more serious malady. I shall next deny, Sir, that the means proposed would suffice to attain the object in view, and I do so on the following grounds:—First, in face of the most satisfactory decline, prior to legislation, as indicated in the tables already quoted, I find since the adoption of the Act up to the latest published reports, to the end of 1868, that there has been at the same six stations Devonport and Plymouth, Chatham and Sheerness, Shorncliffe, Woolwich, Aldershot, Portsmouth, a slight diminution at three, a large increase at one, and a decided increase at two, showing an aggregate increase of sixty-six per 6,000 of force under the Act, in face of a decline prior to the Act of 871 for the same number. Taking Devonport and Portsmouth, the stations where the most satisfactory results are said to have been obtained, the number of cases per 2,000 was in 1860, 943; in 1864 it was 626; a diminution of 317 without any act. In 1868 it was 629, an increase of two after four years' trial of the system under most favourable conditions. In the same way if we take the three stations last brought under the Acts, Shorncliffe, Woolwich, and Aldershot, the number at these three stations combined in 1860 was 1,139 per 3,000; in 1866 it was 671, a reduction of 468 without any Act. In 1868, it was 725, an increase of 54 in two years under the regulation system. We get similar evidence from abroad. Dr. Huet, first physician to the Hospital at Amsterdam, has published an elaborate report on prostitution, and the effects of the regulation system. On disease in the army, he takes several cities, and compares the amount of disease in the aggregate among the men, several years before the adoption of periodical examinations of prostitutes and several years after its adoption. Nothing can be more conclusive than its results. Before the introduction of ordinances 1,786 cases amongst 15,913 soldiers yearly, after the introduction 2,241 cases in 16,810—*i.e.*, 11·2 per cent. before, and 13·3 per cent. after. An exactly similar sequence of events has been noticed in the presidency of Bengal. Before the adoption of the Act the number of admissions per 1,000 was 166; but in 1868 the number rose to 199 under the operation of the law. The last report as to the sanitary condition of Bombay affords similar evidence as to inefficiency, but I cannot quote further. Why should such regulations fail in the attainment of the object in view? The reason is plain. The periodical examination of prostitutes affords a false security. They make vice apparently safe and increase its prevalence, but they are in reality as futile as they are filthy. Mr. Evans who had an excellent opportunity for studying the French system, and its effects upon our Army of Occupation at Valenciennes says—"it is abundantly evident that the condition which communicates disease in the female, is only to be known by its effects; and it is thus, that Government regulations for checking disease so entirely fail in the attainment of the

object in view." This observation is especially true of syphilis, the only disease we are interested in checking. Thus, I find from Ch. Puche and Fournier's table, that of 873 men under their care for syphilis, 625 contracted the disease (believing themselves safe) from registered and regularly inspected women. Dr. Vintras says, that at least *two-thirds of the cases* of true syphilis in Paris are derived from inspected women. Mr. Simon, who is acknowledged to be one of the first pathologists in Europe, says—"the various local states which most habitually spread the infection of true syphilis, are constantly overlooked in examinations made expressely for their discovery." Dr. Aitken in his well known work on the "Science of Medicine," says—"Medical inspections are formal and look useful; but the infecting sore, the true syphilitic one can rarely be detected in the female." In another part of his work he observes, "the syphilitic sore, when it does occur in women, is readily overlooked, even when searched for with great care aided by a vaginal examination with the speculum." Dr. Macloughlin during twenty-seven years' practice in Paris, made a point, whenever practicable, of examining the women from whom his patients had contracted syphilis, and he says it was extremely rare to discover the source of infection in the female, and Mr. Skey, writing to Dr. Macloughlin and referring to these facts, says, —"I am convinced in common with many surgeons, that every form of sore, and every variety of discharge, from the slightest to the severest in intensity, are obtained from women who have not discoverable indications of disease of any kind." I could quote pages of similar testimony. Do not these facts totally uproot the very groundwork of the Acts? If it is alleged that, in spite of difficulties of diagnosis the worst cases may be detected, then I say syphilis is the only disease of consequence, and it is precisely the disease you can so rarely discover in the female. Besides, the working of the Act has proved that the worst cases are most eager to apply voluntarily to hospitals for cure. In fact, to use Lord Lennox's expression (who fancied he was defending compulsion when proving it was not needed), "they flock to the hospitals." Lefort says—"what with infection derived from inspected women, and the effect of the system in multiplying clandestine prostitutes, the means employed against syphilis in Paris amount to nothing." Like most Frenchmen, he has a remedy absolutely indispensable to success. Here it is: 40,000 clandestine prostitutes must be forced on the register; children under age must be registered in spite of their parents; the whole must be compelled to live in brothels for greater convenience of inspection. Moreover, Lancereaux and all other authorities state, that the examinations must be multiplied. Once a week is absurd. They should take place *at least every other day*, and the women must be shut up several hours before they are inspected and carefully watched, so that they may not wipe away discharges or use syringes. Then they must be examined and the mouth, the throat, the stripped skin, carefully inspected, and the genital organs introspected. Surely, that is enough? The woman may go now? No, Sir! Lancereaux says (and I can quote no higher nor more modern authority), "it is *absolutely indispensible to carefully introspect the anus with a speculum*, and to keep women prisoners after recovery who have had sores, lest secondary symptoms should crop up in course of time!" All authorities are agreed that after all the slightest possible security is ever obtained, and the head of the Parisian Police, Commissionaire interrogateur, and Chef de Bureau de Mœurs, solemnly warns us that to obtain any good at all we must inspect as frequently and carefully as the authorities I have just quoted have proposed. Nothing less will do. He mournfully adds that—"all the results prove that prostitution is increasing in Paris, and that it is more dangerous than ever to the public health. The evil is a moral and social one, and cannot be controlled by the police, nor by legislative measures." In a letter to Mrs. Butler, the same authority says—"by science we have increased and not diminished the evil." There are at the present moment in Paris, in spite of the efforts of the police, 9,500 patients under treatment in hospitals for venereal diseases, and 47,500 cases at the very lowest computation in a city, the population of which is one half that of London (*i.e.*, a million and-a-half), while among a poor population of a million and a-half in London we find from Mr. Wagstaff's careful investigations, and the report of the Medical Officer of the Privy Council, there are only 455 cases of syphilis. In fact, the system by giving a false security, offers a direct inducement to thousands, especially married men, to contract disease. The examinations fail also because healthy women by mediate contagion communicate infection; because owing to the menstrual period they cannot be carried out in a large number of cases, (thirty in one day at one station have not been examined on this account); because also it is impossible to distinguish gonorrhœa from leucorrhœa. Again, women are exposed to great danger of infection from contaminated instruments. In a short space of time seventeen cases of communication by the Eustachian catheter were recorded in Paris, and if we do not hear more of its transmission by the vaginal speculum, it is simply owing to the seat of the evil. The examinations fail, too, because the inspection and restriction of one sex only for a disease common to, and propagated by both sexes, is not only a cruel injustice but is a delusion and a snare; and they also fail because the system calls into existence and fosters a numerous class of clandestine prostitutes who, from fear of detection, conceal their disease and become permanent sources of infection. Now, Sir, we have been accused of wishing to see people go on suffering from venereal diseases. We do not. We believe that such laws increase the evil, and that is one reason why we oppose them. We know also that other means entirely unobjectionable, christian and merciful would suffice. The advocates of the Act constantly point to their hospitals as though the hospitals were the essence of their system. We don't object to hospitals. We object to spies, and periodical examinations of healthy women; which is the real essence of their system, and all we stipulate for with regard to hospitals is, that the doors shall be open by christian charity, and not by the police. Mr. J. R. Lane says—"much more good may be done by free hospitals than by police interference. Police regulations can get only a certain number of women, whereas free hospitals would attract all suffering from disease, even those who contracted it clandestinely and who would escape the police." If time permitted I could quote a mass of evidence to show that women who are diseased will go anywhere to be cured, and everything beyond the establishment of hospitals is as unnecessary as it is inexpedient and utterly opposed to the free spirit of all English institutions.

It would be well, Sir, if the advocates of this law would limit themselves to the possible everywhere at home and abroad. Such unjust statutes are regarded with aversion, and are directly and bitterly opposed to the feelings of the inhabitants. In Great Britain the voice of the country is loudly raised against them. Eight hundred petitions, signed by half-a-million of people, and representing in the shape of one chairman for large public meetings many more have already been presented against them. It would be impossible to defend the Acts at any public meeting, and if you tell me that the health of the people is the supreme law, I shall reply, "*Vox populi, vox Dei.*" I want the medical profession to be rid of the discredit of this legislation. Mr. Holmes Coote tells us that the few earnest men, among whom he was a principal worker, and who met to discuss means of giving shelter to sick prostitutes, "*would have scouted*" this miserable abortion of a law which, he adds, "would disgrace a despotic monarchy." George Thomson the well-known anti-slavery orator, remarked at a recent meeting in this town, that, "these Acts exceed the constitutional power of Parliament." He says:—"They have sanctioned a measure which is at once immoral, indecent, and revolting, and a most atrocious invasion of the sacred and, as I believe, in-

defeasible personal rights belonging to every woman, even the most degraded and most outcast." Professor Newman remarked at a recent meeting in London—"the state maxim of the wisest of the Greeks was this ; an injustice to the meanest citizen is an insult to the whole community." Grant that women who trade in their persons are the meanest of citizens, they do not cease to be citizens, much less to be women. It is not only becoming in us, it is our absolute duty to be indignant, and loudly to declare our indignation at the indecent, depraving, and barbarous treatment to which fallen women are now subjected, as well as at the overthrow of legal safeguards for all women. When bodily instrumental outrage is inflicted on females, no man with a heart in him will speak of it softly. Women, nay, wives and women who recently have been or are about to be mothers ? Such violation of the person is an intrinsic wickedness, an indefeasible atrocity. Legislation is desecrated; parliament is dishonoured ; resistance becomes nature's own command when such things are enacted.

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the MEDICAL PRESS.)

No. XI.

TREATMENT OF SEWAGE BY CHEMICAL PROCESSES.

THE offensiveness of sewage and cesspool matters, as well as the more or less exaggerated estimate of their agricultural value, have served at all times as a powerful inducement for the discovery and application of some simple process whereby the most important constituents of these matters might be so disinfected and consolidated as to render them not only inoffensive to the public, but also useful to agriculture and fit for commercial purposes. Chemists of great celebrity, as well as the merest dabblers in experimental science, have devoted attention to the subject, and have proposed the use of all kinds of materials for the purpose in question. A glance, indeed, at the following table, which exhibits most of the suggestions for the treatment of these matters over a period of nearly a hundred years, will show how completely the subject has been explored, and how futile have been the results. Almost every description of waste product, as well as many rarer chemical compounds, have been vainly resorted to, and made the objects of unprofitable patent inventions. The caustic alkalies, mineral acids, metallic salts, empyreumatic oils, spent tan, vegetable charcoal, trade and household refuse, and all sorts of worthless substances have been successively and often repeatedly used for this purpose.

Name of substances.	Inventor.	Date
Acetate of lead and protosulphate of iron	Deboissieu.	1762
Chlorine	Hallé.	1785
Quick lime.	Estienne.	1802
Powdered charcoal	Giraud.	1805
Chlorine and chloride of lime	Guyton Morveau.	1805
Ashes	Chaumette.	1815
Sand	Duprat.	1818
Sulphate of iron	Briant.	1824
Chloride of soda	Labarraque.	1824
Waste chloride of manganese	Payen and Chevalier.	1825
Sulphate of lime	Siret.	1827
Animal charcoal	Frigerio.	1829
Peat	Guibourt & Sanson.	1833
Charcoal and calcined marl or river mud	Pottevin.	1835
Sulphates of iron and zinc with tan and tar	Siret.	1837
Earth, lime, and waste substances	Rossier.	1837
Peat ashes	D'Arcet.	1840
Metallic oxides and carbon.	Krafft & Suequet.	1840
Chloride of zinc	Sir Wm. Burnett.	1840
Schist coke	Hompesch.	1841
Trade refuse, charcoal, and ashes	Albert.	1842
Powdered lignite	Jourdan.	1843
Impure alum	Siret.	1843
Sulphate of zinc, charcoal, and clay	Gagnage & Regnault.	1844
Persulphate of iron	Baronnet.	1845
Schist coke	Du Boisson.	1845
Chlorides of iron and zinc	Dubois.	1846
Lime and precipitating tanks	Higgs.	1846
Nitrate of lead	Ledoyen.	1847
Waste salts of iron, lead, zinc, &c., with pyroligmatters, ashes, &c.	Brown.	1847
Pyrolignate and perchloride of iron	Ellerman.	1847
Impure chloride of manganese	Young.	1847
Dried sea-weed, lime, and sulphate of lime and zinc	Salman.	1848
Peat charcoal	Rogers.	1848
Charcoal, soot, mineral salts, &c.	Legras.	1849
Spent tan, carbonised	Tarling.	1850
Fresh bark, sulphate of iron, and peat charcoal	Angely.	1850
Metallic sub salts, as of iron, alumina, &c.	Browne.	1850
Milk of lime and collecting the deposit	Wicksteed.	1851
Acids and metallic salts, and filtrations through charcoal, clay, peat, gypsum, &c.	Dover.	1851
Lime, sulphates of alumina, and zinc and charcoal	Stothert.	1852
Lime, magnesian earth, sulphate of zinc or iron and vegetable charcoal	Gilbee.	1852
Sifted ashes, breese, or peat charcoal	Perks.	1852
Sulphate of zinc, potash, alum, and sand, with waste tan, ashes, lime, soot, &c.	Pinel.	1853
Metallic sulphates, metallic chlorides, or charcoal and magnesian salts	Herapath.	1853
Salts produced in working galvanic batteries	Dering.	1853
Peat or bog earth containing salts or oxides of iron	Dimsdale.	1853
Peat and other charcoal and chloride of sodium, &c.	Macpherson.	1853
Animal charcoal, alum, carbonate of soda and gypsum	Manning.	1853
Magnesia and lime with sulphurous and carbolic acids	Smith & McDougall.	1854
Lime and finely-divided charcoal	Wicksteed.	1854
Boghead coke	Herapath.	1854
Soft sludge from alum works with lime and charcoal	Manning.	1854
Peat charcoal carbonised with oil of vitriol	Longmaid.	1855
Alum schist or shale, and other aluminous minerals, with lime and charcoal	Manning.	1855
Manganates and permanganates	Condy.	1857
Superphosphate of lime with magnesia and lime	Blyth.	1858

Hardly anything can be more illustrative of the reckless way in which inventors endeavour to apply their knowledge, without first ascertaining what has been already done in the matter, and how far it has been found successful. Quicklime, for example, as well as the various forms of charcoal, and the salts of iron and alumina, have again and again been the subjects of patent invention. But, besides this, there have been many patents for the most elaborate treatment of sewage and nightsoil. White, in 1854, proposed to carbonise nightsoil in a close retort, and to mix the products with dried blood, dried nightsoil, superphosphate of lime, wood ashes, &c., and so to form them into a manure. Bardwell, in 1853, and Littleton and Anderson, in 1854, proposed to utilise the ammonia of sewage by processes of evaporation and subsequent absorption; and Noone, in 1865, actually distilled the sewage, and obtained a liquor which was charged to the extent of 38·75 grains of ammonia per gallon; but, as in practice it required about 1,000 gallons of sewage to furnish this quantity of liquor, the value of which was only about five farthings, the process was soon abandoned, although it was most hopefully entertained by the authorities of Hastings, where it was fully tested on the sewage of the town. Patents have also been taken out for the speedy desiccation of the solid matters precipitated from sewage, as by Perks in 1852, Needham in 1853, Wicksteed in 1854, Kite in 1854, Noone in 1864, &c.

In connection with this subject, it may not be out of place to refer to the experiments of the late Dr. Davy on the deodorising power of different substances on nightsoil. He took 125 grains of nightsoil, and found that the following were the proportions of the several substances required to deodorise it:—Volatile oils, including naphtha, gas tar, and creasote, from one to two grains; fixed oils, from four to thirteen grains; a mixture of vinegar and creasote, one grain; vinegar alone, eight grains; pyroligneous acid and nitro-muriatic acid, four grains; chromic acid mixed with strong sulphuric acid, eight grains; sulphuric acid alone, twenty-two grains; a saturated solution of euchlorine, forty-one grains; ditto of chlorine, ninety-four grains; ditto of chloride of lime, forty-seven grains; but sulphate of iron, chloride of zinc, muriatic acid, and bichromate of potash had little or no deodorising power.

The following are the results of experiments made by Dr. Letheby in the year 1858, when he reported to the City authorities on the subject of sewage and sewer gases.

Quantities of different disinfectants required to deodorise ordinary London sewage.

Deodoriser.	Price.	Grs. required per gallon of Sewage.	Results as to Deodorisation.	Cost per 100,000 gals. of Sewage. £ s. d.
Quicklime - -	10s. per ton.	12	Incomplete.	0 0 9
Chloride of Lime -	£15 ,,	8	Complete.	0 15 4
McDougall's Powder	£12 ,,	40	Incomplete.	3 1 3
Peat Charcoal - -	£3 5s. ,,	150	Ditto.	3 2 3
Condy's Liquid -	1s. per gal.	150	Complete.	10 14 4
Dale's do, - -	6d. ,,	313	Incomplete.	11 3 7
Ledoyen's do. - -	4d. ,,	1,000	Ditto.	23 16 4
Ellerman's do. -	9d. ,,	470	Ditto.	25 3 6
Sir W. Burnett's do.	4s. ,,	100	Ditto.	28 12 0

The several liquids used in these experiments had the following strength:—

	Sp. Grs	Grs per gal	Of following.
Condy's Liquid	1,055	4,357	Permanganate of Potash,
Dale's do.	1,470	64,827	Perchloride of Iron.
Ledoyen's do.	1,160	8,120	Nitrate of Lead.
Ellerman's do.	1,443	43,434	Muriate and Pyrolignate of Iron.
Sir William Burnett's do.	1,594	60,031	Chloride of Zinc.

In those cases where the deodorisation was incomplete, the peculiar smell of sewage remained—sulphuretted hydrogen, and, except in the case of quick-lime, ammonia being the only volatile matter removed. In all cases the substances were added until subsequent decomposition was entirely prevented.

The thick matters of cesspools, and of stagnant sewers required about a twentieth part of their weight of chloride of lime to deodorise them, and the corresponding proportions of the other deodorisers.

We will now examine the practical results of the various disinfecting and defæcating processes on a large scale, as at the several sewage works where they have been used.

Transactions of Societies.

THE MEDICAL SOCIETY OF LONDON.

October 31st, 1870.

DISCUSSION ON THE MEDICAL ASPECT OF THE GERM THEORY.

To facilitate the discussion on the paper read by Dr. Richardson on the 24th inst., the President read a short abstract of the author's views on the subject of "The Medical Aspect of the Germ Theory." Two theories had been set forth—viz., The Vital or Germ Theory, and the Physical Theory of the Communication of Disease. Certain truths are common to both these theories and are generally accepted; these are, 1st. That certain diseases arise from organic poisons; 2nd. That such poisons are solid, probably colloidal in nature; 3rd. They are transmissible from person to person, and transmitted and capable of exciting disease; 4th. The poisons are specific for each specific disease. Dr. Richardson objects to the germ theory on the grounds that, 1st. The presence of the assumed germs is not proved; they are not found as definite parts of the different poisons; 2nd. The specific character of each germ is not traceable in such specific malady; but is assumed on the ground that the diseases being themselves specific must therefore proceed from specific causes; 3rd. If the germs are reproductive and indestructible the universe would become filled with germs, which, as media of disease, would destroy the people. Neither fermentation nor putrefaction can be proved in any forms of disorder to which the germ theory is applied. The germs being entities we are led to regard diseases as entities—manifestly a retrogade step in science. The germ theory neither explains nor tallies with what we know of the progress of these diseases. The second part of the paper deals with the physical as opposed to the germ theory. Dr. Richardson believes in organic poisons as the causes of communicable diseases; these poisons may become solid, but they are not reproductive, independent germs, they are not derived from without, nor are they produced out of the body. They result from morbid changes within the body, in the secretions. These poisonous secretions convey disease from one body to another; the perspiration of the hand possessed with poison of puerperal fever may become a means of conveying the disease to an infinite number of patients as in a case known to Dr. Richardson. The reproduction of the introduced poison is charged to the reproduction of the secretion affected by the poison, as the skin surface in scarlet fever, and the bile in yellow fever. The poison may be destroyed, and then the disease caused by it dies out. Of this we have numerous instances in diseases now extinct among us. The physical theory explains the nervous derangements as then follow a disturbance or irritation of secretory surfaces. It explains how a communicable disease may be purely local in its action, and how, beginning locally, the disease may spread generally. There may, perhaps, be a process of zymosis continually going on in the body, but this would be diminished rather than increased during the action of the poison.

Mr. De Meric did not consider gonorrhœa had a place among the diseases communicable by specific poison, it was an inflammation only. With regard to syphilis, the case was different, but we were quite in the dark as to the nature of syphilitic virus. With respect to the colloidal nature of these poisons, Mr. De Meric mentioned experiments by Chauveau, of Lyons,

who had shown that when globule and cellular matters were eliminated the clear serum yet retained poisonous powers.

Dr. Sansom referred to a previous paper he had read before the Society. He believed the theory set forth by Dr. Richardson to be absolutely and entirely erroneous. Vital molecules were essential to fermentation and putrefaction. Infectious diseases were due to vitalised molecules; Chauveau had proved this. Dr. Sansom did not hold with the specific germ theory put forth by Haller.

Mr. Brudenell Carter said that it had been clearly shown by Professor Tyndall that the best test of the soundness of a theory was its fitting perfectly the facts to which it was applied. A most communicable disease was found in the contagion of ophthalmia introduced into France into 1779 and 1830—a cause of total blindness in 4,000 soldiers in Belgium. This disease had now been shown to be due to sago-like grains deposited on the eyelids, connected with obstructed lymphatics in the connective tissue; these, when they become inflamed, produced the ophthalmia. Here, then, was a very contagious disease, but no evidence of the presence of germs as a means of communicability.

Dr. Bindon Sanderson agreed with Dr. Richardson in the main points, certain contagious matters seemed to consist of colloidal matter. Further experiments were essential to solve the question involved.

Dr. Schulhof thought the communicability of coryza and the destruction of contagious matter by disinfectants were rather in favour of the germ theory.

Dr. Crisp mentioned his own researches on the splenic apoplexy of animals. Davaine, in France, thinking this fatal disorder depended on bacteridies, inoculated rabbits with the blood of creatures that had died of splenic apoplexy, and they were all poisoned and died. Vegetable parasitic diseases lend support to the germ theory in their spread, which might be more fully explained at a future day. Living germs might become extinct just as some creatures—the dodo and the Great Auk had become extinct.

Mr. Brooke said that if we adopt the germ theory, we must admit azonic or spontaneous generation, or ignore the sporadic origin of zymotic diseases, an essential difficulty.

Dr. Temple recognised a great distinction between fermentation and putrefaction; the one led to the formation of permanent and stable products, such as alcohol, the other quite the reverse. Electrical stasis of the atmosphere were not sufficiently regarded as influencing diseases.

Dr. Routh thought that in hay-fever we had an example of a disease caused by vegetable germs. Sporules, or germs, might be seen also in substances scraped from infected surfaces.

Dr. Wolff spoke of the similarity in the action of contagions,—might then be an universal agent whose action was modified by local surfaces?

Dr. Silver showed how Lister had made his belief in the germ theory of practicability, by excluding germs from wounds; by means of carbolic dressings pyæmia was prevented, and rapid healing promoted; colloidal particles might show evidence of life in the presence of microzomes.

Mr. Jabez Hogg concurred with Dr. Richardson in his views. In respect to fermentation, Mr. Hogg had found that this might be set up without the aid of yeast in a saccharine solution, and much alcohol be formed.

The President then asked how the accepted doctrine of the spread of cholera could be explained on the physical theory?

Dr. Richardson, in reply, said that he did not profess to explain what the exact changes were that took place in a secretion to render it poisonous. To the President's question, he said that in cholera a specific product or poison was generated, the smallest portion of which taken in by another, poisoned the alimentary canal of that person. There was no reproduction of the thing itself. In reply to Dr. Sansom, Dr. Richardson said there was no evidence to be found of fermentative process in any disease, save increase of temperature, and this was not essential. He said that his namesake, Dr. Richardson, of America, had inoculated himself with bacteridies without any actual result being perceived. Mr. Wolff's theory would render all so simple that Dr. Richardson would be glad to find it prove true. Noxious gases had nothing at all to do with the production of communicable diseases, and the success of some surgeons, who never used or heard of carbolic acid, was equal, or superior to that of those who used it in the most approved and careful way. The physical theory would account for the spread of all communicable diseases.

Registered for Transmission Abroad.

THE
MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
,, If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of A. A. Tindall, 20, King William-street, Strand, London, W.C.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WSEDENDAY, NOVEMBER 9, 1870.

THE CONTAGIOUS DISEASES ACTS AT COLCHESTER.

The opponents of the Contagious Diseases Acts, seem to be as determined as ever in their opposition to the new state of affairs in our garrison towns. A split in the liberal party seems to have taken place on the question at Colchester, where Sir H. Storks, after having lost his election at Newark on account of his complicity in the passing of these Acts, has again been defeated. Friends of the Acts say that they are working admirably, and that, in every military and naval station where they are in operation, the health of the troops has been greatly improved, whilst, at the same time, the health of the prostitutes of the localities has gained immensely, and that there is far less open solicitation to be remarked than formerly in all those localities. They are all therefore anxious to extend the operation of these laws to every city in this empire, both at home and abroad, whether soldiers or sailors are found in such places or not. Evidence is so conflicting; the advocates on both sides so eager, and party spirit runs so high, that it is difficult for anyone who desires to write impartially on the subject, as all editors, of course, ought to endeavour to do, to see the way clearly to any definite conclusion.

Such being the case, it would perhaps, be better to have up a few more witnesses before we definitely conclude for either plaintiff or defendant. Now, in a recent meeting at Newcastle-on-Tyne, in September, Mr. Duncan McLaren, M.P. for Edinburgh, gave some evidence against the Acts, which does not as yet seem to have come before the notice of the medical profession, and which, therefore, it may not prove uninteresting for us to reproduce. Mr. Mc'Laren says, that the Contagious Diseases Acts, came into operation in 1865, in Portsmouth, Devonport, Sheerness, and Chatham, and in 1866 in Woolwich, in 1867 in Aldershot, in 1868 in Windsor, and Shorncliffe, in 1869 in Colchester. All the women of the class defined, were enumerated and registered at the commencement of the Act, and the names of all "new comers" into each district added to the register, and also those who left. A

return of the results of the Acts was moved for in the House of Commons before the prorogation : but not issued till long after the House rose. This return is in two parts. The chief part consists of statistical tables, respecting each district. The second is a report, professing to condense the evidence derivable from the tables. Mr. McLaren considers the latter to be a deceptive production, and not creditable to the Admiralty Department, by whose authority it was issued. "Firstly" it is stated in the first page, "that 7,766 women were on the register, and that this number has now been reduced to 3,016." "I shall prove from the tables that, as compared with the numbers at the commencement of the Act, no diminution whatever has taken place in the number of these women resident within the districts; but on the contrary, that there is an increased number of these women now residing within them," says Mr. McLaren. It has also been said by a supporter of the Acts in the report "I am desirous of calling particular attention to the effect produced in Plymouth. There has been, from year to year, at this station, a steady and increasing diminution in the number of brothels, as likewise of prostitutes attending the same, which decreased from 1,770 to 645." Mr. McLaren says, that the tables show that this is a falsehood. The report states too, that in the case of 300 women, who left Plymouth at the commencement of the operations of the Act, "their places are not filled by new comers." This again, Mr. McLaren says is quite false. The report likewise says, that, "the decrease in disease is likewise remarkable. I may mention Chatham : the disease in 1863 was 70 per cent. ; in 1869, 18 per cent. ; in 1870, 6 per cent." Mr. McLaren is prepared to prove that disease has greatly increased. And he gives the following reason. Firstly, with respect to the alleged diminution in the number of prostitutes from 7,760 to 3,016, he tells us that in one of the tables in the report, the registered number of prostitutes when the Act came into operation is given. Now it appears from this, that, in the stations of Portsmouth, Devonport, Sheerness, Chatham, Woolwich, and Aldershot, when the Act came into operation, there were a total of 1,244 prostitutes : and the number remaining on the register on the 26th March, 1870, was no less than 2,236, a great increase instead of a decrease, as alleged. The fraudulent figure 7,766 given, as having existed in these towns at one epoch, includes all the women who have been on the regular for several years. It was on such statistics as these, that some of the enthusiatic medical supporters of the Act relied on their recent attempts to press the extension of the Acts on the House of Commons.

The next allegation was that in Plymouth or the Devonport district the number of prostitutes has "been reduced from year to year, till from 1,770 they have become only 645, and that the places of those who left were not supplied by new comers." Mr. McLaren says the facts are these—In place of 1,770, there were only 203 prostitutes when the Act came into operation in 1865, and in place of the "steady and increasing diminution" alleged to have taken place, the numbers in 1868 had increased to 390. In place of no "new comers" being added, there were, according to the tables, during 1866, no fewer than 333 added, and 179 of these formerly registered had left or died. With respect to the alleged diminution in the amount of disease, Mr. McLaren observes that, if we turn to the tables, we find for Chatham that, beginning with 1866, the number of cases sent to the Lock Hospital was 277 ; in 1867 it was 463 ; in 1868 it was 686 ; and in 1869 it was 697 ; and yet the number of women resident was nearly equal during each year. It is to be particularly noticed, says Mr. McLaren, that in nearly every town and district there is an increase in the amount of disease in 1869 over 1868. Women were actually examined 49,389 times, and found free from disease ; 14,268 examinations had a different result. The report was ordered by the House of Commons, and was furnished on Government responsibility ; and Mr. McLaren observes at Newcastle that, although he had possessed rather a ravenous appetite for blue books and other statistical documents, and had, in various ways, dissected not a few of them, he felt bound to say that this was the most unfair and untruthful public document it had ever been his lot to meet with.

And thus we leave, for the time, this knotty point with the remark that, if Mr. McLaren's statements are as correct as they seem to be, Mr. B. Hill and the Society for the Extension of the Acts will have a hard fight even to maintain the ground they have won. For, after all, unless the hygienic utility of the Acts were made out to be as evident as the summer sun at noon-tide in a cloudless sky, these Acts could not be long maintained in the modern deluge of men and women's-rights movement. The Franco-Prussian War, even, has damaged the chances of the maintenance or extension of the Acts, since, as Mr. Lowe observed in Scotland recently, it has rung out the knell of celibate standing armies. We shall be glad to know what statements can be made to sustain or invalidate those mad e by the M.P. for Edinburgh in September last.

Notes on Current Topics.

About the War and Wounded

On the 25th ult., the special correspondent of the *Times* with the Crown Prince's Army, visited the stores of the British Society for Help to the Sick and Wounded. Their depôt is at present in the coachhouse of a mansion in the Rue des Reservoirs, which is filled with bales of shirts, flannels, medical and physical comforts, which are distributed by Mr. Furley, who is assisted by Dr. Reichel and a few soldiers. All articles taken from the store are entered in a book, which is signed by the recipient, and the demands from Prince Pless, Prince Putbus, Prince of Tour and Taxis, and others are numerous for the service of the hospitals, the Bavarians especially being short of many necessaries. Indeed, the German hospital establishments do not at all come up to our ideas. The representative of each branch of the National Associations does the best he can for his own compatriots, for in Fatherland there are still a variety of children—the Prussian for the Prussians, the Hessian for the Hessians, the Bavarian for the Bavarians, the Wurtemberger for the Wurtembergers, and so on—each works for his own compatriots. Dr. Kirchner, who is an energetic person, rules his palace and his hospitals as the Lord of the Silver Bow lorded it over Tenedos. I am not going, says the correspondent, to put my finger into the hot water which the medical men are making in their kitchen, but it seems as if a strict rendering of the rules of the Geneva Convention were not compatible with the views of exclusive control entertained by the Prussian medical men.

***

We take some further extracts from his letter :—"I went round through the Palace wards afterwards, begin-

ning with those in charge of the Dutch ambulance, which is admirably conducted by Dr. Van der Velde, the Palestine traveller. As might be expected, these wards were exceedingly clean and neat. 'Wards,' indeed! The first I entered was the 'Salle des Guerriers Celèbres'—the ancient antechamber to the apartment of Madame de Pompadour—in which were the usual hospital scenes—a Sister of Charity with a bowl in one hand and a spoon in the other feeding a soldier too weak to rise; a surgeon dressing a dreadful wound: 'I'm trying to save the joint, but I fear—still, it's a neat case.' The poor wretch looked at the shattered bone as if he more than shared the doubt. Hospital orderlies moving about the rows of pale faces with anxious eyes, and above them all these brilliant warriors, in theatrical attitudes and glaring eyeballs, following you all over the place. It was an excellent idea of the Crown Prince. He suggested the changing of patients able to be moved from one room to another, so that the monotony of 'Hoche for ever,' 'Joubert as before,' and all the rest of them day after day, might not afflict the nerves of the sufferers and retard their cure. But, of course, it could not be carried out. On each door is a notice of the République Française, signed Jules Simon, relating to the internal arrangements of the hospital, and precautions against fire."

***

The same writer says about chloroform: "I wish Prussian surgeons used chloroform—that is, if it be desirable in a medical point of view. But it is not in favour with them, nor is it with the French. I see in the Paris papers specific directions for the treatment of wounds, in which chloroform is objected to as well as the use of perchlurure of iron.' While I was in one of the Salles des Maréchaux, a surgeon was probing a gunshot wound in the thigh of a man, who uttered such harrowing yells that the Sister of Charity—there is one in each room—turned and fled, a wounded man nearly burst into tears, and all in the ward were agitated except the surgeon and his assistants, one of whom tried to stop the outcry by putting one hand on the top of the 'patient's' head, and squeezing his mouth and chin with the other, till the doctor lost his patience and roared at the wretched sufferer to be quiet, applying a strong term at the same time. The yell died into a whimpering moan still more dreadful, and I retired. The doctor is a very clever man, I am told, and has his hospital in capital order. And *à propos* of him, let me notice what seems an illiberality on the part of the Prussians, as well as a folly. Jews may become regimental and staff surgeons, but the post of Ober-Stabsarzt, which may be considered equivalent to our Deputy Inspector-General of Hospitals, is closed against them. So if they are fit for it the State is deprived of the services of able men in places where they are most needed."

***

"I promised I would not dwell on hospital scenes, and I shall refrain from the description of the linked misery which extends along three sides, as you remember, of the centre in the *rez-de-chaussé*—fourteen rooms, with their arrays of painted warriors. But there are 'cases' enough, some 'very curious.' A peculiarity about curious cases, I observe, is, that the surgeon generally, if not invariably, says, 'He can't live very long.' And no wonder—'time was when brains were out that men would die.' Well if it were always so."

***

"One man was alive with a ball lodged in his brain; he had even been conscious. Another had the side of his skull clean carried off by a bit of shell; a third in a ward all by himself was—but no! It was too horrible. The man was in mania, and Mr. Furley (who was with me) and I hurried into the next ward, whence an orderly was sent to keep watch and ward over the 'case.'"

***

"The gallery of Louis XIII., of the Admirals of France, and so on all round, are filled with wounded men to the end till we come to the officers' rooms. My first glance was at the bed on the left as you enter. I had seen a gallant captain of Artillery lying there the last time I visited it, which was in company with Count von Gortz, of Schlitz, and had witnessed his reception of a little deputation from the men of his battery, who had come in from Plessis-Picquet to see how their officer was getting on. The bed was empty. I was quite relieved to hear from a Bavarian officer sitting up, with one leg left, that the artilleryman, who had only lost the greater part of one of his thighs, had been sent away to complete his cure at home. The suites upstairs in the palace, or Château as it is more generally styled, are occupied in the same way as those below. There is at least silence in the rooms, broken only by the whispers of Sisters of Charity, the voices of chaplains by the bedsides, and the rustling of newspapers, which are eagerly read by the wounded; but the rooms are draughty and cold, and as winter increases in harshness there will be difficulties in ventilating the wards."

***

The following extract from a letter dated Oct. 29, from Mr. H. W. Page, one of the assistant-surgeons to the International Field Hospital at Bingen-on-the-Rhine, appeared in the *Times* of the 31st ultimo:—

"Last night, amid a storm unparalleled for its violence, and such as I never shall forget, which rose as suddenly as it departed, after forty-five minutes' duration, the whole hospital was swept off the face of the earth. Never was such a scene—never such agony! If it was awful for wounded men, without shoes or stockings, with nothing but their blankets, which in a second were drenched, to turn out and be exposed to the elements, it was even worse for the sick. Imagine a typhoid fever patient, for whom it is almost fatal to move in bed, having to take up his bed and walk. The storm began at 8.15 p.m., and not till 1 this morning did we succeed in housing the unfortunate creatures in the operation room, in the porter's lodge, and in the hotel. The wonder is that they all lived through it. To-day, what a wreck! Nearly every roof is stripped, and the people declare they never remember such a storm. The rest I leave to your imagination."

The School Boards.

Among the names we have mentioned as candidates for seats on the School Boards in London districts are Dr. Lankester, Miss Garrett, and Dr. Edmonds. We sincerely hope that many of our professional brethren may obtain such posts. The knowledge of physiology is further back than any other kind of knowledge, and medical men and women alone are aware of the immense importance of the topics contained in the science of hygiene, public and private. Morality is but the art which teaches us to live and let others live a healthy existence.

Professor Cairnes on Philosophy in France.

A few weeks ago we endeavoured, in a leading article, to show how important the study of true philosophy was to nations and individuals. That Professor Cairnes is of like opinion we glean from an admirable lecture delivered by that distinguished gentleman (who is a native of Drogheda, and formerly Professor of Political Economy in Galway) at University College on the evening of November 1st. Mr. Cairnes, as many persons know, has had the distinguished honour of having been permitted to edit the last edition of Mr. J. S. Mill's work "On the Principles of Political Economy." Speaking, the other evening, of the causes of the present war in France, he justly, we think, attributed that horrible event to the

low state of the science of political economy in France, and to the exaggerated views entertained by so many of the working-classes as to the capabilities of communism. "It was the fear of socialism and communism," said the learned Professor, "which reconciled the mass of the proprietors and capitalists in France to the iron rule of a despotic government; and this again led to dreams of conquest and dissolution of manners." We have no hesitation in asserting that Mr. Cairnes is the ablest political economist Ireland has ever seen.

Warts and their Removal.

A CORRESPONDENT complimenting us upon some of our recent annotations gives us the particulars of his treatment of simple warts when there is nothing more than simple hypertrophy of the papillæ and skin. He tells us he is uniformly successful, even where the ordinary methods of treatment in use have signally failed, of curing warts by passing through their base a double piece of silk by means of a straight needle saturated with creosote, and tied on either side of the wart. The wart being doubly tied from centre to circumference a hole is made in the middle, and if the wart does not speedily fall off, some fresh creosote on charpie can be introduced. "This treatment," he concludes, "effectually removes the wart *and destroys the root*, so that there is never reproduction occurring on the site of the old wart, so usual after the common remedies had recourse to, I have employed the creosote silk ligatures for warts of the eyelids with uniform success, and none are so liable to return."

Vaccina-phobia.

THE following is too good to be ignored :—

"On Friday, at the Preston Police-court, the Rev. Thomas Doody, Primitive Methodist Minister, was charged by Mr. W. Pinder, on behalf of the Board of Guardians, with refusing to have a child vaccinated. Mr. Edelston, for the defendant, said he felt himself in duty bound to his child to set himself against the law, not in a perverse or defiant spirit, but because some years ago he had a very fine child vaccinated, after which symptoms of a painful nature made their appearance, and the child died; and a neighbour's child that had been vaccinated with the virus from his child, also died. Other facts of a similar kind had since come to Mr. Doody's knowledge, and something was, therefore, due to his feelings under the circumstances, as he feared that if the child in question were vaccinated the same fatal results would follow. Mr. Watson submitted that the bench had nothing to do with Mr. Doody's conscientious motive. The law was particularly explicit, and there was an obligation on the Board of Guardians to see that it was put in force. After a short consultation on the bench, Mr. Benson (the chairman), said they deeply sympathised with Mr. Doody, but it was incumbent on them to carry out the Act. Taking all the circumstances into consideration, they had determined to limit the penalty to the fine of 1s., in default the defendant to be imprisoned one day. The rev. gentleman said he declined to pay."

It should have been stated of what disease the first child did die from. It should not be a case of *propter hoc* because *post hoc*, but then these are the kind of people—the quack religious—so cheerful of spirit, with countenance beaming with holy things who make martyrs of themselves on every trifling occasion, who blow presumptuous conceit and ignorance from would-be celestial pairs of bellows, which turn out very terrestrial for all that, and very selfish in motive when the truth is known, not unfrequently having for their object the arousing of sympathy for performing the Master's work so well in disobeying the law, creating dissaffection and teaching to their flock the practical lesson and example of disobedience. A few days' imprisonment is no punishment for them. They elicit sympathy, presents are heaped upon the precious baby's head, who may live on to destroy thousands in the future by propagating variola, because of its father's combination of ignorance, obstinacy, and hypocrisy; or papa gets embroidered slippers, and pulpit-cushions to keep his holy marrow-bones from aching in the act of devotion and reverence, or what is more usual, often the stage of martyrdom, he is invited to a public piety tea-gathering, and stuffed with sally-lunns and an inexhaustible supply of infusion of mixed congou and Assam in sympathy with his police-court manifestation, in approval of his public act (which the Great Unpaid on the bench wink at), of disobedience in not only successfully evading, but with a flourish of a parson's trumpet despising and over-riding the law. Magistrates have no right to deal leniently with such offenders. The more educated the greater the offence, as in other criminal acts, and the greater the punishment, say we, should await all such scheming defaulters accordingly.

Parsley-Pie.

INTRODUCTORY to facts we are about to record, it may not be out of place to state that Parsley-pie is a very popular dish with the humbler classes of South Devon and of Cornwall generally. The pie made of meat and parsley is brought to table, a central piece of crust cut out and as much cream poured in as the dish will conveniently hold, altogether then the pie is very rich and savoury, and most popular. An unfortunate occurrence happened a week ago to a family who had prepared for dinner, and freely partook of, parsley-pie; a young girl gathered the parsley and nothing unusual was noticed until the narcotic action of conium manifested itself a short time after dinner. Upon the arrival of the doctor, a respected correspondent of ours, he had the parsley bed or border examined, when some plants of hemlock were found growing luxuriantly amongst the parsley. There was no longer any hesitation about attributing the anodyne and sickly feelings of his patients to the eating of hemlock. Emetics were freely administered and followed by stimulants, when all recovered except the youngest child, who rallied for a few days, but ultimately sank from *peri-pneumonia notha*. Had the parsley been used as a flavouring in broth, the smell and taste of this virulent poison might have been detected earlier. It (the hemlock) grew up in a new bed of parsley, so that it is to be inferred the seed was adulterated with it. It behoves seed-merchants to guard against any mixture of the umbelliferæ seeds, and all who keep gardens and cultivate parsley to examine the beds that no accidental introduction of a destructive agent may take place. The deep green shining, tripennate leaf, with furrowed sheathing petioles, readily contrasts with the parsley, and the undulating crenulated ridges without vittæ of the fruit at once distinguish it from others of its class, irrespective of its pungent odour.

FINDING that the finances of the Middlesex Hospital are in an unsatisfactory state, Sir Edward R. Jodrell has sent to the secretary a cheque for £1,000, and an intimation that his subscription will be increased from ten to twenty guineas per annum.

Public Convalescent Homes.

The machinery which is, or rather ought to be, in use for preventing the spread of disease, appears to us to be entirely deficient in dealing with one of the most contagious and fatal of our epidemics, and it seems to us that it is quite necessary that some special provision should be made, even if all the powers now provided for confining the malady to the smallest area were put in force. There is, as far as we know, no provision made by any system of sanitation for the isolation of patients recovering from scarlatina, and the result is that every case discharged from hospital as cured becomes itself a nucleus for the spread of the disease. It is obviously impossible to expect that poor parents can keep a convalescent child from contact with the rest of the family, and it really seems as if it would be better that the patient should never be separated from the family than that he should be taken away only to return in a month charged with fresh contagion. Scarlatina is indeed the only disease which so completely saturates the patient with the infection that there is great danger of communication with other persons during the period of convalescence, and there should be, therefore, no difficulty in providing a convalescent home for such cases.

Sanitation in Manchester.

The causes of the high rate of mortality which prevails in Manchester was brought forcibly under the notice of the inhabitants by Dr. Lankester last week.

The present rate of mortality in that city he said was 37 per 1,000, almost the highest in the list of those towns where the mortality was the greatest. The death-rate in Manchester had been less than 33 per 1,000, and in Liverpool less than 36, and it always rose and fell according to the activity displayed by the local authorities. Improved sanitary regulations and a better supply of water largely decreased the death-rate. At Barnard Castle, with a population of 10,000, the mortality had decreased from 33 per 1,000 to 25 since the improved drainage and water supply to that town. In this way eighty persons less died every year, to say nothing of the saving to health. He calculated that where there was one fatal case of disease there were forty persons attacked. Think of eighty times forty in a little town like Barnard Castle. Think of the agony, pain, and anxiety relieved.

The Brown Bequest.

It is announced that the University of London is at length able to carry out the provisions of the Brown bequest, and will shortly acquire the necessary ground and buildings for the purpose. It will be remembered that a very large sum of money was willed to the University for the purpose of building an hospital for sick animals, and it was provided that if the University failed within a given period to avail themselves of the bequest, it should pass to the University of Dublin for other purposes. When the time specified was about to expire, the University of London quietly introduced a Bill into Parliament to enable them to go outside the instructions of the testator in their allocation of the money; but the University of Dublin was awake to the move, and succeeded in defeating it, and the London University is now under the necessity of employing the bequest as they were directed sooner than lose it altogether.

The Fever Certificates of the University of Dublin.

We understand that two modifications will probably be made in the details of the regulations respecting certificates of attendance on fever cases, recently issued by the Medical Registrar of the University of Dublin—

1st. The forty-eight attendances recorded at hospital may be either on bedside instruction or on formal clinical lectures delivered in the theatre.

2nd. If in any case there be an objection to give the names of the fever patients (as, for example, if they be pay patients), a number may be substituted for a name in the return.

The dates of attendance and nature of fever are considered to be absolutely necessary if the certificate is to be a *bona fide* one.

Female Medical Students and the Infirmary.

The female medical students attending the Edinburgh University having recently applied for tickets of admission to the infirmary, the question whether such tickets should be issued, was referred to the managers, and that board, at its meeting on Monday week decided in the negative.

Contagious Diseases Act.

These Acts were set in operation at Winchester on the 6th of January last. During the first quarter the number found diseased among those subjected to these Acts was nearly 40 per cent.; but their seclusion has eliminated the sources of contagion so rapidly that by the middle of the present month (October) no diseased persons were found at the periodical examination, and not a single case of the diseases against which these Acts are directed was under treatment in the Military Hospital at Winchester.

Professor Alexander Simpson's Inaugural Address.

The Introductory Address of Professor A. Simpson (Sir James Simpson's successor in the chair of Midwifery) was the occasion of one of the most disorderly—not to say disgraceful—exhibitions ever witnessed. Some demonstrations of feeling on the part of the students had been expected, but few, it is to be supposed, were prepared for the systematic violation of order and decency that did take place. In the interval before the arrival of the Professor, the students—and chiefly a knot who had taken up their station in the upper benches, and who made themselves disagreeably conspicuous all through the proceedings—amused themselves by throwing peas, exploding crackers, singing, and in various other ways. When Professor Simpson entered the room, accompanied by the Lord Provost, the Principal, and several members of the Senatus, he was immediately greeted with a storm of howls and hisses, which, however, were eventually drowned in the cheers of the main body of the audience. His opening remarks, and almost every succeeding sentence, were but so many signals for fresh outbursts of noise, aided by what seemed to be an organised tramping of feet in the upper benches, and varied by occasional peas and crackers. This lasted for some time, in spite of cries of "Shame" and "Order" from the better disposed of the audience, till at length the Principal rose and appealed to the students to give the lecturer a fair hearing. This appeal

had but little effect. The uproar and tramping were resumed with as much vigour as ever; and at one time there seemed to be a fair prospect of a fight, for one of the "disorderlies," who had drawn down upon himself the indignation of those surrounding him and was threatened with ejection, stuck his bonnet upon his head, and appeared to be defying them to do their worst. Another individual managed to gain access to the garret over the class-room, and added to the confusion by shouting through the grating overhead, but one of the officials quietly turned the key upon him, and left him in durance till he could be consigned at leisure to the justice of the authorities. In the lecture-room itself a new feature was introduced to increase the disturbance, and from various quarters the melodious voice of the bird "that is the trumpet to the morn" was produced with such accuracy of imitation as to suggest the idea that the performers must have studied very successfully in the farm-yard. Professor Simpson again paused in his address, and

Professor Christison rose and entreated the students to give a fair hearing.

The address was then resumed, and though the noise and interruption continued at intervals, it was hardly so violent and sustained as it had been previously. It is only right to say that the disturbance came chiefly from a small but persevering body of the students, and that the great majority were inclined to give Dr. Simpson a fair hearing. The hissing was renewed when the Professor left the class-room.

Re-opening of the Army Medical Department.

It is officially announced that an examination of candidates for Commissions in the Medical Department of Her Majesty's Army will be held in London in the course of February next, and of which particulars as to date, &c., have not yet been advertised.

We understand that there will be between twenty and thirty vacancies to be filled up.

A chemical society, has been established at Zurich under the presidency of Dr. Wislicenus.

The Physical Laboratory lately built at Oxford is opened this term for practical instruction in physics, under the superintendence of Professors R. B. Clifton, F.R.S., assisted by two demonstrators.

The Board of Trinity College, Dublin, have expended about 2,000*l.* in draining the College park. Situate as the park is, in the very centre of the city, its drainage will confer a considerable benefit on the city.

The next meeting of the London Pharmaceutical Society will be held on December 7th, at eight o'clock. The following paper will be read:—"Pharmacy in the United States." By Mr. Robert Howden.

The Woman's Hospital and Medical College at Philadelphia has existed twenty years. Attached are dissecting-rooms and a large dispensary for the diseases of women and children. There are four male and four female professors, and the cost for education is about £50.

Small-pox is raging among the Indians in Canada.

Dr. Liebreich is now in London, and is frequently to be seen at the Moorfields Hospital.

The British Medical Benevolent Fund seems languishing. Medical men are, we fear, not rich enough to subscribe much to the Fund.

The Edinburgh students seem likely to renew the scenes caused by the evidence of Tardieu in Paris on the occasion of the entry of Dr. Simpson into his new duties.

Surgeon John Caldwell, R.N., and Assistant-Surgeon W. H. Putsey, R.N., have been appointed to take medical charge of the detachment of 300 marines which has been despatched to China.

We understand that the Managers of the Edinburgh Infirmary have appointed a committee to consider if beds can be allocated to Dr. Thomas Keith, for the purpose of performing the operation of ovariotomy, with which his name is associated. For many years past, Dr. Keith has kept up an hospital at his own expense, and has performed the operation in question for the 101st time, with remarkable success.

It is our painful duty to record in another column, the deaths of Mr. C. Loe, Surgeon of Leeds, his son's wife and daughter in the short space of a fortnight. The deceased gentlemen held the appointment of medical officer to the Leeds Public Dispensary; and this terrible calamity is greatly felt in the neighbourhood, where he and his family have long resided.

Professor Kelland in a letter to an Edinburgh paper states, that five ladies competed for Lady Amberley's Scholarship for female medical students. The number of the papers which the five sent in was twenty-eight—each lady professing five of the prescribed subjects, and one professing as many as seven. The total number of marks on the twenty-eight papers was 1,974, or an average of upwards of 70 per cent. The marking was as follows:—One paper was marked 100 per cent.; two, 90 to 99; eight, 80 to 89; five, 70 to 79; six, 60 to 69; six, below 60. None failed.

In a meeting of the Cumberland and Westmoreland Branch of the British Medical Association, on Oct. 19th, Dr. Dogson mentioned that he had used very large doses of succus conii in chorea with good effect. He had himself taken as much as an ounce and a half of the succus. Dr. McLaren, of Carlisle, speaking of nitrous-oxide gas, mentioned that two fatal cases are on record, in one of which the lungs of the patient were full of tubercles. Dr. Elliot, of Carlisle, speaks greatly in favour of the stomach pump in cases of opium poisoning.

Dr. Althaus observes that there are many cases of palsy which present insensibly to Faradisation, both muscular and cutaneous, and perfect excitability to galvanisation in the paralysed limb. It has been found by the researches of some German experimenters, that nerves and muscles

obey totally different laws in this respect; that, soon after an injury to the motive nerves has taken place, the excitability of the nerves seems to be completely gone, not only to the induced, but also to the continuous current, while the muscles only lose their excitability to the induced, but not to the continuous, current. It is, therefore, of no use whatever to treat cases of this kind with the handy little machines furnishing an interrupted (induced) current, but they should be treated exclusively by means of the continuous current.

The election of a member of the Council of the Royal College of Surgeons in Ireland, in the room of Dr. James Barker resigned, took place on Thursday last. As we mentioned in our last issue, the candidates were Dr. Mapother, Professor of Physiology in the College, Dr. Robert Smith, Professor of Surgery in the University of Dublin, Dr. Kirkpatrick, Surgeon to the North Union, and Dr. Darby, President of the Irish Medical Association. The contest for the vacant office was keen, and as the supporters of each candidate attended in force, the assemblage of Fellows was unusually large for a casual election. One hundred and one votes were recorded, and the scrutiny showed a considerable majority in favour of Dr. Mapother, the numbers being as follows :—

Dr. Mapother	37
Dr. Kirkpatrick	26
Dr. Smith	22
Dr. Darby	16

Scarlet Fever.

The *Times* has devoted its columns at great length to a disquisition on scarlet fever, from which we quote the following statistics :—The continued prevalence and the great fatality of scarlet fever in England and Wales, and especially in the London registration district, are such as to call for the earnest consideration of all classes of the public. In order to show the magnitude of the evil it will be sufficient to say that the disease in the two years 1863 and 1864 destroyed in England alone more than 60,000 persons. In 1869 the number of victims in London amounted to 5,803. In the quarter ending on the 30th of June in the present year the deaths from scarlet fever in London were 1,076, and in England and Wales 5,973; and the number registered in London has lately been about 200 weekly. The disease varies so much in character and severity, is sometimes so slight and sometimes so malignant, that it would be difficult to state any definite proportion between mortality and prevalence. If we assume this proportion to be 1 in 12—an estimate that would probably not be very far from the truth—it follows that there have existed in London during a single quarter nearly 13,000 cases, each one of which, whether trivial or fatal, would be a new source of infection to the district in which it occurred. Putting the matter in another form, and allowing each patient a fortnight of insectious activity, we may say that London maintains a permanent stock of 2,000 centres of contagion.

SCOTLAND.

The Winter Session of the University of Edinburgh was opened on the 2nd inst. by an address from Principal Sir Alexander Grant, Bart.

The Managers of the Edinburgh Infirmary have declined to issue tickets of admission to the female medical students

The Winter Session of the Royal College of Physicians and Surgeons was opened on the 1st. Dr. Joseph Bell delivered the Introductory Address.

Dr. Matthews Duncan commenced his Winter Course of Lectures "On Midwifery," on Monday. The lecturer met with a most enthusiastic reception from a large and attentive audience.

THE APPOINTMENT OF PROF. SIMPSON.

The recent appointment of Dr. Alexander Simpson in the place of his distinguished uncle, as Professor of Midwifery in the University of Edinburgh, which at the time was received with so indignant an outcry in Scotland, has borne its legitimate and most desirable fruit in a powerful movement for the reform of the Board of Curators by whom the appointment was made.

At the statutory half-yearly meeting of the General Council held last week, Mr. Alexander Gibson, advocate, moved :—

"That a representation be made to the University Court, urging the desirableness of a change in the constitution of the Board of Curators, with a view to its being made more representative of the different bodies of which the University is composed, and better adapted for the function of selecting persons to fill high scientific and educational appointments."

This motion was aimed at the Town Council, who, strange to say, have the appointment of four out of seven of the electors to University Professorships, and, in the manner of Town Councils, have jobbed, in the first instance, the appointment of the Curators, and, secondly, the election of Professors.

Mr. Gibson said the time was when the Town Council looked to gentlemen outside their own body; but for the last two or three years they had confined their election of Curators to members of their own body; and on several occasions, where there were marked differences of opinion, they found that the four Town Council Curators on the one side and the three University Curators on the other.

Professor Calderwood said he had had an opportunity—not a very comfortable one for any man—of going through a canvass for two Chairs; and he had thus had occasion to judge, from personal experience, of what could be said by those who were electors for those Chairs. He had not found any individual on those bodies who professed himself able to judge, personally, as to the claims of the candidates—(hear, hear)—and he was quite satisfied the Council would acknowledge that no man, who had any proper understanding of what University appointments implied, would at all presume to say that he was competent to form any such judgment. In regard to the constitution of the Board of Curators, he thought all the members of Council were prepared to allow that any board constituted of four gentlemen from one body, and three from another, was badly constituted. (Hear, hear.) He thought they were all unanimous in thinking that, whatever should be the constitution, four from one quarter and three from another might breed dispute and faction. He moved, as an amendment, "That a committee be appointed to consider what changes may be desirable in the constitution of the Board of Curators, to prepare a definite plan, and to submit the same to next meeting, with a view to further steps by this Council."

The Rev. Dr. Phin seconded the amendment. He was quite sure there was not in the Council an individual who would say that matters should remain as they were. The fact was that the present was the worst possible system of patronage; and that a change could not be made without being for the better. The Town Council of old administered the patronage much better than the Court of Curators. (Applause.) The election of Professors should be put in the hands of educated men—men whose minds had been cultivated by study, and who might be supposed to be capable of knowing what sort of persons should hold academical appointments.

No one could have watched the proceedings of the Town Council in selecting representatives for the Curatorial Board without feeling that the Council had been gradually making matters worse and worse. At one time the members of Council appointed as curators eminent men not connected with their own body; but a resolution was afterwards passed that they would do so no longer—that in future they would confine their choice entirely to their own ranks.

Dr. Alexander Wood occupied the peculiar *rôle* of defender of the Town Council, and pointed out that the University had continued to exist since the year 1588 under the arrangement of the Town Council, and argued that it might safely go on as heretofore.

Mr. Gibson withdrew his motion in favour of the amendment, which passed *nem. dis.*

It seems to us to have been hardly necessary to elaborate the question as the speakers did. There could be but two reasons for leaving the appointment of Academic Chairs in the hands of the Town Council—that they were the persons most competent to judge, and that, though not the most competent, they had discharged the duty satisfactorily.

The unfitness of a Town Councillor as such to appraise scientific talent and erudition may be conceded—that they have not done so to the satisfaction of the public is proved.

Having then neither suitability nor efficiency to plead, they ought not, we conceive, to be maintained in the exercise of so responsible a duty.

GENERAL COUNCIL OF THE UNIVERSITY OF EDINBURGH.

The last meeting of the Council of the University of Edinboro' was occupied with a lengthened discussion on Female Medicine.

THE MEDICAL EDUCATION OF WOMEN.

On the announcement of the Vice-Chancellor that an address from 160 students of medicine had been forwarded to him, Professor Crum-Brown moved—

"That whereas last year a resolution was passed in favour of the medical education of women in the University; and whereas it is found that under the present regulations of the University Court such education is practically impossible, the General Council represent to the University Court the desirableness of so far modifying the regulations as to afford to women the same advantages as to other medical students."

He said that nothing could be better than the result of the experiment made last session, except in one point, that it was absolutely impossible to carry it any further. There were several ways in which women might be admitted to the advantages of medical education, and he thought they might ask the University Court to determine which of these schemes was most suitable, and take such steps as might be necessary for carrying it into effect.

Professor Turner moved a negative to Dr. Crum-Brown's proposal. He confessed he did not see his way clearly to any other plan to relieve the professors from the burden they complained of than that women and men should be admitted to the same class-rooms, to hear the same lectures, and at the same hour. That seemed to be the only method of getting out of the difficulty. He had taken some pains to ascertain how the system would work, and what was the general feeling in regard to it. He would take the opportunity of reading some information he had received from one of their own graduates, who had studied for sometime at Vienna, and who wrote:—"The professors and teachers in Vienna declare that the presence of women in their class-rooms interferes with the free discussion of subjects they are to teach." The professors of the German universities boasted that no German lady by birth studied medicine there; and similarly at Pesth there were no Hungarian ladies. A gentleman, who for some months was in daily conversation with one of the professors at Zurich, was told that the members of the medical faculty were not only opposed to the principle of mixed education, but would have cancelled the arrangements in force if that had been within their power. He asked them, as men who were desirous of keeping up the tone of public morals, if it was at all decent that they should ask him, or any other man in his position, to discourse on questions of this kind to mixed audiences? Such a thing was utterly repulsive to him. He therefore moved the previous question. (Applause.)

Professor Lister seconded the amendment. He could not but believe that Professor Crum-Brown's motion virtually meant that the University Court should be asked to sanction mixed classes.

Professor Crum-Brown—No.

Professor Lister—It might be said, perhaps, that medical men were prejudiced in this matter. Of course, it was very difficult to say how far they were swayed by prejudice. He was not aware that he was prejudiced in the matter. If he could believe that women would benefit the human race by following the medical profession, he would be extremely glad to assist them. As regarded the particular question of mixed classes it seemed to divide itself into two branches—the effect upon the women studying and the effects upon the male students, and indirectly upon the school. As regarded the former point, he would content himself with saying that he believed there was not in the length and breadth of Britain a single medical man, knowing what medical study really was, who would send a daughter of his to study in a mixed medical school—(applause)—at the young and susceptible age at which medical study should be begun. Therefore, supposing mixed classes existed, the result must be that a large and important class of diseases must be withdrawn from his instruction; or, on the other hand, if, in spite of considerations of modesty, such diseases were brought before mixed classes, the result would be, undoubtedly, to produce the most mischievous effects on the morals of the male as well as the female student. If the time should ever come when he should have this forced upon him as a part of his duty, so far as he was at present able to judge, the result would be the resignation of the office which he so highly valued. (Applause.) Dr. Lister went on to read the address from 160 medical students which had been referred to by the Principal, and which conveyed thanks to the members of Council who had opposed the introduction of female students into the medical classes.

Professor Blackie said he was rather a moral sort of man in his way. He did not deal in indelicate matters; and he wanted to tell why he differed from the gentlemen who had spoken. There was a great talk of indelicacy. No more vague, unintelligible word than that was to be found in the whole English language. If they were never to mention certain matters in a mixed company, they were never to read their Bibles in their own houses. They had, he contended, no right to exclude any person from the University. The present feeling against mixed classes was the same as those people had against mixed audiencies; but what was to prevent a young man from going and sitting beside his sweetheart and holding her hand most affectionately during the whole time of sermon? (Laughter, hisses, and applause.) If they disapproved of mixed classes, other classes should be provided; but he knew of no law of the University stating that women should not receive instruction as well as men, especially as it had been proved that women had as good brains, and even far better brains than men had. If the age was so corrupted that men could not look a fact in the face without rushing into a gust of immorality, he was sorry for them; he did not know that he lived in such an emasculated generation. (Laughter.) Another point was, that, as the lawyers said, *res non sunt integræ*. Certain ladies had been admitted into the University. The authorities admitted them with the right hand and knocked them down with the left—gave them license to study medicine, but no appliances for doing it. Was that, he asked, a gentlemanly way to treat ladies?

Professor Bennett maintained that the whole argument on the other side had been irrelevant. He hoped that the University Court, through the means at their command, might devise some method by which ladies and gentlemen might be instructed in medicine, either separately or in some other way. What, then, was this great argument which told them that the study of medicine was a something utterly repugnant to modesty, that medicine was altogether a sort of shameful immodest study, which rendered it impossible for a woman to listen to it with propriety? This idea of delicacy was altogether peculiar. It entirely depended upon the manner in which the subject was treated whether it was delicate or indelicate. The view of the naked form was not in itself indelicate, but it might be made so from the way in which it was commented on. It was the duty of a University to impart knowledge to all people—to women as well as to men. What they had to deal with was human intellects, and not sexes.

He himself gave a full course of physiology to females last winter. He entered fully into all the very delicate subjects which had been referred to, and there had been no trouble whatever in the matter. It had been said that the exposure of certain parts of the body gave the feeling of indelicacy. If that was so in regard to females as medical persons, how should the same feeling not exist with respect to nurses?

Dr. PHIN, as the Council's representative in the University Court, wished that Dr. Crum-Brown would tell him what he wished the University Court to do. If he wished mixed classes, let him say so in his motion. (Hear, hear.)

Professor MASSON understood Dr. Crum-Brown's meaning to be this—that there had come to be a dead-lock in the present method of admitting women to a medical education; that the University was in a wrong position before the public in having nominally and enthusiastically consented to do a thing, but having actually left it a sham and a pretence.

Professor CHRISTISON called attention to the circumstance that the resolution of the University Court, recognizing the teaching of women by the professors, was coupled with the condition that the teaching should be given in separate classes. When this matter was brought up twelve months ago, it was stated, and it had a great effect upon the public, that the movement was patronised by the highest lady in the realm. Now, he could possibly contradict that. Not long after the meeting a communication was made to him—not a formal message, but still a message sent to him, and also to Dr. Laycock—to this effect, that her Majesty concurred in the views which had been expressed on that occasion by Drs. Laycock and Christison, that she desired that this communication should be intimated to them, and that her sentiments should be made known. (Loud applause.)

After a few words in reply from Dr. Crum-Brown, the meeting divided, when the negative as moved by Professor Turner, was carried by 47 to 46. The result was received with loud cheers.

Summary of Science.

By Chas. R. C. TICHBORNE, F.C.S., M.R.I.A.

Mem. Counc. Royal Geological Society of Ireland, Chemist to the Apothecaries' Hall of Ireland, &c.

ON THE ACONITINE ALKALOIDS.

FLUCKIGER has been examining the aconitine tubers, and gives the result of his labours in a long and valuable paper. Aconitine seems to be contained in all the European aconites with blue flowers, and in the similar species found on the Himalaya mountains. *Aconitum Lococtonum* a yellow flowering aconite is void of aconitine. True aconitine is said to have the following properties: It softens in boiling water, and colours concentrated phosphoric and purple; the colour is retained for some days, watery solutions of aconitine taste bitter, but *not acrid*. It is not precipitated by platini chloride, but gives a voluminous precipitate with potassium iodo-hydrargyrate. It dissolves readily in ether, alcohol, and chloroform. There is an alkaloid entirely different from aconitine, and of uncertain derivation, perhaps from the aconite tubers from Nepaul and the slopes of the Himalaya, Flückiger calls this pseudoaconitine. It is also known by the name of napellin. Pseudoaconitine does not soften in boiling water, tastes acrid not bitter, and does not colour concentrated phosphoric acid. It is insoluble in water, very little in alcohol, ether, and chloroform, but crystallizes from its hot saturative solution in large prisms. Dr. Flückiger, thinks that English and German aconitine are at present as supplied to the market identical.

EUCALYPTUS GLOBULUS.

THE leaves of this plant (natural order, *Myrtaceæ*), have been used successfully as an anti-periodic, particularly in Vienna. A tincture is made of the leaves, which has a pleasing aromatic taste.

THE MOST DELICATE COLOUR TEST FOR STRYCHNINE.

M. WENZELL in the *American Journal of Pharmacy* says, the best form of applying the colour test, is to dissolve one grain of permanganate of potassium in 2,000 grains of sulphuric acid, water only acts as a diluent, and besides, the solution has a deep purple colour, whilst the acid has a pale green. It was found that the limit of positive recognition by the bichromate and sulphuric acid test may be placed at 1-100,000th, that of chromic acid, 1-600,000th, and that of the permanganate 1-900,000th.

ON THE INFLUENCE OF LIGHT ON THE PETROLEUM OILS.

M. GROTOWSKI has shown that when the petroleum oils are exposed to the solar light under certain conditions, they absorb a certain quantity of oxygen, and convert it into ozone in a similar manner, to what has been observed in connection with other hydro-carbons. The oxygen does not seem to combine with the oil, but reacts energetically as an oxidizer upon substances with which it is brought in contact, thus the cork of the vessels in which it is contained, is generally acted upon to some considerable extent. After the action of the ozone, the oils boil with difficulty. The colour of the vessels in which the oil is placed, has a great deal to say to the absorption of the oxygen.—*Cosmos.*

MAGNETIC OXIDE OF IRON FOR THE PURIFICATION OF WATER.

DR. J. SCHOBER states that ferroso-ferric oxide absorbes certain salts from their solutions, providing that the said solutions are sufficiently diluted. The salts are so fixed, that they cannot be removed by washing; nitrate of lead, silver, copper, and nickel—the sulphates of copper, iron, and zinc, with stannic chloride, also organic matter, alum, chrome alum, and tartar emetic lose part of their base, but the alkali remains in solution. Baryta, strontium, and lime salts are not much affected by it, soluble salts of mercury, magnesia salts and the alkaline salts not at all, oxide of iron has a similar property, but in a much less marked degree. There are some cases where this might be used practically.

DETECTION OF ALCOHOL IN CHLOROFORM, CHLORAL HYDRATE.

M. LIEBEN uses the reaction of iodine and free potash upon alcohol, as a test for that body. The production of iodoform in microscopic crystals, is capable of detecting 1-2,000th in any liquid. Hagers' process is as follows:—The reagents used are a solution of potassium iodide in five or six times its weight of distilled water, and then saturated with free iodine, and a solution of hydrate of potassium, of about ten per cent strength. To the liquid to be examined, five drops of the latter solution are added. After warming to 50° C. so much of the potassium iodide solution is added drop by drop, that its colour after gentle agitation remains yellowish brown. Then the liquid is carefully decolourized by the addition of a few drops of the solution of potassium hydrate. When set aside, the iodoform crystals deposit, and are recognized under the microscope. The formation of iodoform is not produced by amylic alcohols, ether, chloroform, chloral hydrate, or any of the organic acids.

To determine the presence of alcohol in chloroform or similar fluid, two volumes of the chloroform are mixed with five to ten volumes of water at about 50° C. The liquid is shaken and poured upon a filter previously moistened with water. The filtrate is then examined in the ordinary manner.

Chloral hydrate is examined in a similar manner. Chloral forms with alcohol an alcoholate, corresponding to chloral hydrate in its chemical and physiological (?) properties. Since the equivalent weight of ethyl alcohol is five times greater than water, it is of considerable pecuniary advantage to the manufacturer to bring the chloral alcoholate into the market instead of the hydrate. Independently of the iodoform test if the hydrate is warm in a test tube with twice its bulk of water, it dissolves readily, but the alcoholate melts without solution, and on cooling congeals under the water. Sulphuric acid warmed with chloral hydrate remains colourless, but turns brown with the alcoholate, with nitrous acid the alcoholate starts a vehement reaction, and nitrous oxide gas is evolved, or the amount of chloroform produced by the action of potash may be directly measured.

ON GLUCOSE AND ITS ARTIFICIAL PRODUCTION.

IN the last number of the *American Journal of Pharmacy* appears an article upon glucose, which possesses considerable interest from a scientific as well as a technical point of view. It is written by C. Joy. The conversion of starch into sugar was discovered by Kirchhoff in 1811. This peculiar sugar, grape sugar or glucose, can be made in many different ways. It is probable that both cane and grape sugar are formed from the starch contained in the cellular tissues of the plant, cane sugar being formed first and then grape sugar, if acids be present. Acidulous fruits contain only grape sugar, whereas cane sugar occurs in those which are free from acids as in the sugar cane or beet. The grape vine, figs, honey, and the liver se-

crete glucose. Maubré's process is the one generally adopted for making glucose, and it consists in boiling a mixture of dilute sulphuric acid and starch-meal under a pressure of six atmospheres. The boilers are similar to those used for high pressure boilers, except that they are lined with lead and provided in the interior with a perforated tube for the passage of steam. The boiler is furnished with a safety-valve, stop-cock, and thermometer. Fifty-six pounds of sulphuric acid are diluted with 5,600 pounds of water, and heated to 212° Fahr. A mixture of the same amount of acid and water which is heated to 86° F., is taken, and into this second mixture 2·240 pounds of starch-meal are well stirred and heated to 100° F. This is gradually added to the first mixture, and, after heating with open valves for a few minutes, the stop-cocks are closed, and the heat is raised to 320° F., and continued until all of the starch is converted into sugar. This requires from two to three hours. The acid is then neutralised with chalk, and the filtered solution of glucose is clarified by blood and bone black. Another method consists in converting the starch by means of malt. However, the sugar made in this manner always retains the flavour of malt, and is therefore only adapted to use in breweries.

Glucose can be also made from cellulose, but not so economically as from starch. In this case two parts of clean linen shreds are gradually added to three parts of sulphuric acid, and the mixture is allowed to stand twenty-four hours; the whole is then largely diluted, and the sulphuric acid neutralised with carbonate of calcium. The starch of potatoes is easily converted into glucose by digesting a few hours with the parings of the potato. This is made use of practically by the German farmers in the preparation of food for fattening hogs. An excellent starch sugar is prepared from Indian corn, which yields alcohol one-eighth cheaper, and as pure as that prepared from cane sugar. Grape sugar is used to add to wine. The reducing power of grape sugar may be made use of for reclaiming photographic wastes. Fourteen parts of chloride of silver obtained from that source are treated with twenty-four parts of caustic soda, sp. g. 1·333, 11¼ parts of ammonia, and 7½ parts of honey. The mixture is allowed to stand in a warm place until all decomposed. The reduced silver after washing can be dried and melted in a crucible.

ANGLO-AMERICAN AMBULANCE.

Dr. William MacCormac, of Belfast, made recently a report of the proceedings of the Anglo-American Ambulance, to which he was surgeon-in-chief. We extract from his report the most important parts :—

"In accordance with our instructions on leaving Paris, we tried, after arriving at Sedan, to reach MacMahon's head-quarters and the front. The Vicomte de Chezelles, *Courrier des Ambulances*, acted as our guide. Through a combination of circumstances we were delayed that evening, the 30th August, at the railway station near Sedan. In place, therefore, of our going to the front, the front came to us. Then were the negotiations completed which placed us in possession of a large hospital of 384 beds on the battle field of Sedan. This piece of exceptional good fortune, the getting into a first-rate position, and into working order, just on the eve of a great battle, has enabled the Anglo-American Ambulance to render services such as no other ambulance in either army has been as yet in a position to perform during this war. Of course, during the first ten days or a fortnight we were short-handed and overworked. I find in the diary I kept that we have been sometimes working for twenty hours at a time, performing operations, noting cases, and making dressings. I have heard of surgeons working for much longer spells after battles. But it is questionable if work done under like circumstances is of advantage to the wounded. Captain Brackenbury, whose valuable aid I have already had occasion to acknowledge as it deserves, visited us on the 11th September, and shortly after his visit there flowed in upon us stores of all kinds, and during all the time we were at Sedan the French Military Intendance supplied us with rations and with wine, and with a staff of hospital servants. The keeping of an accurate medical and surgical record was, from the circumstances, simply impossible. I alone attempted it, and the result is necessarily very imperfect. At one time we had 400 cases under treatment, the majority in the hospital itself, a building of two floors, upwards of 400 feet long, but a large number also in tents stretching over some acres of ground. What harassed exceedingly our already overworked staff were the 'evacuations' made upon us of fresh patients. For example, on the 9th September, we received into our hospital 65 seriously wounded men from various ambulances. On the 12th September, 130 new cases were sent to us, 105 being wounded, and 25 being cases of fever. On the 14th and on the 15th were sent 50 fresh cases, 25 each day.

CASERNE D'ASFELD, SEDAN.

Wounded, inscribed and registered, including a few sick	593
Sick and wounded, not registered, but treated in hospital	200
Wounded, dressed and attended to as extern patients, during the battles of the 31st August and 1st Sept.	400
Total	1,193

INJURIES.

	Cases.	Deaths.
Gunshot wounds of the head, face, and neck ...	38	10
Gunshot wounds, without penetration, of the trunk	29	4
Penetrating wounds of the chest	21	10
,, ,, abdomen	5	5
,, ,, pelvis	9	4
,, ,, joints	35	21
Gunshot wounds around joints, close to, but not penetrating, chiefly the knee	25	1
Gunshot wounds, causing fracture of the bones of the extremities	91	35
Gunshot wounds of the extremities without fracture	136	9
Gunshot wounds of the hand and foot ...	55	3
Sprains, burns, contusions, &c.	28	1
Disarticulation of joints, including two hip-joint and three knee-joint amputations ...	11	9
Amputations of limbs, including 14 thigh, 19 leg, and two double amputations	77	30
Resections of joints, including one knee, two shoulder, and nine elbow cases, and a double resection of shoulder and elbow, as well as resections of the long bones	15	7
Ligature of the subclavian artery	2	2
Ligature of the common carotid artery ...	2	1
Ligature of the common femoral artery ...	1	1
Ligature of the dorsalis pedis artery	1	0

(All for secondary hæmorrhage.)

"The total number of our deaths was 117, 30 at least being from pyæmia, and many of the patients died within forty-eight hours of their arrival in the hospital. Our deaths were caused chiefly by exhaustion, by diarrhœa, by dysentery, and mainly after operation by that hideous scourge, pyæmia, which, however, was quite as common, if not more so, in the small houses and chateaux, with only few patients, as it was in our larger establishment. We had six deaths from tetanus. Without any doubt the primary amputations did much better than the secondary. When it was possible to investigate the nature of the injury within the first twenty-four or forty-eight hours, and then operate if needful, our results were infinitely better than they were when amputation proved necessary in ten days or a fortnight after the injury. With but few exceptions, we found that both the Prussian and Chassepot balls produced most extensive fracturing of bone, and the cases of bone injury in which the practice of conservative surgery was expedient were but few. I think the Prussian bullet, which is much the heavier of the two,

caused the greatest amount of damage. Our rate of mortality began to increase directly after the 'evacuations' made upon us of the 9th and 12th, and this, as well owing to the deaths amongst those sent in, as from those occurring amongst our original patients, previously in most excellent hygienic conditions. On Sunday, October 9th, there were but 15 patients remaining in the Caserne d'Asfeld, and these I transferred to the care of a Dutch ambulance, just arrived at Sedan, with plenty of both money and *materiel*, but with nothing to do."

Literature.

REPORT ON THE SANITARY CONDITION OF THE PARISH OF ST. GEORGE, HANOVER SQUARE.*

This report shows first of all that, deducting the deaths of non-parishioners (298) at some hospitals in the parish, the death rate of this parish was only 16·8 per thousand. On this, we would remark that many of the inhabitants die at country houses, and that the rate of 16·8 per thousand is on this account very misleading. In the case of zymotic diseases, Dr. Aldis has shown that diarrhœa was the most fatal. None of the cases, 141 of relapsing fever, admitted during the year into the various Metropolitan hospitals were from the parish of St. George. The specific fever of cows, called foot-and-mouth disease, which is accompanied by an eruption resembling varicella, appeared in a few cases and then died out. The Serpentine cleansing commenced in September. A great outcry was made when the operations for emptying the lake first commenced, during a few unexpected warm days, but no increase of fever took place in St. George's district. It has been determined to remove all the mud; but not to render it shallower. With regard to the Workshops Regulation Acts, Dr. Aldis is dissatisfied with the wording of the 4th Clause, which says that "No child, young person, or woman shall be employed in any handicraft on Sunday, or after two o'clock on Saturday afternoon," because this is interfered with by another clause which permits them to be employed until three in the afternoon. We question whether *women's* labour should be thus interfered with, although in the case of young girls and children, we are ready to endorse the provisions of the Bill. The protection of women now-a-days shown in the Contagious Diseases Acts, &c., looks rather like meddling and muddling. Dr. Aldis complains that there is another exception to the provisions of the Act, which renders it difficult to work it. The gas in St. George's, Hanover Square, is all free from sulphuretted hydrogen and seems to be pure.

TRANSACTIONS OF ST. ANDREW'S GRADUATES ASSOCIATION, 1869.†

This is a most tasteful volume, bound in blue cloth, and with excellent paper and type. We propose to notice a few points in the various excellent papers it contains. First of all, there is a memorandum on the criminal responsibility of the insane, in which it is contended by Dr. B. Richardson that the law concerning persons alleged to be afflicted with insane delusion who have committed a crime, should be submitted to a Royal Commission. Next, there is a memorandum on the advantages to be derived from a registration of disease. Then follows an oration by Dr. Richardson "On the Science of Cure." Most of our readers have read this eloquent address at the epoch of its delivery in our pages. Dr. Black, M.D. St. Andrew's and London, gives an essay "On the Clinical Examination of Urine in Relation to Disease." Dr. Black takes 40 ounces in the twenty-four hours as the normal quantity of urine passed by healthy adults. In hysteria, patients pass frequently in a few hours as much as three or four quarts of urine of a specific gravity as low as 1,007. Diabetes mellitus is sometimes present, with no increase in the amount of urine passed. There is no disease in which the density of urine fluctuates so much as in phthisis pulmonalis; but in the acute forms it has a high specific gravity, 1,026-28 being frequently met with. The urine of neuralgia, of hysteria, and of rheumatism have one character in common—that of a pale colour; but here the analogy ends. With regard to phosphatic urine, Dr. Black describes it as of the lightest shade of the standard colour of urine, with a dash of white in it. It is frequently the result of wear and tear of the nervous system. Occasionally, sugar, phosphate, and oxalate of lime and uric acid, in crystals, may alternate with each other. Chyle is sometimes found in urine, in warm climates especially. In such cases, a quantity of fat in a molecular form is found in the urine. When pus is present in urine, the fluid, on standing, becomes separated into a supernatant part and a white sediment, which, under the microscope, is seen to consist of pus globules. If pus occurs in the male in pretty large quantity, the pelvis or the tubuli urineferi of the kidneys are probably diseased. If the bladder be affected, thick viscid mucus accompanies it in most cases, but not in all. In the female, the colour of the urine may be rendered milky in appearance not only from such causes, but also from inflammation of the mucous membrane of the vagina and uterus. In oxaluria, the colour of the urine is usually deep amber, and the density varies from 1,025 to 1,030, and such urine is common in professional persons. Yellowish red and brownish red urine is essentially the urine of inflammation. The depth of colour in inflammatory urine is due to an excess in the pigment matter of the secretion, and its increased density to the presence of an increased quantity of urea. In acute rheumatism, the colour of the urine is described a deep lake red and of specific gravity 1,028-30. This will often assist us in diagnosis of rheumatic affections. When urine, containing either albumen or sugar, is shaken in a bottle which is afterwards kept corked, the head of the air-bubbles thus produced will not break and subside for upwards of twenty-four hours. When the urine of disease contains no other than the ordinary constituents of urine, the capability of aeration is in proportion to the quantity of organic matter present in the urine. The appearance of an urate deposit in the urine in disease is generally indicative of a tendency towards recovery in fevers or in inflammations. Diabetes mellitus is in no way a disease of the kidneys themselves; and however long a case of diabetes may have existed, however much sugar there may be in the urine, and however fractional the natural solids of the urine have been reduced by this disease, hope of recovery under judicious treatment may be entertained. In pulmonary consumption, the presence of urates is significant of the progress of the disease to a fatal termination. In galloping consumption, the urates are always found. In all diseases of the stomach, in which excess of acid is secreted by the organ, deposits of uric acid are apt to occur in the urine. In irritable dyspepsia, in pyrosis, and in the early stage of organic disease of the stomach, this is of frequent occurrence. The stomach, in such cases, secretes an excess of uric acid; this passes into the blood, finds its way to the kidneys, is eliminated, and passed off in the urine, in which it displaces the uric acid from its combinations, and causes it to be deposited in a crystalline form. Professor Polli, of Milan, after experimenting on himself with haschish, and finding that this drug gave feelings of happiness and self-satisfaction, tried it in a case of melancholia. He commenced with a dose of about fifteen grains of the brown

* Report on the Sanitary Condition of the Parish of St. George, Hanover Square, ending March 26th, 1870. By C. J. B. Aldis, M.D. Pp. 19.

† Transactions of St. Andrew's Graduates Association, 1869. Edited by L. W. Sedgwick, M.D. Lond. Churchill, 1870, pp. 306.

extract to be taken at dinner time. In ten days the patient took seventy-seven grains, and she was soon in perfect health. In a case of hydrophobia, the patient was made to swallow seven grains of the extract every four hours. In twenty-four hours he took two-and-a-half grammes of extract of Indian hemp by the mouth. This alleviated his sufferings, although the result proved fatal.

Dr. Cholmeley contributes a paper "On the Therapeutic Influence of Chloride of Ammonium," a drug which in Germany has long been used in fevers and chronic disease. The author of the paper asserts that the chloride is of great service in some cases of *neuralgia*, in doses of fifteen grains t. d., or, if the pain is very severe, thirty grains. In some cases of tic doloreux and hemicrania, it is alleged to act like a charm; in nervous head-ache, too, he finds it very useful, and in myalgia. The author of the paper has found the chloride of great use in sciatica in one form of it, and he also recommends it in lumbago. In amenorrhœa, also, it is, he says, to be recommended; indeed, he fears to order it during pregnancy on this account. In dysmenorrhœa, too, he has found it useful.

There are papers by Dr. Lloyd Roberts, of Manchester, "On Ovariotomy," by Dr. Hughlings Jackson "On Convulsions," and by Dr. B. W. Richardson "On Intermittent Pulse," which require careful reading, but do not admit of extracts being made from them. Altogether, we congratulate the graduates of St. Andrew's on this excellent record of their annual meeting. It is a great pity that the method of granting degrees by St. Andrew's University were not universal. If ever we are to have a state-degree, it must be like, in many respects, to the one formerly carried out at that Scottish University, neither implying residence nor any other trash of like nature.

Correspondence.

CAUSES OF PROSITUTION.—SEDUCTION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In connection with the subject of Baby-Farming, which has lately been discussed in your columns, that of Seduction has incidentally sprung up, One correspondent, Dr. Waring-Curran, insists strongly upon the excessive prevalence of seduction over all other causes of the loss of female honour; while another "Veritas," writing apparently from a special knowledge of the question at issue, objects to Dr. Curran's sweeping denunciation of the male sex.

Without professing to have closely studied the intricate windings of the road to ruin, I venture to suggest that the statements of writers of experience in such matters go far towards showing that "Veritas" is much nearer to the mark than Dr. Curran.

I will not attempt to occupy your valuable space by bringing forward more than one authority in support of the views advance by "Veritas," and that authority is Mr. William Tait, formerly house-surgeon to the Edinburgh Lock Hospital, and author of "An Enquiry into the Extent, Causes, and Consequences of Prostitution," published in 1841, and now a somewhat rare work, so that I may be the more readily excused for quoting from it.

The extent and consequences of prostitution need not be dealt with here: they are matters which are obvious enough to anyone who has lived in a populous place, and I shall limit my letter to the causes which lead to the deviation of a considerable number of females from the paths of virtue.

First, as regards seduction. Under this heading, Mr. Tait, who had exceptional opportunities of obtaining statistical information concerning the causes of prostitution, and who, judging by his work, must have applied himself energetically to his task, says:—"Seduction is believed to be a very general cause of prostitution. The investigations which the author has made, relative to this important subject, have led him to a different conclusion. . . . . By seduction, is to be understood the act of corrupting, tempting, or enticing females from a life of chastity, by money or false pretences, solely with the intention of gratifying the lust or amorous propensities of the opposite sex. If the instances of seduction be brought to the test of this definition, it will be found that they are comparatively few. . . . So far as can be ascertained, about eighteen per cent. of all the common women have become prostitutes in consequence of seduction. (Second Edition. 1842. Pp. 141-143).

This can scarcely be considered a very large percentage, and, *mutatis mutandis*, I should be disposed to put the relative proportion of George Barnwells, and other young men, corrupted by depraved persons of the weaker sex, in excess of this.

Next, with respect to the love of finery and dress, as exercising a strong undermining influence upon female chastity, permit me to make another quotation from Mr. Tait's work (p. 119)—"There is not, perhaps, in the lengthened catalogue of causes of prostitution, one more general or more powerful than ambition for fine dress. It is one to the influence of which all women are in a considerable degree subjected. The desire to appear more gay than her companions, is a prominent feeling in the breast of every female child; and it is strengthened rather than diminished when she attains the age of maturity. As her acquaintances multiply, and as she begins to court and delight in the society of the opposite sex, this desire becomes more and more excited, till the ambition of appearing fine oversteps the means of doing so. Unless the feeling is curbed at its commencement, or the restraint of a powerful and well-regulated mind is called into operation to check its influence when once matured, some extraordinary means must be adopted, in order to satisfy it; and no method holds out a more encouraging prospect of success than a life of prostitution."

I have already trespassed further upon your space than I had intended, and I must therefore only refer to other not uncommon causes of the loss of female virtue, such as the natural inclination to vice which prevails in some persons of either sex, and pride and indolence, which often cause women to part with their chastity in preference to following laborious, honest callings.

I have, however, said sufficient to show that I do not agree with Dr. Waring-Curran in his unqualified attack upon the male sex, and, indeed, I think that he, according to his last letter on the subject, is more disposed to throw deserved censure upon a certain class of individuals, whose chief aim in life appears to be the subjugation of virtue to vice, than to charge the masculine half of humanity with wholesale depravity.

I am, Sir, yours, &c.,
Abbotts Smith, M.D.

7 Princes street, Hanover square, London.
November 2nd, 1870.

ONE WAY TO CHECK BABY-FARMING.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Allow me to suggest to those benevolent persons who are exerting themselves in order to establish a society for the PROTECTION OF INFANT LIFE, and to others interested in the various questions which belong to the subject of "Infanticide," that little good will be done by the enactment of any laws unless it be understood that the most searching investigation will be made, and the fullest publicity given concerning such cases as those which have recently come to light, and some of them even now are under judicial inquiry.

All possible information should be brought forward, including the names of all the persons mixed up with baby-farming cases. With that object in view, an inquest should be held in every instance of a child dying at nurse, or under suspicious circumstances, even in the charge of its mother; and the aiders, abettors, or connivers who are concerned in such a system should be held up to public scorn and loathing—no matter what their position in "society"—in order that *all* the guilty parties may receive their proper share of the blame and ignominy of their evil deeds.

I am, Sir, yours obediently,
M. A. B.

SEDUCTION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—With "Veritas" I quite agree that man is not always the primary cause of virtue's downfall. Your much es-

teemed correspondent Dr. Waring-Curran is more gallant than just, when he asserts that girls are, for the most part, always wantonly and deliberately seduced; such is not the fact, and so would statistics prove, could they be taken, but I am sadly afraid the opponents of the Contagious Diseases Acts will allow me no opportunity of proving the above. Suppose we take a hundred courtesans and learn the history of their individual downfall, the facts that would be revealed would be so astounding, so incomprehensible, so shocking, that they would scarcely be credited. My experience amongst our fallen sisters leads me to suppose that 25 per cent. only are genuine examples of wilful and premeditated seduction, that is, where deliberate and systematic villany on the part of the male sex has been brought into play. The other seventy-five are made up of the women who have of their own free will gone on the town out of sheer liking for the life, and of others the prey of their own sex, in some cases, alas, where the female reprobate of a tempter, literally the seducer, has been their own near relative; truth is stranger than fiction, and in many cases it is hard to hear it spoken as it is in this case, but it should not lead us into the error of putting the blame on innocent persons to shield the guilty, even if they be mother, aunt, sister, or cousin. Yes, I maintain that women as seducers outnumber the men. Girls who have already partaken of forbidden fruit and found it agreeable to body and pocket, by appearing in fine clothes, good spirit and health, excite the jealousy of their associates who want to know how they get all these good things; of course they are told, and are persuaded that it is a jolly life, and advised to do likewise by those who have been their school-friends, their fellow-servants, their factory-mates, their fellow shop-assistants, and they do go and do likewise, and in their turn become the tempter, the betrayer of their own sex, and it is thus that the ranks of prostitution are recruited. Another cause of seduction is, the innate vanity of women who love to be made much of, especially by those who may be in a station superior to themselves in society, as in the case of illegitimate children, you often hear the relatives say, "Never mind, my dear, the father's a gentleman, that's a comfort," and many girls prefer being the mistresses of rich men than the wives of poor ones, let those who deny that statement just take facts and dispute facts if they can, perhaps they may make black white; I can't! With regard to the aristocracy being so bad, they are no worse than other classes, but only let such be caught tripping, of course theirs is a most heinous fault, on the principle that the more respectable one is, the more one's shortcomings are magnified and commented on. The letter of "Veritas" on the "Victims of Seduction," is at once truthful and to the point, he must be well acquainted with the subject he wrote upon in all its bearings, or he never could have worded his letter as he has done, it is not in the least overdrawn, and certainly should be read by all interested in ameliorating the social evil. One bad woman amongst her sex is more dangerous than ten men, because in the case of the latter, girls would be on their guard; whereas, in the former, no such precautions would be deemed necessary, and the poison would be so gradually instilled into hitherto pure minds, that it would never be detected until it had borne fruit, and then the mischief's done. Widows have fallen, and will do so again, and married women prove untrue, as they do, and that only makes matters still worse for the fair sex. Surely, widows and wives are old enough to withstand the various arts and devices resorted to by the seducer who wins them from the path of rectitude. I am of opinion in such cases there must be six of one and half-a-dozen of the other. Make seduction a criminal act if you like, but punish the seducers if you please, and in some cases it will be the women. Have there been no cases of servants tampering with their young masters? I really cannot answer that question personally, but I know some who can, designing servant-maids are not over scrupulous how they inveigle a youth into an intrigue, perhaps thinking they can make a match of it, or at any rate, a case by which they may benefit themselves. I by no means apply the above to all servants, only to the few, the only thing I wish understood and known is, that man is not the *only* sinner and the sole means by which girls are tempted and fall. The callous indifference of some girls when speaking of their first sin, and the nonchalance with which they talk of the life they are leading, and how much more they could put in their pocket if they could only get a better start, *i.e.*, live in a larger house and keep their brougham, dress more expensively, &c., speaks volumes; it is very amusing to hear them talk, but, at the same time, it is horrible to know there are hundreds of young women who prefer to live in riot, and to them affluence, rather than endeavour to gain their living in an honourable manner, in fact, they glory in their shame, and some of the more fortunate ones will even condescend to pity the hard-working wife, and will answer when reproached, that she is not a low woman if she is gay, she's a swell at it, and sure enough in gay life there is the "caste" as it is in every-day life, one courtesan takes precedence of another, and the Brompton or St. John's Wood woman would feel she had lost caste if she had shaken hands with an unfortunate inhabiting the East-end of London.

I am, Sir, yours, &c.,

HENRY W. WILLIAMS, M.D.

168 Fulham road, S.W.
Nov. 3, 1870.

Medical News.

Royal College of Physicians of London.—At the ordinary quarterly meeting on the 27th ult., the following gentlemen, having passed the required examinations, were admitted as Members:—Thos. Lauder Brunton, M.D., Edin., Davies street, Berkeley square; James Keene, London; Robert King, M.B. Camb., Middlesex Hospital; John Murray, M.D. Aberd., Bryanston street; John Frederic Nicholls, M.D. St. And., Devizes; David Wm. Williams, M.D. St. And., Lynn.

Apothecaries' Hall, London.—Pass List—On Thursday, the 3rd inst., the following were admitted licentiates of the Society of Apothecaries, viz.:—Messrs. J. H. Clarke (Sheffield School of Medicine); E. T. Hale (Bristol School of Medicine); John Marshal (Guy's Hospital); and G. T. Willan (Guy's Hospital); and at the same Court Messrs. H. M. Maybury, of St. Thomas's Hospital, and E. R. Morgan, of King's College Hospital, passed the primary professional examination. At the recent competitive examination for the prizes given annually by the society to third winter session students for proficiency in the knowledge of the materia medica and of pharmaceutical chemistry the successful candidates were—1st. Joseph Henry Philpot, of King's College, gold medal; 2nd. Charles James Hislop Warden, of St. George's Hospital, silver medal and book.

The Regius Professor of Medicine at Oxford (Dr. Acland), has given notice that examinations in the first or scientific, and in the second or practical, portions of medical study for the degree of Bachelor of Medicine, will be held early in December. Also, that early in next term there will be an examination for a Radcliffe Travelling Fellowship.

Bequests.—The Hon. Augusta Irby has left £500 to the Northampton General Infirmary; Miss Catherine Stanley has bequeathed £50 to the Warnford Hospital at Leamington; and the late Baroness Wenman £500 to the Oxford Infirmary, and £100 to the Deaf and Dumb Asylum, Old Kent-road.

Society for Relief of Widows and Orphans of Medical Men.—An ordinary general meeting of the above society, was held at the rooms, 53 Berners street, on Wednesday, Oct. 26th. The chair was taken by the President, Dr. Burrows. The attendance of members was more numerous than of late at general meetings, showing it is to be hoped, an increasing interest in the affairs of the society, taken by those most concerned in its welfare. After the usual reading of minutes of the Annual Meeting and of the Courts of Directors, the acting treasurer's half yearly statement of accounts was read. The receipts of the half year available for payment of grants and expenses, amounted to £1,590 7s. 8d. the grants and expenses to £1513 9s. 1d. leaving a very small balance in favour of the society. A sad falling off was manifest in donations, the total for the half year being only £65 11s. 0. Mr. George Cooper of Brentford, was unanimously elected as Vice-President, in the place of Mr. Bacot, deceased. The proceedings terminated by a vote of thanks to the chairman.

Dr. Humble and Dr. Embleton have been appointed medical visitors of the Dunston Lodge Lunatic Asylum, near Gateshead, Durham.

The difficulty, says *Nature*, of providing funds for the establishment of a Professorship of Physical Science in the University of Cambridge has been overcome by the colleges, at a meeting of their heads, taking upon themselves a quota of the rates for improvements and other purposes in the town of Cambridge, which was formerly charged upon the University funds. This sum amounts to more than twelve hundred pounds per annum; so that the University will speedily be able to avail itself of the munificent offer of the Duke of Devonshire, and will doubtless proceed at once to establish a Professorship of Physical Science, and obtain the other aids in the way of laboratory, apparatus, and assistants, that the Professor may require.

The Conservator of Forests in India, states that the ipecacuanha plants in the gardens at Nelamboor are doing well, and that some of the fleshy leaves were four inches long.

NOTICES TO CORRESPONDENTS.

☞ Correspondents requiring a reply in this column, are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Out of thousands of such persons it may cause enquiries so signed, on very various subjects much confusion.

⁂ We must also request our Correspondents to write only on one side of the paper and in *legible* characters. We are often compelled to consign MSS. to the waste-paper-basket merely because it is illegible.

Correspondents not answered in the current Number are requested to look to the Notices the following week.

A. R.—The subject has been already discussed by us.

Dr. P., New York.—You shall receive the supply before leaving Liverpool. Thanks for your promise to push us in America; already we circulate extensively there.

Spes.—All who fail complain. Try again. *Nil desperandum.* We cannot take up your grievance. Persevere.

Drei.—The curious history of the so-called *Drei* appeared in the *Times* some years ago. Of course it was fiction.

Pater.—You must refer to our "Student's Number," where all the information you require is given. We cannot recommend any particular hospital or school.

Speranza.—We know nothing of the gentleman. The name is in the "Directory" for this year.

James R—, Esq., Cheadle.—Consult a physician, or if you come to London, see Sir Thomas Watson.

Medical Student.—There is no recorded case of poisoning by chloral hydrate. We do not know that it might not in the dose you mention. Experiment.

THE SICK LION SYSTEM.

To the Editor of "The Medical Press and Circular."

Sir,—I thought your much admired remarks on the "Sick Lion System" would have cured a certain class of journalists. Upon my word it is most unprofessional, most uncourteous, and very cruel these sensational paragraphs—the puff oblique. When will they end? We, the Profession, must at once not only despise and denounce them, but take active measures to suppress them. Our beloved Princess Louise sprains her ankle two weeks ago. We all know that, but I make a mountain out of a mole-hill, and to try to make the case alarming, we have another "Napoleon" paragraph. What will the Manchester *Punch* say to this? Surely, Mr. Lister disapproves of it as much as I, and as you, Sir, do. Our spirited young Lorne will knock the heads of some if they don't mind.

I am, &c.,
A Scotch Physician of Twenty Years.

Edinburgh, Nov. 5th, 1870.

HOW TO TAKE CASES.

Our attention has been called to a very excellent little shilling work for taking cases at the bedside, published in London by Messrs. Baillière, Tindall, and Cox, and in Edinburgh, by Maclachlan and Stewart, which is most extensively patronised at some of the hospitals. The work is ruled in a very convenient form, and with the simple instructions furnished at the commencement, will be found most useful to all whose practice or studies lie within the walls of an hospital.

THE LONDON MEDICAL SOCIETIES.

Wednesday, (this evening.)

Hunterian Society.—7½ p.m. Meeting of Council.—8 p.m. Dr. Peacock, "On the Leper Hospital at Lisbon."—Exhibition of Pathological Specimens and Discussion of Miscellaneous Cases.

Royal Microscopical Society.—8 p.m. Mr. S. J. M'Intire: "Notes on the Minute Structure of certain Insect Scales."

Friday, the 11th.

Quekett Microscopical Club.—8 p.m.

Clinical Society of London.—8½ p.m. Mr. Pollock: "Report of Cases of Skin-grafting and Skin-transplantation."—Mr. Durham, "On a remarkable Case of Spontaneous Fracture of the Femur."—Dr. Wiltshire, "On Paroxysmal Hæmaturia."—Mr. T. Smith, "On the Nature of the so-called Congenital Tumour of the Sterno-Mastoid."—Dr. Handfield Jones, "A query as to the Safety of Subcutaneous Injections."

Monday, the 14th.

Medical Society.—8 p.m. Ordinary Meeting.

Tuesday, the 15th.

Pathological Society.—8 p.m. Ordinary Meeting.

VACANCIES.

Stockport Infirmary.—House-Surgeon. Board and residence, but no salary.

General Hospital, Birmingham.—A Physician, a Surgeon, and for the office of Resident Registrar and Pathologist. Salary for the latter appointment £100.

Dursley Union.—Medical Officer. Salary £60, exclusive of fees.

Homerton Fever and Small Pox Hospitals.—Resident Medical Officer for each. Salaries £350 and £300 respectively, with residence.

Ardwick Dispensary.—Senior House-Surgeon. Salary £100, with residence.

General Hospital for Sick Children, Manchester.—Assistant Medical Officer. Salary £170 per annum. See advertisement.

Coventry Hospital.—House-Surgeon. Salary £100, with residence.

North Witchford Union, Cambridge.—Medical Officer. Salary £50, fees extra.

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

The Mortality of Childbed and Maternity Hospitals. By J. Matthews Duncan, M.D. Edinburgh: A. and C. Black.

St Bartholomew's Hospital Reports. Vol. VI. London: Longmans.

St. Thomas's Hospital Reports. New Series. London: Churchill.

Reports of the Anti-Contagious Diseases Acts Association.

The British Journal of Dental Science; The Homœopathic Review; Food Journal; New York Medical Gazette; The Practitioner; Hardwicke's Science Gossip; Boston Medical Journal, &c., &c.

Marked Papers received:—Lincoln Chronicle; Exeter Gazette; Derby Mercury; Lincoln Journal; Scotsman; Irish Times; Public Opinion; New Zealand Examiner; Midland Gazette; Ramsgate Gazette; Dublin Freeman; Edinburgh Courant; Northern Whig; Nottingham Journal; Shield's Northern Star, &c., &c.

Marriages.

Keith—Reed.—On the 26th ult., at St. Mary's Catholic Chapel, Edinburgh, William Gregory Keith, M.B., C.M., of Colombo, Ceylon, to Jane Mary, eldest daughter of Wm. Reid, Esq., of Edinburgh.

Smith—Ross.—On the 31st ult., at St. Giles, Camberwell, Walter Smith, L.R.C.P., of Regent's-park, to Susan, youngest daughter of the late Alexander Ross, Esq., of Bradford, Yorks.

Deaths.

Campbell.—On the 26th ult., at Park House, Portobello, N.B., John Campbell, M.D., Staff Surgeon Army (retired), aged 77.

Green.—On the 25th ult., at Mount Sorrell, near Loughborough, Thomas F. H. Green, M.R.C.S.E., in the 32nd year of his age.

Hubert.—On the 26th ult., W. A. Hubert, M.R.C.S.E., L.S.A., at his residence, Markyate-street, Herts, aged 61.

Loe.—On the 15th ult., at Garforth, near Leeds, Charles Low, L.S.A., father of J. S. Loe, M.R.C.S., of Leeds.

Loe.—On the 30th ult., Louisa, wife of J. S. Loe, M.R.C.S., of Leeds.

Loe.—On the 30th ult., Louisa Nevitt, infant daughter of J. S. Loe, M.R.C.S., of Leeds.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 16, 1870.

CONTENTS.

Original Communications.

FRACTURE OF LEFT THIGH, ALSO OF PUBIS, TO THE RIGHT OF SYMPHYSIS, WITH PUNCTURE OF BLADDER.—A RECOVERY.

By Francis McEvoy, L.K.Q.C.P., L.M., M.R.C.S.E.,

Medical Officer Balbriggan Dispensary, &c., &c., &c.

I was requested to see, by presentation of a red ticket, a man named P. C., who, I was informed, when returning from Dublin market the night previously with his horse and cart, fractured his thigh about the middle, and otherwise injured himself, as his urine was quite bloody. How it occurred could never be satisfactorily accounted for, as he was quite intoxicated at the time, and it was several hours after the accident that he was found lying near a wall, and the cart upset beside him. The horse managed to get loose, and came home, which alarmed his friends, who immediately went in search of him, and had him conveyed home on the cart which was unbroken. When I saw him, he was lying on some straw on the earthen floor stupidly drunk. It was easy to see that his thigh was fractured; it was enormously swollen, and bent at an angle of about forty-five degrees. As nothing could then be done for him, he being without sense or reason, and most violent when aroused from his stupor or touched, I considered it better to leave him until he slept off his debauch, and recovered his reason, which did not take place until late in the evening. In the meantime, I got everything ready, as I had desired his friends to send for me when he should recover, which they did. On seeing him the second time, he had slept off his intoxication, and reason had resumed her seat. He was moaning most piteously, and when questioned could not give any account of what had happened to him—how, when, or where it occurred, whether he was beaten or not, nor tell anything whatever about the matter, as he was too hopelessly drunk; but as all the money he had received (£2) was found correct, the occurrence was considered accidental. I proceeded to examine him; first had to cut off his clothes ere I could see what were the injuries he had received. There could not be the least doubt about the thigh being broken, and when I tried to move or get the fractured leg into position he would scream out, and most piteously entreat to be left alone. In the same way with the good leg (which was quite paralysed), for the least attempt to rotate the thigh on the pelvis would cause him the most excruciating torture. At first I thought he had injured his spine, but as the sense of feeling and voluntary motion of the muscles of the feet and toes were perfect, I saw that I was wrong in my surmise, and finally considered that an injury was done to the pelvis somewhere about the symphysis pubis, and that the bloody urine was perhaps the consequence, which he passed with great pain and difficulty, and which he did not refer to the urethra, but immediately behind the pubis.

As it was quite impossible to move, or even touch him, without his screaming most terrifically, or reduce the fractured limb, I was obliged to put him under the influence of chloroform, and whilst in that state had him conveyed to a proper bed prepared for him, and instituted a most rigid examination of the spine, pelvis, and the whole man, and came to the conclusion that my latter supposition was the correct one, as I could distinctly detect a crepitus to the right side of the symphysis pubis.

He had a livid mark and swelling just over the fracture as if the horse had laid his hoof upon it; moreover, his trousers were torn and soiled with the gutter of the road, which corresponded with the livid mark and swelling on the pubis. Reduced the fractured thigh, put on splinters that would admit of counter extension, pads, straps, and buckles, and firmly bound him round the pelvis with a good strong binder. As soon as the effects of the chloroform had passed away, with the exception of a slight giddiness and nausea, which remained for a short time, he said he felt quite comfortable; nor did he complain of the counter extension I used (but on the contrary it seemed rather to give him relief), which I daily increased, and in two or three days had it as long as the good leg. I gave him an opiate and left. He suffered considerably the first night,

and indeed for the first week, from pain, when he would go to stool or micturate. Although I had given him an opiate draught, I was called up twice the first night in consequence of the frequency of the calls to make water, and I had to introduce a small sized catheter, No. 7 gum-elastic, and draw off about half a pint of bloody urine which relieved him much; and I considered it advisable to secure it in the bladder, and allow the urine to drain into a wide-mouthed bottle to keep the bed dry. I withdrew the catheter every second day, and at the end of a week he no longer required it. From this time he progressed steadily and favourably. In seventy days he was able to go about on crutches, and in six months he was quite recovered, without the least shortening or lameness. The only thing he complained of was, that occasionally he had an uneasiness about the region of the bladder, which did not amount to pain exactly, but to an indescribable sensation, and at such times (not always) he would pass a few drops of blood.

In twelve months after the accident, as I was walking one day in the street, he accosted me, and said that he had been at my house wishing to see me as there was something the matter with him; that he could not pass urine as well as he could a week ago; that he considered there was something in the passage that prevented its coming, as the water would force this something (whatever it was) as far as the nut, that there it would stop, and the urine collect behind it; and when the urine would drain off it would go back towards the bladder, during which time he would suffer considerable pain. I, at first, pooh-poohed the idea of anything being in the urethra, as he described it, going backward and forward, and endeavoured to persuade him that it was all nervousness. I, however, immediately returned, examined the urethra externally, and by rectum, but could not detect any foreign body in it, and was in the act of introducing a silver catheter, when I asked him to endeavour to pass water, which he did. Then, indeed, I could perceive something passing beneath the skin along the urethra (which I considered at the time to be a calculus) to about three-quarters of an inch of the glans penis, where it stopped, the urine collecting behind the obstruction and swelling the urethra. I immediately took a fine silver probe, and having bent it into the shape of a hook at the point, passed it into the canal down to the foreign body, against which I felt it grating—got the hook behind it; what between the pressure of the water, and using gentle traction with the probe, I managed to get it within half an inch of the meatus urinarius. The man at this stage fainted, very opportunely, which rendered its extraction much more easy. I then took a narrow-bladed forceps, passed it into the urethra, and seized the substance in the most favourable position possible, and extracted, to my no little amazement, a small splinter of bone somewhat like a small fragment of the thigh bone of a chicken.

The natural inquiry that presented itself was, whence came that bone? How did it get into the urethra? At first I considered that some evil disposed person had passed it into the urethra whilst he was in a state of intoxication and asleep (as some boys once did to a poor idiot whom they found lying drunk in a field near this town with his person exposed. One of them having an eight or tenpenny nail in his pocket passed it into the urethra and ran away. Seeing some blood trickling from his penis, his mother found him a short time after with the point of the nail protruding from the urethra, she brought him to my father, who held the situation I now hold, and he extracted the nail to the no small astonishment of the bystander; and, as murder will out—except in Ireland—the boys quarrelled some time after, and discovered on one another). But this man assured me that he never had since the accident occurred tasted intoxicating liquor.

Several other hypotheses suggested themselves to my mind to account for the bloody urine at the time of the accident. Could it be that this spicula bone had become detached from the posterior or inside of the fractured pubis, and wounded the *distended* bladder, for it had been so, and very much too? But if the bone had punctured the viscus, would there not have been infiltration of urine, or might it not have remained in the bladder, and acted as a sort of plug, or wounded the bladder obliquely, the mucous membrane acting as a kind of valve, and so prevented the escape of urine into the surrounding tissue, for I am certain that there was no infiltration into the cellular membrane. If there had been there must have been more or less constitutional disturbance—abscess and urinary hectic to indicate its presence, but there was none.

The foregoing is interesting, not only from the nature of the injuries which were received, but from their obscurity, complicacy, and difficulty of diagnosis, its presenting many phases at different times, all resulting in my opinion from the same accident; but also showing the value of chloroform in enabling the surgeon to form a correct diagnosis of his case, which could not have been done without its invaluable assistance, as his cries were the most terrific I ever heard.

The simple fracture of the thigh would have been nothing, were it not complicated with fracture of the ramus of the pubis, and whether it extended through the obturator foramen, fracturing the opposite side, or not, is more than I can say; but I think not, although the binder I put on afforded decided and immediate relief, as also the extension of the leg. The hæmorrhage from the bladder must have resulted from some lesions, and which I attribute to the wounding of that organ by a spicula of bone. I may be condoned for saying that I felt proud of the correctness of my diagnosis, as the result proved, from the passing of a bone through the urethra in a year after the accident occurred.

Now comes the most curious phase of the case, and if the foregoing was not sufficiently confirmatory of the correctness of my diagnosis, the following circumstance would sustain it. On the 7th of July last, this man came with a friend of his, who had cancer on his lip, and which I was to remove on that day, and did.

Whilst waiting for me, he consulted my assistant and Dr. Johnston, who was also waiting my advent, and told them he was sure there was something in the passage that prevented the water coming; that it came very slowly, and not in a continuous stream, but used to follow in a sort of dribble from the meatus urinarius, and that he was afraid to show it to "the governor," as he called me, lest I might cut it out as I did the piece of bone some years ago. In making this statement, he was mistaken, as I have mentioned in the former part of this paper how I extracted it. They examined him, and discovered a hard substance in the passage near the scrotum. Having asked him to make water, they could perceive a something passing along the urethra to the nut or glans penis, where they imprisoned it; got a silver probe, bent it at the point in the form of a hook, as I did before, passed it into the urethra, and extracted a triangular piece of bone, after which he made water as well as ever—and "went on his way rejoicing."

This made the second piece of bone passed in ten years after the accident, and nine years after the first came away.

He is now apparently quite well.

CLINICAL MEMORANDA.

SUBCUTANEOUS INJECTION OF MORPHIA, WITH CASES.

Reported by JOHN W. MARTIN, M.D., Assistant-Surgeon to Mayfield Factory Dispensary.

(*Continued from page* 242.)

CASE 3.—*Pulmonary Phthisis.*—J. O., æt. twenty-eight, subject to repeated attacks of bronchitis, both lungs deeply engaged, exhibiting the physical sign of cavities, probably the result of bronchiectasis at the apex of left lung, and every gradation of crepitation, from the very

fine to the large coarse and moist in character. Judging from the train of symptoms that presented themselves, the case was one of phthisis, the result of repeated inflammatory attacks. His business engagements required that he should be absent from the works where he was engaged as short a time as possible. On the first occasion of trying the hypodermic injection of morphia, he had got fresh cold, with added thoracic symptoms, feverishness, inability to sleep, quickened pulse, headache, and general restlessness. At bed-time I administered hypodermically one-third of a grain of morphia. At the expiration of ten minutes the good effects became apparent; a sense of tranquillity replaced the previous feverish restlessness, and next morning I had the satisfaction of hearing that he had had a good night's rest; the symptoms of cold had so far left him as to allow of his following his usual occupation.

On the second occasion of administering the injection, it was more as a preventitive than a curative measure that I used it. After great exertion and excitement, in consequence of a fire occurring in the mill where he is engaged, and at which he was wet through and thoroughly fatigued, he had a great tendency to feverishness, and was very restless. On his going to bed, I again injected one-third of a grain of the morphine. It did not induce sleep, but produced great tranquillity and rest. Next day he was not nearly so much fatigued as he would have been, and felt no bad effects from all he had passed through. No doubt his escaping so well was in a great measure due to the excitement, but I think some influence for good may be fairly ascribed to the morphine.

Case 4.—*Pericarditis pleuritis, and emphysematous condition of the lungs.*—John Maher, æt. forty; had got no sleep for over five nights; coughing produced fearfully racking pains in the legs, loins, back, and shoulders; could not draw a deep breath as he felt a *catch* in the chest at various points, and severe pain at the ensiform cartilage; heart's impulse seen and felt at the epigastrium; abnormal resonance strangely marked over both lungs, respiratory sounds feebler than normal; normal position of præcordial dulness, yielded abnormal resonance on percussion, showing displacement of the heart's apex downwards, and to the right side. Crepitation and friction over and on a line with left mamma; feverish, hot and restless; pulse 132; tongue white and furred; bowels acting; anorexia; cardiac action excited, sounds exaggerated, and a friction sound, distinctly marked, heard over the ensiform cartilage. At nine o'clock, p.m., on visiting him, had a blister to the chest since three o'clock, and had taken one one-eighth grain dose of hyd. bichl. in solution. Felt some ease from the pain, but was very hot, feverish, and restless; and, if dozing, starting from his sleep every five minutes. I injected ¼ of a grain of morphine into the arm, at insertion of deltoid; he was asleep in ten minutes, rested quietly the whole night, felt some thirst, but no sinking or tendency to nausea. Next morning, on visiting him, was quite tranquil; pulse 116; sleepy; felt some return of appetite for food, a thing he has not felt for a week past; makes a deep inspiration without pain; no inclination to cough; cardiac and pleuritic symptoms diminished; altogether improved. The injection was repeated several nights, the good effects apparent being the rapid induction of sleep, diminution of tendency to cough, general state of ease and tranquillity. Under a mercurial and iodide of potash course of treatment, together with blistering, the man made a good recovery. Without detracting from the beneficial action of the last named medicines, much of the good results obtained must, I think, be ascribed to the powerful tranquillising effect of the morphine hypodermically administered. One curious and, I think, noteworthy fact, in connection with this case, was, that for six months previous to present illness, Maher had quite lost the sense of smell; but subsequent to his recovery this became most acute, almost morbidly so. To what was this due? Had the course of mercury or that of the iodide of potash the credit of producing such a change?

CASES IN COUNTRY PRACTICE.

REMOVAL OF A LARGE NASO-PHARYNGEAL POLYPUS WITH WIRE ECRASEUR.—TALIPES VARUS SUCCESSFULLY OPERATED ON.

By Thomas Hayes, M.D. Edin., M.R.C.S. Eng.
Medical Officer, Shanagolden Dispensary.

J. O'Sullivan, æt. fourteen, the son of a labourer, strong and healthy looking, consulted me in the month of May in the present year. "About 2½ years ago he found his left nostril stopped, he could not breathe through it," it bled occasionally and sometimes considerably; latterly he found a great deal of trouble in breathing, a choking sensation and frequent vomiting; gradually he began to feel drowsy, and for some time before he came to me whenever he rested during the day he dropped off into a *snoring slumber*. His father told me "he was always asleep or going to sleep," which I believe was not a very exaggerated statement, as I found whenever he came to consult me and waited any time before being attended, he usually dropped off into a deep and stertorous sleep, reminding me of the peculiarity which Dickens attributed to Pickwick's fat boy, and which, until then, I regarded as the most extravagant flight of fancy on the part of the great and gifted novelist. He spoke with a very nasal utterance, as one suffering from a severe attack of inflammation of the fauces; his appetite was small, but he had no difficulty in swallowing. He consulted three doctors before coming to me: one said there was nothing wrong with him; the second was unable to decide what was his complaint; and the third advised him to go to Dublin to get a "chance of his life," as nothing could be done for him at home. He was recommended to me as a *dernier ressort*, by a gentleman of the county who entertained very faint hopes of a successful result for the poor boy. After having heard the history of the case, and having made a slight examination, I came to the conclusion that I had a polypus to deal with, but on carefully looking into the nares no trace of a polypus could be detected; yet the left nasal passage was occluded as no air could be driven through by a forced expiration; but I succeeded in injecting water through the nose into the pharynx. The right nasal passage was partially obstructed; on looking into the mouth the soft palate was seen depressed and convex resting on the tongue. I raised up the palate and tilted up the uvula, and looked into the fauces which presented nothing abnormal: but I did not succeed in getting a glimpse of the overlying tumour, which seemed to have stretched the curtain of the palate; but did not appear beyond its arches. I examined with the finger, and found the tumour pressing on the palate, but my exploration was not sufficiently exhaustive to ascertain its nature; for as soon as my finger extended beyond the arches of the palate, the boy got such a fit of suffocation and vomiting, that I was forced to desist. With a view to try and ascertain the situation and extent of the obstruction, and with a hope—should it prove to be a soft polypus—of detaching it or drawing it into the nasal fossa, I passed an elastic catheter, armed with a strong ligature, through the nasal cavity into the pharynx. There was some difficulty in getting the catheter past the obstruction, but it ultimately glided down by the *left side* of the pharynx, which lead me to believe that the tumour was attached more towards the mesial line than in the vicinity of the turbinated bones or fossa, the usual *habitat* of polypi. I brought the ligature forward through the mouth, attached a small plug of lint, and guided it over the palate as in plugging the posterior nares, and then drew it forward through the anterior nares. No result followed; the polypus was neither displaced nor detached, but I found the throat less sensitive to digital examination.

I again tried to pass my finger *over* the arch of the

palate, and I succeeded this time in ascertaining the nature and size of the tumour. I found it round, smooth, and hard, filling up the space between the posterior nares and the back of the pharynx, resting, with the intervention of the palate, on the dorsum of the tongue, occasionally dipping into the opening of the glottis, and producing spasmodic choking fits, which the father stated, so terrified himself, that he was unable to sleep at night for some time before the operation was performed, lest his son should die in one of them.

I determined on removing the tumour with Maw's wire écraseur for nasal polypi. I ordered the instrument, and in the meantime the tumour grew so much, that when he came to me on the 4th of July to have the operation performed, the tumour had grown so large, that it was only necessary to raise the uvula to see a smooth, whitish, rounded body, almost completely blocking up the breathing channel between the nares and larynx. I tried to ascertain its point of attachment by passing my finger about it, but the only thing I could ascertain was, that I could put the loop of wire over it, and so secure its being securely ligatured.

The Operation.—I passed a catheter, armed with a ligature, with some difficulty, through the nose into the fauces : I drew one end of the ligature out of the mouth, I withdrew the catheter, and with the ligature pulled the wire looped through the nose, and brought it forward into the mouth : I attached both ends of the wire to their proper place in the écraseur, moving the instrument into the nose. I stood behind the patient, and pressed with my fingers the loop of wire over and in front of the tumour. I kept my fingers on the tumour to prevent the wire slipping off, while my friend, Dr. Madigan, who gave me valuable assistance, turned the handle of the écraseur to tighten the noose and strangulate the tumour. After a little the wire came away, but the tumour was not detached ; I then came to the conclusion that the tumour grew from above, and not from the floor of the nose, as one would suppose from the catheter passing outside and behind it ; at all events, I felt sure that the loop should pass over *behind* the tumour. I passed the armed catheter again, and this time with two ligatures, to leave one in for an emergency—a very wise precaution as it proved. I pulled the wire through as before, passed the loop behind the tumour, kept the tops of both index fingers steadily on it, to prevent the loop passing over it. When the écraseur was worked, it was very soon evident that something was caught in the loop, at which the wire had some tough work ; the boy screamed as it tightened, but on the whole bore it very well without chloroform. After a few more turns of the handle of the écraseur, to my great discomfiture, the wire yielded to the resistance offered by the tumour—a coil of three wires broken by the roughness of a nasal polypus ! Who would suppose such a thing ? But I must say that the wire did not seem to me to be good, and the tumour was very firm. I then tried the strongest wire of the three sent with the instrument. The supplementary thread left in the nose was now of service (a double one was inserted) ; the loop of wire was pulled through and adjusted round the neck of the tumour ; the écraseur was worked as before. I kept my fingers on the tumour, which I found was fairly encircled this time, but I now wished to guard against its dropping into the pharynx, and causing suffocation. After a little, the wire came through the foramen of the écraseur. The tumour did not drop down on my fingers immediately ; I feared a failure after all—but hold ! I find it loose, ready to fall down. I pressed the head forwards, and never removed my fingers from beneath it until it dropped out of the boy's mouth on the floor. I gave a sigh of relief—of joy. What a glorious success due to French ingenuity ! I could have elevated Chassaignac to the seventh heavens, so effectual, so decisive was the success obtained by his charming invention. There was no hæmorrhage, except a slight oozing after passing the catheter. The patient has felt quite well since the operation. The drowsy symptoms presented in this case were, in my opinion, due to imperfect arterialisation of the blood, and not to any pressure from the nose on the base of the brain. The tumour proved to be a fibrous polypus. It was removed with as clean a cut as if done with the knife.

TALIPES VARUS.

Two cases of congenital talipes varus came under my observation within the past two years ; in each case only *one* foot was deformed—the right foot in one and the left in the other. Mr. Erichsen in his excellent work "On Surgery," which, as a student, I read carefully, says—"It is the most common form of congenital deformity, *both feet being found similarly affected*." Not in all cases according to my experience. Both the children were a year and nine months old, and limping about, when I performed the operation. I divided subcutaneously, with the tenotome knife, the tendos-achilles and also the plantar fascids which were contracted. I did not find it necessary to divide the tendons of the tibiales antici and postici. There was very little bleeding. I applied a small piece of lint over the wound, and embraced the foot and ankle with adhesive plaster ; applied a splint lined with cotton wadding and extending beyond the foot, which I kept quite straight, leaving as little angle as possible in front of the ankle. A roller kept the toes and foot well everted, embracing the limb and splint as high as the knee. I kept the foot in this position for a fortnight, occasionally adjusting the splint and bandage, A *home-made* Little's shoe was then applied. The cases turned out quite successful. I recently saw one of them, operated on a year and a half since, and he walks about without the least noticeable deformity. The other is equally successful, so his parents tell me.

I have followed the practice of Professor Spence, or Professor Dunsmure—I forget which, as I studied under both at Edinburgh—in putting up the foot *straight or extended*. If I rightly understand Mr. Erichsen, he recommends *the toes to be* "well drawn up, and supported by pegs attached to the splint." I prefer the Edinburgh practice, as it seems to me a better means of keeping the foot everted, and of allowing the tendo-achilles to unite, and when the child begins to walk, the pressure will turn up the toes, and give the foot its proper angle at the ankle.

THE INTRODUCTORY LECTURE

AT THE

MATER MISERICORDIÆ HOSPITAL,

WAS DELIVERED

ON THURSDAY, NOVEMBER 3RD, BY MR. HAYES,
One of the Surgeons.

MR. HAYES began his address by welcoming his audience, which included not only a large class of students, but also many friends and supporters of the institution. He next proceeded to advise and encourage those present who were about to commence to continue and, he hoped, largely prosecute the study and advancement of knowledge, which would enable them to alleviate human suffering, combat disease, and even prevent its development. He alluded to the various reasons which induce men to enter the ranks of Medicine, and stated that, happily, in his experience, the medical student, *of reality*, was far different from the character which fiction and misrepresentation had painted under that name.

The lecturer next described the surroundings necessary for the student of medicine, and dwelt upon the relationship which should exist between teacher and pupil, also how the latter ought to have the opportunity of studying under the master of his choice ; and, while condemning the system which favours an unnecessary number of teachers, and causes divided responsibility, yet he advo-

cated the demand for a full and efficient medical and surgical staff in *every* hospital open for clinical instruction. He added, that "one man, however able as a practitioner, cannot afford instruction of equal value in every branch of either medicine or surgery; and, again, the method of one master, which will answer admirably with some students, may serve only to confuse, mislead, or repel others." He then pointed out the great opportunities and advantages for professional study which exist at the Mater Misericordiæ Hospital, and how the students there, become even involuntary, impressed with, and are induced to copy, the respect and solicitude ever displayed towards the sick and injured. In speaking of the new portion of the building, where wards have been set apart for the reception of patients suffering from contagious diseases, Mr. Hayes drew attention to the fact that, heretofore, many poor patients were slow to enter some of the hospitals in the City because they feared the absence of kind, attentive friends, usually to be found at even the humblest bedside. No such objection could now be raised, as the good Sisters of Mercy, who labour for no earthly reward, count not time, trouble, or expense, when by such means they can "assuage pain, restore health, or smooth the path, lonely and awful, which leads to the world beyond the grave."

Mr. Hayes concluded his address in the following terms, —"Gentlemen, I thank you for your courteous attention; I am conscious that my observations have fallen as far short of the requirements of this occasion as of my own wishes. Throughout, my object has been to impress upon you how essential are the means towards the end in medical study. A youth may become a classical scholar in a hedge school, and possibly surpass at examination a university graduate; so a medical student, whose surroundings were deficient, or who neglected proper opportunities, *may*, perhaps, obtain a diploma, but he should never dare tamper with human life; yet, could we read the secrets of hearts I fear we might find that, even in medicine, instances are not wanting to illustrate how often 'fools rush in, where wise men fear to tread.'"

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the MEDICAL PRESS.)

No. XII.

PRECIPITATION OF SEWAGE WITH CAUSTIC LIME.

As far back as the beginning of the year 1802, M. Lewis James Armand Estienne obtained a patent for the use of lime as a means of disinfecting and consolidating human excrement; but it was not until the year 1844 that caustic lime was employed for the precipitation of sewage. In that year Dr. Clark, of Aberdeen, and Mr. John Graham, of Manchester, resorted to it for the purpose of purifying the refuse water from the Mayfield Print Works at Manchester, and the results were so satisfactory that the process was immediately adopted on a large scale. It was also used at that time for the purification of the River Medlock, which receives the sewage and trade refuse of Manchester, but although successful, the cost of the process was considered to be a hindrance to its adoption, for Dr. Clark was of opinion that it would require about a ton of lime daily to defæcate the whole of the water of the river. In the autumn of 1854, when the state of the river was so bad as to create alarm for the public safety, the process was again recommended by Dr. Crace Calvert, of Manchester, who found, from experiments made at the request of the Sanitary Association, that the black and fœtid water of the river could be completely purified, by adding to it from two to three grains of hydrate of lime per gallon of water, and allowing it to settle. Taking the average of five successive days' experiments, the following were the results :—

Constituents per gallon.	Original Water.	Effluent Water.
	Grains.	Grains.
Dissolved matters . . .	32·00	25·76
Organic matter . . .	8·54	3·50
Mineral ditto . . .	23·46	22·26
Oxygen required for oxydation	—	—
Matters in suspension . . .	6·65	0·00
Organic matter . . .	3·57	0·00
Mineral ditto . . .	3·08	0·00

From which it is evident that the lime precipitated not only the suspended matters, but also a large proportion of the dissolved organic matter, leaving only about three and a-half grains of this impurity in a gallon of the water. The precipitate was found to subside very rapidly, the supernatant water being perfectly clear, colourless, and inoffensive.

This method of treatment resulted from the patent obtained by Dr. Clark in 1841, for softening and purifying water for domestic purposes by means of caustic lime, it having been found that the flocculent precipitate thus produced removed from the water a notable quantity of dissolved organic matter, it being a property of such precipitates to aggregate and carry down not merely the suspended matters of foul water, but also a considerable amount of the dissolved impurities. This fact was more fully developed in the year 1846, when Mr. William Higgs obtained a patent for the treatment of sewage in subsiding tanks or reservoirs, by means of "chemical agents for the purpose of precipitating the solid animal and vegetable matters contained therein, hydrate of lime, commonly termed slack lime, being preferred;" and five years later a like patent was obtained by Mr. Thomas Wicksteed, who proposed to manufacture manure from sewage or other liquids containing fertilising matters, by mixing them with milk of lime, collecting the deposit, and submitting it to certain centrifugal drying machinery, "whereby the whole or nearly the whole of the moisture is driven off, and the manure or fertilising matter is obtained in a state commodious for transport." Both of these patents were put into operation on a large scale by the patentees, with considerable sanitary success, although the commercial results were not encouraging. At Tottenham, for example, where Mr. Higgs's process was tried, and at Leicester, where Mr. Wicksteed's was adopted, the whole of the sewage of the two places was submitted to treatment with lime, and the results were most satisfactory, as regards the purification of the sewage, and the marked improvement of the neighbouring streams into which the purified sewage was discharged. In fact, the Tottenham Local Board of Health were so pleased with the process, that in the early part of 1857 they published a testimonial to the effect that Mr. Higgs was treating in a most satisfactory manner the sewage of from thirty to forty miles of sewers, and dis-

charging the supernatant water in a comparatively pure state into the River Lea, so that the Board was thus enabled satisfactorily to sewer and drain their populous district, and dispose of the sewage without annoyance to anyone. At Leicester also, in 1858, three years after Mr. Wicksteed's works had been established, the River Soar had become changed from a most foul and pestilential stream into a comparatively pure river, for before the sewage was purified by Mr. Wicksteed's process the water of the river was black with decomposition, all the fish and aquatic plants had been killed, and persons exposed to its influence were constantly ill. At the Belgrave Mill, which is just below the point where the sewage enters the river, the foulness of the stream was such that in summer time the water of the mill-dam appeared to boil with putrefaction, and the stench was intolerable. So large, indeed, was the quantity of sulphuretted hydrogen evolved from the water that the silver in the men's pockets turned black in a few hours, and, as might be expected, those who worked at the mill were constantly affected with diarrhœa, and rapidly fell off in health; one man only, out of thirty, in eighteen years had been able to withstand the effects of the effluvium, and he it was who gave us an account of the matter. But soon after the lime process had been adopted the river presented an entirely different appearance, for aquatic plants had begun to flourish, the fish had returned, the black mud had ceased to accumulate, and the mill-dam was no longer offensive. All along the stream the people spoke of the change with satisfaction, for the process had evidently fulfilled the requirements of the Local Act of Parliament, which demands that the sewage water discharged into the river from the works shall not occasion a nuisance or be injurious to the health of those who live or are employed upon the banks of the stream.

At Tottenham, at the time of our visit in 1858, the sewage was dealt with in a comparatively fresh state, so that when it arrived at Mr. Higgs's works it was neither decomposed nor disintegrated. The average quantity of sewage amounted to about 175,000 gallons a day, and this was furnished by about 10,000 persons. On reaching the works it was first strained and then treated with twelve grains of lime, in a creamy condition, to every gallon of sewage, the amount of lime used per week being just one ton to 1,225,000 gallons of sewage, and the product of dry manure or precipitate thus obtained was from four to five times the weight of the lime used.

At Leicester the quality of the sewage was exactly similar to that of most large towns, except that it was often tinted with dye-stuffs, the solid matters being much disintegrated and far advanced in putrefactive decomposition. The population of Leicester, in 1858, was about 65,000, and the amount of sewage about 2,000,000 of gallons a day. The greater part of this was conducted to the works, and treated with lime—the proportions being from three to sixteen grains per gallon of sewage. In the summer, when in full work, the last named quantity was used; but in winter, when the process of putrefaction is checked by cold, the former proportion was employed; and the amount of dry, solid precipitate obtained was from three to four times the weight of the lime used. In fact, when twelve grains of lime were employed, as at the time of our visits to Leicester and Tottenham in 1858, the following were the amounts of organic and mineral matters precipitated from each gallon of sewage :—

Constituents per Gallon.	Leicester.		Tottenham.	
	Raw Sewage.	Effluent Water.	Raw Sewage.	Effluent Water.
	Grs.	Grs.	Grs.	Grs.
Dissolved Matters.	70·00	66·99	54·50	48·99
Organic ...	13·49	10·65	9·49	8·01
Mineral ...	56·51	56·34	45·01	40·98
Ammonia ...	2·52	2·61	2·60	2·84
Suspended Matters.	19·15	1·40	39·99	1·69
Organic ...	5.56	0·49	14.53	0.37
Mineral ...	13·65	0·91	25·46	1·32

So that in the case of Leicester sewage the precipitate obtained from a gallon of sewage, with twelve grains of lime, amounted to nearly forty-two grains, of which about eight grains were organic matter; and in that of the Tottenham sewage it amounted to nearly sixty-five grains per gallon, of which about sixteen grains were organic. These results accord very closely with experiments made at that time in the laboratory with ordinary London sewage, and from which it was ascertained that with twelve grains of lime per gallon of sewage, from the several City sewers, the average amount of precipitate obtained was about 54·5 grains, of which 21·1 were organic. This consisted of all the suspended matters of the sewage, amounting to 38·2 grains, and about one-fourth of the dissolved organic matter, together with the lime which was converted into carbonate and phosphate. The particulars of these experiments are shown in the following table :—

Proportions of Organic and Mineral matters precipitated from a gallon of London Sewage with 12 Grains of Lime.

Sewage from	Original Sewage.				Precipitated with 12 grains of lime.		Soluble organic matter removed.	Do. do. still in solution.
	Dissolved.		Suspended.					
	Organic.	Mineral.	Organic.	Mineral.	Organic.	Mineral.		
	Grains.	Grains.	Grains.	Grains.	Grains.	Grains.	Grains.	Grains.
The Fleet Sewer ...	11·60	30·00	14·40	12·60	17·34	29·71	2·94	8·66
London Bridge do. ...	20·96	37·09	7·04	15·40	12·46	27·69	5·42	15·54
Dowgate Dock do. ...	27·31	38·36	16·64	13·26	23·94	26·52	7·30	20·01
Irongate do. ...	11·20	65·01	15·80	16·32	18·81	29·07	3·01	8·19
Paul's Wharf do. ...	21·79	51·35	17·21	32·21	23·18	44·69	5·97	15·82
Whitefriars Dock do. ...	3·53	23·02	9·59	4·89	10·45	16·97	0·86	2·67
Custom House West do.	9·22	64·30	36·28	42·21	39·02	50·01	2·74	6·48
Custom House East do.	20·19	37·82	12·13	14·82	17·55	24·97	5·24	14·95
Hambro' Wharf do. ...	14·24	32·79	4·26	12·75	7·99	25·03	3·73	10·51
Wool Quay do. ...	10·76	23·84	35·04	46·41	37·85	59·32	2·81	7·95
Average of all	15·08	40·66	17·06	21·09	20·86	33·39	4·20	11·08
	55·74		38·15		54·45			

The flocculent precipitate which is thus formed settles at the rate of from one to two inches per minute, and in the course of an hour it subsides to about the fortieth part of the bulk of the original fluid, leaving a clear supernatant liquor, which is comparatively inoffensive, and which may be admitted into a running stream of good water without causing offence. In a sanitary point of view the careful precipitation of sewage with lime has undoubtedly been very successful, although it has not been found profitable commercially; for the precipate is chiefly composed of carbonate of lime and non-nitrogenous organic matter.

Hospital Reports.

THE SURGICAL HOME.

In a recent visit, one of our reporters was shown several interesting cases. Two patients had been operated on for fibrous tumour of the uterus, by the method, we believe, devised by Mr. Brown—*i.e.*, by incision of the os au cervix uteri by a hysterotome. In both cases the patients mentioned that they had lost very little blood by the operation; that the symptoms of uterine colic had quite disappeared, and that they were quite restored from the feelings of weight and uneasiness in the pelvic regions. He saw in the wards a young lady of the age of twenty-five, who, according to the statement of her friends, since the age of four had masturbated until two years ago. She had been subject to epileptic fits during the whole of this period, and had lost all her teeth during the paroxysms caused by epilepsy. She had been entirely imbecile, and had not been able to learn reading, writing, or counting. The habit was constant every evening on going to bed. Her friends, hearing of Mr. Brown's views, brought her to that gentleman, who removed the nymphæ and clitoris about eighteen months ago. Now the young lady is able to go about anywhere by herself, is quite cheerful, has learnt the multiplication table, and told us that 8 x 8 are 64. Has also learnt reading and writing during the past year. This case induced our reporter to ask for full particulars, which have been supplied as follows :—

"Epilepsy.—Miss —, æt. twenty. During the primary dentition, suffered from violent convulsions; after this she was well for a few years, when she began to suffer from epileptic fits. These, at first occasional, became gradually more frequent, and, on the establishment of the menstrual function, they became more frequent at these periods—often four or five fits in one day.

"Menstruation quite normal. In the fits she usually bit the tongue, until the front teeth were extracted. For the last ten years she has been almost continually under some treatment—allopathic, hydropathic, or homœopathic—but without the slightest benefit from either method, the severest and the mildest measures having been adopted. She was taken away from school, was placed under the constant care of an attendant, was not allowed to go to church, or even to walk out without holding the hand of her attendant. Her mind became enfeebled, so that she was unable to apply herself to reading, work, or amusement, and her expression was rapidly assuming an imbecile or idiotic cast. When spoken to, she would stare vacantly at you, or reply with hesitation, and was unable to sustain a conversation. Her complexion was pale, pasty; digestive system, however, in tolerable condition.

"*Examination.* — Long, flabby labia and clitoris—no hymen—evidence and confession of long peripheral irritation.

"*April 30th.*—Mr. Brown removed labia and clitoris, and divided a fissure of rectum in the usual way, and her hands were confined.

"*May 6th.* — Progressing favourably. Pot. bromide twenty grains, three times a day.

"*June 22nd.*—Nothing worthy of note until to-day, when menstruation appeared for the first time since operation. Patient considerably improved; hands still confined when in bed. She got about in the fourth week. Continue bromide.

"*July 28th.*—The last menstrual period was normal; again menstruating; continue bromide; progressive improvement.

"*October 30th.*—In this case, there has not been anything requiring frequent notes, and her progress may thus be summed up. For some two months she retained a good deal of childish or imbecile appearance, and the hesitation in conversation so characteristic. She became gradually weaned from the subject of irritation about the external genitals. At first cautiously, and then as a rule, she went out to walk and to church on Sundays, and finally took to reading, with profit, and learning new modes of fancy work, tatting, &c., gaining, at the same time, all the freshness of complexion and physical vigour of renewed health with the cheerfulness and vivacity of youth. She has lost all traces of her disease, and is in perfect health. The restraining of the hands has been continued, for after her mental restoration its object was explained, and she would not discontinue the use of the bandages. She goes home to-morrow, October 31st."

NORTH-LONDON CONSUMPTION HOSPITAL.

In a recent visit to this institution at Hampstead, we were pleased to see the really admirable position of the hospital as a hygienic establishment for the cure of consumption and other chronic diseases. This hospital was formerly a private house belonging to the celebrated artist, Stanfield, and is situated at Greenhill, Hampstead, about ten minutes' walk from the top of the hill. The wards are cheery and comfortable, with one exception, viz., of the male dormitory, which is in what formerly we presume was the studio, situated in a building of one story, in a wing of the house. The number of beds in the hospital is about thirty-six, but there are rarely more than thirty patients in the hospital. We strongly recommend the Committee, in case they decide on extending the number of beds, not to build a larger hospital, but rather to purchase a similar house in Hampstead, and thus avoid the mistake of large pestilential congregations of the sick and dying. We regretted to see that there is an out-patient department connected with the Hospital at Hampstead, as well as in Tottenham-court road. This seems to us a perfect waste of good money; what is wanted being beds for poor consumptives, not out-of-door medicines which they could get at any hospital or dispensary just as well. In the wards we remarked, under the care of Dr. C. R. Drysdale, two cases of alcoholic phthisis, in males aged thirty-one and thirty-three years, respectively. Dr D. thoroughly admits the doctrines of Dr. Andrew Clark and others, who maintain that there are several kinds of destruction of the lung comprehended under the name phthisis, which ought to be carefully kept n view. In tuberculosis in early life, or before the age of twenty-four, the majority of the cases are hereditary in his opinion, but after thirty a large number of cases of breaking down of the lung substance in males is traceable to alcoholic poisoning, and in females to bronchitis. Syphilis is the cause, occasionally, of cavities.

Transactions of Societies.

MEDICAL SOCIETY OF LONDON.

General Meeting, Nov. 7, 1870.

John Gay, Esq., F.R.C.S., President, in the Chair.

Mr. John Daniell Hill exhibited a patient on whom he had performed primary excision of the knee. The young woman was on her way to the Royal Free Hospital to be

treated for fractured ribs, when she was thrown out of the cab and the knee-joint torn open to the extent of four inches. Mr. Hill sawed off the articular surfaces and removed the patella, there was protracted collapse after the operation, but at the end of from four to five months a sound union was effected.

Mr. Henry Smith said this case was highly important as showing that, though the rule in these cases was to amputate, yet excision might be successfully performed.

The President said that he thought mental depression had much to do with the want of success in primary excision of the joints. In military practice excision did much better than in civil.

Mr. Barnes asked Mr. Hill whether he would adopt excision in all cases of injury causing the opening of a joint.

Mr. Hill said yes, when the synovial membrane was torn as it was in this case. Mr. Hill then showed a patient, aged twenty-three, who had had an aneurism by anastomosis, 1¼ inches across, follow on a blow over the right temporal region. Mr. Hill tied the occipital temporal and posterior auricular arteries and acupressed some of the other vessels, eventually he had to ligature the mass and its sloughing out was followed by free hæmorrhage ; a complete cure had taken place.

Mr. Spencer Watson had seen this case before operation, and congratulated Mr. Hill in having so ably overcome the difficulties presented.

Mr. Henry Smith wished to contradict a report he had heard to the effect that he had given up the practice of puncture for swelled testicle. Far from this being the case the operation was now in greater favour than ever with him, and he believed he could record about 500 cases in which he had thus operated during the last five years, the immediate relief that resulted from the operation seemed due to relief of the tunica albugenia from tension.

Mr. Barnes said he had had a case under his care where the operation of puncture done sometime previously, seemed to have led to much pain and irritation on account of which the patient applied to Mr. Barnes.

Mr. Royes Bell had seen a jet of serum spirt out, on puncturing an inflamed testis, immediate relief followed. Mr. Bell thought very highly of the operation.

Mr. Bonney inquired as to the length of the incision required.

Mr. Adams asked Mr. Smith if he had tried subcutaneous division of the tunica albugenia, operating thus no blood would be lost, and it would be proved whether it was the loss of blood or the division of the tense structures that gave relief.

Mr. Smith said that at present a mere puncture was enough, but he would remember the suggestion of Mr. Adams.

Dr. Sansom then read the paper of the evening

ON THE CORRELATION OF PUTREFACTION, FERMENTATION AND MORBID INFECTION.

The paper embodied the following propositions : 1. Putrefaction and fermentation are each due to the influence of living, growing, and multiplying material particles. *A.* Fermentation is the result of the vital acts of particles of vegetable protoplasm in an organic fluid of uniform composition, the particles assuming distinct morphological forms according to the nature of the fluid. *B.* Putrefaction is due to like influences exerted upon organic matter of a more complex or mixed kind. 2. The atmosphere contains minute spores, ova, and particles of protoplasm, which it wafts from place to place. These are, for the most part, perfectly harmless. 3. The diseases of infection are due to minute particles of living protoplasm which are transmitted by physical intermedia are capable of reproduction within the recipient organism and are excreted in vastly increased numbers. 4. The infecting molecules differ in their potentiality pathologically as other living molecules differ in their potentiality physiologically, so special poisons induce special diseases. 5. Such molecules present complex reactions of living beings, and though they resist certain physical influences, they are destructible by others. Thus, though they may be desiccated and yet in the presence of moisture assume vitality ; yet slight chemical or physical disturbance may destroy them. 6. Fermentation and infection are alike due to living molecules, but though it is possible that in some cases (cholera, typhoid), the molecules of fermentation in complex conditions can induce infection, it is far from proved that all the diseases of infection are due to the organisms of fermentation.

Dr. Richardson thought Dr. Sansom had made as able a defence of his point as could be expected, he alluded to the different effects of oxygen gas on matters according to its different state. Liebig has shown that oxygen is not essential to decomposition, save as it results from the decomposing compound. Experiments made years ago by Dr. Barker, of Bedford, confirmed those of Dr. Parkes quoted by Dr. Sansom, that sewer emanations inhaled do not appear to cause any specific disease. Fifteen years ago Dr. Richardson had shown before the Epidemiological Society that colloidal organic poisons were soluble only under certain conditions. The advocates of the germ theory had been reducing the so-called germ further and further as the capabilities of their microscopes improved, and what they would eventually come to regard as a germ none could tell.

CLINICAL SOCIETY OF LONDON.

Session 1870.

1st Meeting Oct. 14th.

Mr. Paget, President, in the Chair.

There was no Introductory Address at the opening of this the fourth session of the Society on the 14th Oct.

Mr. Spencer Watson read the "Reports of Four Cases of Parenchymatous Keratitis, associated with Acute Rheumatism." The patients were young adults, all under nineteen years of age. Both corneæ were affected, and the symptoms and appearances were not distinguishable from those of parenchymatous keratitis due to inherited syphilis. Out of a series of cases, extending over the last ten years, Mr. Watson had only observed acute rheumatism in association with parenchymatous keratitis in these four ; but he suggested that in some others of the series this complication may have itself cut short the observations, by preventing the attendance of the patients at the Ophthalmic Hospital. From these cases it was conjectured that the interstitial keratitis of inherited syphilis may be allied to rheumatic inflammation, and may possibly yield to treatment such as is beneficial in the latter disease. Two of the patients, whose cases were related, were exhibited to the Society. In one the attack of keratitis had occurred eight years ago. It was found in this case that the young woman had become myopic since, and most probably in consequence of the attack.

Dr. John Harley read a paper on "Injury to the Liver resulting in Abscess ; rupture on the 14th day, diffuse peritonitis ; formation of a second abscess opening into the colon on the 25th day ; interrupted discharge of pus by the large intestine until the 112th day ; and complete recovery." The patient, aged sixty-nine, was, by the fall of his horse, thrown forwards upon the brass turrets of his horse's pad, thus bruising the epigastric region. An inflammatory tumour, exquisitely painful, formed just above and to the *right* of the umbilicus. On moving in bed this suddenly disappeared, followed by collapse, and subsequently general peritonitis. In a few days the peritonitis became circumscribed, and the pain and swelling limited to the *left* side of the umbilical region, where there was evidence of the formation of a second abscess. This also suddenly disappeared, with dangerous collapse and the evacuation of pus by the rectum. Marked colic symptoms, showing lesion of the bowel, preceded this second rupture. From time to time there was retention of the purulent discharge and hectic, but ultimately a free passage was maintained, the appetite returned, and the patient made so complete a recovery that, at the end of seven months from the time of the accident, he was able to ride and follow his professional work, and he has since (for the last eighteen months) enjoyed perfect health. The author considered that the left lobe of the liver was bruised or lacerated by the accident; that an abscess formed which pointed partly towards the right hypochondrium and partly within the small omental sac behind the stomach ; that rupture occurred in the latter situation, the pus escaping into the small omental sac, and then, finding its way through the upper layer of the transverse meso-colon, passed further downwards

between its layers, forming a second abscess by the side of the descending colon. This, in its turn, caused inflammation and rupture of the contiguous wall of the large intestine, and thus the pus was liberated and carried out of the body. Hectic and jaundice attended the retention of the discharge.

Dr. Ogle read a case of Tetanus. The patient, a healthy boy, got a bruise on the thumb. Three days afterwards he complained of stiff-neck, and vomited, and shortly afterwards became affected by opisthotonos. On the fifth day after the injury he was admitted into St. George's Hospital in a state of tetanus. He was put fully under the influence of belladonna; ice was constantly kept applied to the spine, and chloral was given at night to induce sleep. It was noticed that at no time did the sardonic smile exist, and there was never any trismus or (except on one day) difficulty in swallowing liquid food, such as wine, brandy, beef tea, and beaten-up eggs. In this case the temperature and pulse were registered twice a day; and it was noticeable that almost throughout the patient's stay in the hospital the temperature was higher in the evening than in the morning, on one day reaching 102·3 deg. About the fourteenth day after the injury the tetanic symptoms began to abate, and by degrees the belladonna and the chloral were discontinued, and also the application of ice to the spine. After about a month from the accident the patient left the hospital quite well, and has so continued ever since. Dr. Ogle suggested that possibly the examination of numbers of cases of tetanus might show that the temperature always increased in the evening, and that this fact might have value in diagnosing true tetanus from certain cases of affections of the spinal cord and its membranes, certain cases of hysteria, and strychnia and other poisoning. Dr. Ogle believed that the highest temperature arrived at in tetanus was recorded by Wunderlich, who described it as being 108 deg., shortly before death; 112·55 deg., at death; and 113·56 deg., after death. He also alluded to a case of tetanus in which, after the attack, the patient was subject to great irregularity of the heart's action, with much discomfort and palpitation on exertion, as if the mechanism of the organ had been injured in some violent muscular effort.

Mr. Croft divided tetanus into two classes: one in which patients died, and the other in which they recovered. He professed scepticism as to the use of belladonna, but remarked, had treated cases with the hydrate of chloral with apparently good effect.

Dr. Harley required evidence as to the irregularity of the heart's action in the case related by the author; and attributed the favourable results of the belladonna treatment to the toxic effects of that drug.

Mr. Chunder Roy continued the discussion by saying that, according to experiences gleaned at Calcutta, he had come to the conclusion that in cases of tetanus death always occurred if the muscles of deglutition were affected; but in the absence of this symptom, the prognosis might be favourable; that, in consequence, symptoms only were treated; that Indian hemp and opium smoking were most commonly used (the latter not, in these cases, producing constipation), and that the general result proved the opium treatment to be the best.

Dr. Barclay quoted Dr. Fuller as to the advantage of belladonna in the treatment of cases of chorea, and said that with children it might be given advantageously in very large doses.

The Chairman recapitulated his experience as to cases of tetanus, the gist of which was that all drugs hitherto exhibited produced little or no appreciable effect. Of the cases which resulted in recovery, one was that of a boy in which nothing was done, another in which oxygen gas was employed continuously, and two others in which chloroform and other drugs were used. He also made some remarks as to treatment by Calabar bean, which were challenged by Dr. Anstie.

Further observations were made by Dr. Broadbent and Mr. Croft; and Dr. Ogle closed the discussion by explaining his own ideas as to the physiological action of belladonna in cases of the kind under discussion.

Second Meeting, Oct. 25th.

Dr. Sutton read particulars of two cases of Acute Scurvy, which were fatal, the one in twenty-eight, the other in fourteen days, and which had both originated in this country. Both patients were females, and in each instance vaginal hæmorrhage ushered in the disease. One, aged twenty, had tramped from the North, and been much exposed to cold and fatigue. Three weeks before admission into the London Hospital she had suffered from pain in the back and febrile symptoms, which were followed by a condition of the throat, which suggested diphtheria, except that the grey-looking membrane in the tonsils when peeled off was not renewed. The gums then became swollen, bleeding and sloughing, the bowels much relaxed, and death took place by collapse. At the autopsy sanguineous extravasations were found in the pleura, pericardium, kidney, stomach, and intestines, beneath the pia mater, and in the mucous membrane of the cheek. The second case was thirty-two years of age, and had lived at Bromley. Her illness had commenced fourteen days before admission with pain in the abdomen, and loss of appetite, headache, nausea, and thirst, followed by swelling of face and sanguineous spots in the skin over the chest and extremities. At the autopsy the gums were found sloughing; there were extravasations of blood in various parts of the body, and very characteristic scorbutic ulcers of the large intestine. Unfortunately it had been impossible to ascertain the diet upon which the patients had been living.

Mr. Harry Leach asked particulars as to the plan of treatment pursued in both cases. In a somewhat extended experience of scurvy on board the *Dreadnought* Hospital-ship he had failed to discover albumen in the urine, and would, therefore, suggest whether the first case cited (having regard to the fact that albumen was present, and that the kidneys were abnormally large) could be fairly classed as one of scurvy, pure and simple. It was a matter of regret that Dr. Sutton had been unable to collect any precise particulars as to the history of these cases, scurvy being mainly, if not wholly, dependent on the kind of diet taken.

Mr. Brudenell Carter thought scurvy in some cases was due not so much to the diet taken as to a certain want of power of assimilation of food on the part of the patient.

Dr. Buzzard observed that chronic scurvy, not very severe in character, was not uncommon in England at the present day; but in order to account for the rapidly fatal termination in these cases, he thought the intercurrence of some other disease, derived from a morbid poison, must be assumed, and the high temperature which had been noted tended to confirm this supposition.

Dr. Broadbent mentioned two cases that had come under his notice, similar in some respects to those of Dr. Sutton, one of which died in three weeks, and the other recovered. He particularly emphasised cold, wet, and exposure as chief exciting causes of scurvy.

Dr. Wiltshire remarked that in females the scorbutic state caused hæmorrhage into the pelvis, which was usually sub-peritoneal.

Dr. Greenhow gave particulars of some severe cases landed at Leith, from Greenland, some years ago, and two cases that had occurred in his own practice, both plainly due to abstinence from vegetable diet. He failed to recognise in Dr. Sutton's cases the marked symptoms commonly spoken of as indicative of scurvy.

Mr. Cooper Forster had seen, when attending the practice of the *Dreadnought* Hospital-ship, a great many very severe cases of scurvy. He also thought that two or three leading symptoms were, in the cases read, conspicuous by their absence; and asked the author if, in his patients, any contraction of the muscles about the popliteal space, or pain and tenderness about the knee and calf, existed.

Mr. Harry Leach remarked that these, though very usual, were not, strictly speaking, universal symptoms among patients admitted into the Seamen's Hospital with scurvy.

The President said that the observations of Mr. Forster, Dr. Greenhow, and Mr. Leach were worthy of special consideration; and having been informed just now by Dr. Buzzard that the production of scurvy in most cases involved abstinence from vegetable diet for some two or three months, he informed the Society that, some time ago, the entire omission of vegetable diet produced blotches on his own skin, of a markedly scorbutic character, in fourteen days. In noticing the remarkably anti-scorbutic properties of milk, he cited the case of a medical practitioner who lived exclusively on milk and arrowroot, and showed no symp-

toms of scurvy until after the lapse of ten or twelve years, convalescing rapidly after change of diet.

Dr. SUTTON, in replying, said that the albumen and the vaginal discharge were probably connected; that, with reference to previous history, the patients had merely remarked that they were badly off for food; that he had not observed any contraction or pain about the lower limbs, and that though unable to say positively as to whether or not these were genuine cases of scurvy, he had rested his diagnosis chiefly on the pathological conditions exhibited, more particularly with reference to the intestines.

Mr. BRUDENELL CARTER described three cases of Optic Neuritis. In the first case the patient was a young woman, apparently in good health, and the right eye only was affected. Its vision was reduced to qualitative perception of light; and an active mercurial treatment was employed, under the suspicion, which could not be substantiated, that the disease was syphilitic. Speedy recovery took place, and normal central vision was restored; but in one direction there was remaining effusion, and a corresponding blind spot in the field, at the date of the paper. The second case was that of a woman, thirty years of age, who became blind in a few days when in the eighth month of her eighth pregnancy. After delivery her sight began to return; and three weeks after, when she came to the hospital, she could read No. 20 of Jaeger with the left, and No. 16 with the right. At that time there was well-marked optic neuritis in both, with scattered patches of effusion in the choroid. Iron and iodide of potassium were given, and the right eye slowly improved, so that it can now read No. 2, the left remaining almost stationary. Both in the optic discs and in the choroid extensive atrophic changes had taken place. The subject of the third case was a boy eight years old, who fell from the roof of a shed to the ground. Shortly afterwards his left eye began to protrude, and became perfectly blind, while he suffered from severe pain in the head and from sleeplessness. The ophthalmoscope discovered optic neuritis. Treated by iodide of potassium and iron, with chloral hydrate at night, the pain disappeared, and the eye returned to its natural position in the orbit; but the neuritis passed into total atrophy, and not even perception of light returned, the other eye remaining unaffected. In a few observations upon these cases, the author referred to the fact, first noticed by Dr. Hughlings Jackson, that a considerable degree of optic neuritis may be present in certain cerebral affections without impairment of vision. The cases related seemed to show that, besides a traumatic neuritis and a well-known form produced by intra-cranial tumours, there was probably some constitutional state or diathesis with which optic neuritis is associated, as iritis is associated with rheumatism and syphilis. The discovery of such an association, if it exists, would be greatly promoted by the study of those slighter cases that may be found if looked for, but that do not come to ophthalmic surgeons because they do not, in the first instance, affect vision. The author urged physicians generally to lend their aid in investigating the causes of the affection, in order that its serious form might be successfully treated.

Dr. HUGHLINGS JACKSON, as a physician, was glad that an ophthalmic surgeon had drawn attention to the important clinical fact that extremely abnormal ophthalmoscopical appearances may exist when the patient can read the smallest type—viz., brilliant type—and when he considers his sight to be quite good. It is most desirable that ophthalmoscopical examinations should be made in cases of disease of the nervous system, whether the patient complains of defect of sight or not. At all events, the ophthalmoscope should be used when there is severe pain in the head, perhaps urgent vomiting as well, and certainly if there be also epileptiform seizures. The cases Mr. Carter had related were of great interest, especially those of unilocular neuritis. In physician's practice optic neuritis is almost invariably double. Dr. Jackson thought it a significant fact that double optic neuritis may occur from disease of but one cerebral hemisphere. With regard to Mr. Carter's remarks on the necessity of investigating the various pathological conditions of the optic nerves in cerebral diseases, Dr. Jackson suggested that a most fruitful field of work would be found in the observation of cases of double optic neuritis, complicated with certain epileptiform seizures, beginning unilaterally. In these cases we can roughly localise the disease causing the two symptoms, and in most of these there is evidence of syphilis.

Mr. CALLENDER could not pass without noticing the remark made by Dr. Jackson to the effect that it might be observed that injury to one hemisphere produced effects in both eyes, just as injury to one hemisphere abolished the faculty of speech. It reminded him of the difficulty which stood in the way of accepting such statements by reason of our want of knowledge of the relations which exist between various parts of the great nerve centres. With reference to the question of affections of the organs of sight, we should begin by clearly ascertaining the anatomical relations of the optic lobes in the formation of the fœtal brain. His observations on its growth showed that at the twelfth week the optic masses grew out from the upper sides of the middle cerebral vesicles, just as the olfactory lobes grow out from the lower sides of the anterior vesicle; that they had no connexion with the optic thalami, nor yet with the masses of fibres which unfold through the corpus striatum of either side to form the mantles or hemispheres. Thus it would be difficult, from an anatomical point of view, to associate affections of the organs of vision with disturbance of any of these structures. If injury or disease of nerve structure was to be connected with the occurrence of optic neuritis, it should rather be looked for in the tissues of the upper part of the corpora quadrigemina, or in that curious reduplication of the hinder wall of the posterior cerebral vesicle which is known as the cerebellum.

Dr. LIEBREICH closed the evening by exhibiting a fixed Ophthalmoscope, similar to that invented by this physician some sixteen years ago, but with recent mechanical modifications, and illustrated its working. He prefaced the illustration by saying, "Vous verrez dans ce cas tous ces details du fond de l'œil normal dont l'observation toujours répétée offre encore de l'interêt, même pour ceux qui ont déjà une grande habitude de poser le diagnostic des altérations pathologiques de ces parties. En effet, l'aspect du fond présente à l'état normal, on pourrait dire, autant de variations qn la figure humaine, et il faut l'étudier indéfiniment si on ne veut pas être exposé à prendre quelquefois pour une altération pathologique ce qui n'est qu'une modification individuelle d'un œil sain. Dans notre cas vous voyez le fond de l'œil d'un rouge clair, la choroïde étant faiblement pigmentèe. Au pourtour du disque optique seulement cette pigmentation est plus forte, et c'est à cause de cela que vous verrez ici très distinctement se reflet grisâtre de la rétine, qui s'aperçoit d'autant plus facilement que le fond est plus foncé. Car la faible quantité de lumière réfléchie par la substance de la rétine n'est visible que quand elle n'est pas trop effacée par l'eclairage plus fort de la choroïde. Sur la papille vous distinguerez facilement les veines plus foncées et plus larges, des artères, qui se caractérisent par un reflet jaune au milieu, et vous apercevrez au point d'émergence des veines le phénomène si curieux du pouls veneux qui, spontané dans ce cas, peut-être produit artificiellement par une très légère pression rhythmique qu'on exerce avec le doigt sur le globe. Poir voir le pouls artériel il faut exercer une pression plus forte et continuée, expérience qui n'est pas sans danger, une cécité complete pouvant devenir la conséquence d'une interruption artificielle de la circulation de la rétine. L'artère centrale de la rétine n'appartient pas à la classse des vaisseaux dans lesquels le pouls est visible, et le phénomène tout-à-fait pathologique, auquel on a donné le nom du pouls de l'artère centrale de la rétine, n'a qu'un rapport très indirecte avec la pulsation ordinaire du système artériel. Il dépend d'une exagération de la pression intraoculaire telle que nous le trouvons dan les cas de glaucome, et il dépend de ce que la vague du sang artériel ne peut entrer dan la partie trop comprimée de ces vaisseaux que par lo choc rhythmique durant le moment de la plus grande force du mouvement diastolique."

Death of Dr. Thomas Anderson.—The death is announced of this well-known botanist and Indian Surgeon, and for some years director of the Royal Botanic Gardens, Calcutta.

Bequests to Medical Charities.—Miss Eleanora Atherton, whose will was proved on the 3rd ult., under the enormous personalty of £400,000 has left besides large bequests to religious bodies and others the following:—£1,000 to St. Mary's Hospital, Manchester, £1,000 to the Manchester Royal Infirmary, and £500 to each of the following:—Manchester Eye Infirmary, Deaf and Dumb Institute, Earlswood Asylum for Idiots, Royal Hospital for Incurables.

Registered for Transmission Abroad.

THE
MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
,, If Paid in Advance 1 1 8

, Post-office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London, W.C.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 16, 1870.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

The returns of the Registrar-General are always full of interest to those whose knowledge of the theory of social science enables them to study such tables with profit. Unfortunately, the gentlemen at present presiding over the Registrar's department, seem to have but slight acquaintanceship with the writings of the *masters*, and, hence, the Reports are disgraced by a good deal of drivelling about the "natural increase of the population," and other foolish expressions: besides being occasionally used as the vehicle for expressions of silly glorification of the English race and other well-known kinds of twaddle. We have before us the quarterly return of the births and deaths, which occurred during the months of July, August, and September, 1870, from which we observe, that there were *registered* in the United Kingdom the births of 255,136 children, and the deaths of 159,102 persons in three months, thus giving an increase of population (leaving emigration for the moment out of the account), of 96,034. It appears that the resident population of the British Islands is probably at present 30,838,210 thus divided—England and Wales 22,090,163; Ireland, 5,525,210; and Scotland, 3,222,837. The death-rate for the quarter is 22·1 per thousand. The writer of the Reports is haunted with the idea that a rapid increase of population is an unmixed blessing: and thus we find, that he observes, that "the returns of marriages and births are satisfactory" (to himself). "The births in the summer exceeded the average." Some persons wish that they did not: but the Registrar-General is none of these.

Of English emigrants, 30,548 sailed from Government ports; 7,311 of Scotch birth quitted these shores; and 16,563 Irish expatriated themselves during these three months. The great bulk of all these abandoned the government of Great Britain and became citizens of the Western Republic. During the two last summers the emigration has been higher than in any previous summer since 1854; and we are not surprised to hear this, when we remember the over-population and poverty we have seen in London and elsewhere recently. The Registrar-General calculates that the actual increase of England was 40,000 persons in the quarter. Also, 13,438 foreigners emigrated from British ports, chiefly to the United States. Thus, about 55,000 of our fellow countrymen, women and children in three months of one year have been forced, chiefly through poverty we may be sure, to leave the shores of Old England, Ireland, and Scotland. In passing, we may remark that in a whole year not more than three or four thousand French people would have been forced by necessity to leave their "beautiful France." Probably, during the year 1870, more than 160,000 emigrants will be found to have been expelled from home and family by our habits of rapid multiplication, so advised by the *Times* and other organs of the land-owning classes.

The price of food does not seem to have been extraordinary high during the quarter cited. Wheat averaged 50s. 4d. a quarter. Beef, by the carcass, was sixpence a pound in the London Meat Market, and mutton 6¾d. a pound. The returns of pauperism still continue a disgrace to the civilisation of this country. In the three months, ending 30th September last, no less than 138,444 persons were in the receipt of in-door relief, and 787,976 of out-door relief. As a consequence of such a state of misery, destitution, and over-population, we are, of course, prepared to hear that the death rate, in many of our large cities, has been excessive. Thus, the mortality in the twenty great towns in the United Kingdom, including London, was at the rate of 25·3; it exceeded 30 in Bristol, Leicester, Liverpool, Bradford, and Leeds. These are the places in which chiefly our poorer neighbours are sacrificed to the Moloch of rapid multiplication. Compare the death rate of Liverpool, above 30, to that of a rural county such as Berwickshire, with a death rate of about 15, and we see how Nature plys her deadly plan of equalising population with capital. Compare, again, the total increase of the British Islands in ten years, from 1860 to 1870, namely, from about 30,000,000 to 30,900,000, with that of the United States in the same time, namely, from about 30,000,000 to about 42,000,000, and with that of France, which has remained about stationary, and we at once see how easily the great law of population may be verified, *i.e.*, that the race we belong to tends, when well fed and clothed, to double in from 20 to 30 years. We shall also understand how it is that when one epidemic disappears another appears, whenever over-population has lowered wages sufficiently to make the poorest classes live in poor lodgings, and without sufficient food and clothing. The two epidemics which have acted most murderously recently have been scarlet fever, which caused 7,498 deaths in the quarter, and diarrhœa, which caused 17,647 deaths. The scarcity of water was unfavourable to health this autumn; the sewage was too concentrated, and cleanliness was less observed than usual. It is now agreed that sewage should not be thrown into rivers, but restored to the earth by the dry or wet method. How to accomplish this is the rub.

There are some good remarks in the Report on the urgent necessity for providing improved dwellings for the working classes, and for demolishing fever dens. The writer truly observes, that when so much money is being spent abroad on human destruction, we at home ought not to grudge funds for experiments directed towards the

social and hygienic regeneration of our poorer classes. We should endeavour to "conquer the standing armies of disease and death, works of vaster amplitude and greater difficulty than the capture of cities, the subjugation of nations, and the destruction of armies." Alas! that the writer should be such a poor political economist, and yet have so good a heart. He is a rooted opponent of the doctrines of Malthus and Mill, and those who propose limitation of families, as the French do, for such evils; and yet he shows us how one pestilence, during the last thirty-three years, has been got rid of, only to be succeeded by another "check to population," in this endorsing unconsciously the very expressions of the discoverer of the law of population. "How difficult it is," he exclaims, "to quench the pestilences that afflict mankind is evident from a retrospect of the English returns, now extending over thirty-three years. Disease is no sooner extinguished in one form than it breaks out in another, and the increase of industry, by which the means of living are created, itself developes new dangers in the mine, in the close workshop, and in the crowded city."

We know that we shall probably speak in vain; and yet we cannot help saying, as we conclude this analysis, that if Dr. Farr and his able and conscientious colleagues would only study the works of the classical writers on political economy, including Chalmers, Senior, Garnier, and Whately, they might yet make their quarterly returns not only vastly more logical, but, in addition to this, they might, by continual reiteration of good and sound doctrines concerning population, accustom the thoughtless masses of mankind to see that low death-rates are incompatible with high rates of multiplication of families, and that prudence is the providence of the poor.

LIFE INSURANCE.—III.

It is an impartially useful exercise to continue, and carry as far as existing means enable us, a fair comparison between the British and American offices as they are affected by the laws of the Governments within whose spheres respectively they conduct their business. It has been already shown that the one great improvement which is needed with respect to the law on the subject in the great Republic is, that it should be taken out of the hands of State legislation, and that a National Department should be formed with uniform laws for the whole country. The law in the Empire State of New York, to which State the principal stranger candidate for our confidence belongs, is, as a law, everything that a law of the kind could be desired to be. But what is good for a part, and for a part so principal and so important, must be alike good for the whole; and, since the division of the whole Commonwealth into so many states or territories has been ordained for purposes in which the mere act of assuring men's lives has no special place or relation, it is obviously desirable that the law respecting companies formed for that end should be the same in all parts of the federation. For the circumstance of the New York Mutual Office being in the City and State whose name it bears does not confine its transactions within the limits of City or even State, but leaves it at no less liberty to accept lives from the Far West or the extreme South than from the precincts of Wall street and Broadway, or from the banks of the Hudson.

Our own new Act, which, so far as it is directed against actual fraud, cannot but prove highly advantageous, is not, however, without its defects. The deposit of twenty thousand pounds, besides being called for from companies formed after the passing of the law, and not from companies previously in existence, is to be allowed to be withdrawn so soon as the declared assets shall appear to amount to a certain sum. Now, if it is considered desirable, as we have reason to know it is, that an American office, like the "New York," for example, of such long standing and showing such satisfactory figures, should make a good round deposit, why should even an old office of British growth be exempt from a condition which the Act, after all, lays down as a general principle of safety for the public? What is aimed at is a material guarantee, and, if that is exacted from one, it ought to be made binding upon all, and upon natives no less than foreigners.

Not only would the money so deposited bear interest, but, in the hands of agents who understand their business, the fact would be converted into a powerful and persuasive argument in prevailing upon the hesitating, the reluctant, and the timorous, to avail themselves of the incomparable advantages held out by a well-managed and successful Life Insurance Company. But perhaps the greatest defect with which Mr. Cave's Act is chargeable relates to the valuation of Companies' liabilities under their outstanding policies. The officers are allowed to make their own valuations, and to make them, not yearly, but at longer intervals; to make them, too, on such basis as they please, provided only that they state what that basis is. Now, surely, a perfect law for the purpose would require the valuation to be made on three conditions: firstly, once a year*; secondly, upon a uniform basis fixed by law; thirdly, by a disinterested person. Such, at any rate, are the provisions of the American law, of which, we are bound to say, our own, so far as it at present goes, is but a very indifferent, not to say bad, copy.

In one respect, however, the English law may be considered as better than the American practice. Mr. Cave's Act requires, very properly, that every company shall send a printed copy of its financial statement to each one of the policy-holders under it. In the United States this is not done. But, though the policy-holders in that country have not the satisfaction of receiving such information through the post at their own firesides, yet the end of public satisfaction is generally answered by the wide-spread and easily accessible abstracts of the whole report of the Insurance Commissioners. Upon the whole, therefore, it is not too much to say that American insurers have better protection than ourselves. The Act of last session is a step in the right direction, but not much more than a step. A year or two's experience of its working will suffice to show its deterring effect upon dishonest enterprise and its discovering effect upon such persons as avoid the light. There are many English, and, comparatively, more Scotch offices, entitled to rank in the first class; and, with respect to others of either sort that are younger or smaller in dimensions and success, let their conductors be assured that they cannot show a better title to be admitted into the first class, or one

* Professor De Morgan says, respecting this point, "The valuation should be made yearly. It is absolutely necessary to any system which gives the real amount of their premiums to the insured."

which will sooner incline the public to admit them to that grade, than by being forward to give to the country at large, and to their own constituents and clients in particular, the fullest, clearest, and truest information of their state and progress. When the real nature and effect of the American law comes to be understood by us, we shall have the New York Life Insurance Company doing such a business, that the native offices will see the wisdom of asking for a state of law in this country as good as that which prevails in America, and as much better as honesty, ingenuity, and public spirit can make it.

Notes on Current Topics.

The Irish Conference on the Medical Act.

The Conference of Irish Licensing bodies assembled at the request of the King and Queen's College of Physicians, for the purpose of debating the anticipated legislation on medical matters, has held, since we announced its formation the week before last, two meeetings.

The delegates sent by each of the Licensing bodies were the following :—For the University of Dublin, Dr. Hart, F.T.C.D., Professor Apjohn and Professor Stokes ; for the Queen's University, Mr. Robert Rane, Dr. MacCormac, and Sir Dominic Corrigan; for the Royal College of Surgeons, the President, Dr. Albert Walsh, the Vice-president, Dr. Wharton, and Dr. MacNamara. The Apothecaries' Company was not represented, the conference being called of delegates from "bodies qualified to confer degrees or licences in medicine or surgery in Ireland," under which designation the College of Physicians did not consider that the Apothecaries' Company was included.

We are informed that a lengthened statement was made by Sir Dominic Corrigan, in the course of which he submitted to the Conference the main provision of the Bill, which embodies his views. The peculiar features of the measure were—Firstly : That the Licensing powers should remain as at present, in the hands of existing Corporations. Secondly : That no person should be placed on the Registry except on the production of qualifications both in medicine and surgery. Thirdly : That the proposed State examination should be compulsory only on candidates for public appointments.

The Conference has, we understand, proceeded to the discussion of the several questions raised in Sir Dominic Corrigan's scheme, and has already dealt with that of direct representation of the Profession in the Medical Council, respecting which, despite a strong adverse feeling on the part of some of the delegates, the general sense of the meeting was considered to be favourable.

About the War and Wounded

Dr. Marion Sims has let a little light into the hospital management at Sedan. The ignorance of some officials seems to have been astounding. The building is about 300 feet in length, by 66 in width ; it is two storeys high, and holds seven wards on the upper floor, and nine on the lower. These wards average 66 by 24 ft., and are 10 ft. high, and there was only about 600 cubic feet of air per bed ; yet it seems that a Committee of French Surgeons, on entering the hospital, wanted the windows to be shut while Dr. Sims and his colleagues were in dread of hospitalism and pyæmia, as well they might be. A little later we find the Prussians forcing the staff to receive cases of dysentery, diarrhœa, and typhoid. A sad mortality was the result of this, and many also died of pyæmia. We think the Prussian authorities acted disgracefully in this as in many other instances that have been brought under our notice. The Germans appear, throughout the war, to have provided for the wounded in a manner that reflects strongly on a civilized community.

***

Drs. C. Orton and W. D. Spanton have published, in a contemporary, an account of what they saw in a recent visit to the Seat of War. They say that after the battle of Sedan 14,000 wounded French were brought in. The stench was so horrible in some parts of the town that they suggested the propriety of having numerous peat fires kept burning all over the district. They were told of wounded lying on the field four or five days, and then remaining under tents untended for two days more. Of those whose injuries dated back a week, scarcely one recovered. They were told that all the operations in one ambulance were performed by one surgeon, although fifteen others were attached. This seems very strange.

***

At the Pathological Society of London Dr. Duncan showed portions of a watch that had been extracted from the fleshy part of a soldier's hip twenty-one days after a bullet had carried it there. A discharging abscess existing, an exploratory incision was made—and the watch found and extracted. The patient died a short time afterwards.

Health of Baron Liebig.

The *Pharmaceutical Journal* announces, on the authority of a letter just received from Baron Liebig, that the re-establishment of the health of that world-renowned chemist is not yet perfectly complete.

The System of Fagging.

A prize of £50 has been offered by a lady for the best Essay upon the system of fagging, as practised among children at public and other schools. The essays will be abjudicated upon by Dr. Edmunds, of Fitzroy square, London, and must be delivered on or before March 31st.

Statistical Fallacies.

Mr. Matheson, of the Dublin General Register Office has issued a *brochure* on the Irish census, in which he alludes to the fallacious nature of conclusions arrived at from local statistical facts, unless regard be had to the special circumstances which affect each locality. He quotes four notes appended to the English Census Returns, which it appears would not form part of the Irish Returns, but in the absence of which the returns would produce a perfectly erroneous impression. The increase or decrease of population in these four districts were dependent on purely local causes, and not at all on the causes usually assigned for decrease in population.

Mr. Matheson says :—

"A consideration of the two schemes will show that the English classification is far superior to that adopted in

the Irish Returns, which on investigation will be found productive of many anomalies. Thus, under the head 'Ministering to Furniture' are included watch-glass makers, gate-keepers, colliery overseers, and colliery contractors. Land surveyors and sack makers appear as 'Ministering to Food.' Jewellers are returned as 'Ministering to Clothing;' a tar dealer and grease manufacturers as 'Ministering to Conveyance and Travelling;' organ builders, as 'Ministering to Amusement;' Botanists, as 'Ministering to Health; and a Government stationery officer, and sealing wax makers, as 'Ministering to Literature and Education.'"

Faults of the Irish System of Registration.

We have frequently adverted to the ineffectiveness of the system of Registration of Births and Deaths in Ireland as evidenced by the returns of the Registrar-General. The apparently low rate of mortality indicated by these returns as existing in Ireland, has been seized upon by the author of a recent pamphlet on the Irish Dispensary system, and by those who are anixous to assimilate the English system to that in Ireland, and who are, therefore, representing the Irish system as nearly perfect. This party quotes the lower numerical ratio of deaths in Ireland, and suggests that the dispensary system should be credited with saving all the lives represented in the returns. The real fact is that the mortality in Ireland may be as great or greater than in England, for aught we know, but that a third of the deaths are not registered at all. In reference to this matter, Mr. Matheson, of the Dublin Register Office, says:—

"It will be seen from the Quarterly Returns of Births, Deaths, and Marriages, that the registration of deaths is far from being perfect. This is mainly owing to the omission in the Irish Act of a clause corresponding to that in the English statute, which requires a certificate of registration to be obtained before burial, a provision which, in the sister country, has secured a complete record of deaths. The defective registration is not only to be regretted, from its being an indication that the people have not learned the benefits resulting to themselves from compliance with the law, but because it prevents practical use being made of the figures, it not being possible to estimate the deficiency except by comparison with England, the population of which is very differently circumstanced."

Midwifery at Edinburgh.

The recent riots in the University seem to have given rise to various mis-statements. Among these, we may mention the alleged crowded class-rooms of the extra-academical lecturers on midwifery. We are assured by a gentleman who was in Edinburgh all last week, and had opportunities of knowing, that Dr. Duncan had nine pupils, and Dr. Keiller five, while the new University Professor's class was not under seventy. The interest of the public in what has occurred make it worth while perhaps, to confront general statements with facts.

The late Mr. Stilwell.

We have to announce the death of James Stilwell, F.R.C.S.Eng., at the age of seventy-three. He was one of the first gentlemen to take the Fellowship of the English College by examination. He practised for many years at Uxbridge. He had some time retired from professional duty, but gave his son, Dr. H. Stilwell, the benefit of his aid in conducting his private asylum.

The Constitution of the Medical Council.

We have reason to believe that a feeling exists in the Council of the Royal College of Surgeons in England that that important Corporation is inadequately represented, as regards numbers, in the Medical Council. It is felt that the influence of bodies in the Medical Council are by no means proportionate to their rank amongst medico-educational bodies, and it is probable that, in any question of reform of the Medical Council, that question will be vehemently raised.

The Sowing of Scarlatina Seed.

A novel and, from its universality, a very alarming channel for the dissemination of scarlatina has been brought under notice by the medical staff of the Children's Hospital at Birmingham, and the investigations instituted by them bear all the impress of reliability. Experiments have been made which point most conclusively to the fact that scarlet fever is communicated in numberless cases through the medium of the laundry. It has always been a recognised fact with medical men that the clothing of fever patients is a medium of infection, but it is only now the important fact has been elicited that the mixing of such clothes with others in the wash is an active agent in the spread of the disease. The experiments at the Children's Hospital have resulted in the establishment of a very important matter—viz., that when the clothes of the patients in the infectious ward are washed separately from those of the other patients, those other patients do not incur scarlet fever. The observation of the medical staff having been drawn to this fact, they carried out the principle still further, and watched its development with the narrowest care. Among the results it was established that the patients in the ward over the laundry were more frequently attacked than those in distant wards. Now, if—as seems clear from these experiments—the fever germs are not destroyed by water at 212 deg. Fahrenheit, we have the startling fact that every laundry is liable to be turned into a fever manufactory whenever thoughtless or ignorant persons send the clothes of patients to be washed there. The question is one of the utmost gravity, and its importance to labourers in the field of sanitary science cannot be overrated.

Medical Conscience Money.

We notice in the *Indian Medical Gazette* a modest business note to the effect that Dr. G. H. Chesnage had forwarded to the editor a cheque for Rs. 120, being arrears of subscription to the Irish Royal Medical Benevolent Fund Society for twelve years. This is, indeed, a restitution of conscience money, alike honourable to the donor and to the Society whose claims on the charity of the Profession have made themselves heard so many thousand miles from home. The Branch of the Fund, established in Bombay, has deserved the gratitude of the Society, and it is honourable to the Profession that its members, under no personal influence or example, are mindful of their duty to the widow and orphan of their brother.

Staff-Assistant Surgeon Wearne has resigned the Assistant-Professorship of Pathology at Netley, after four years' tenure of that important office.

The Corporations and the Council.

Mr. Gay's resolutions at the Council of the Royal College of Surgeons have been withdrawn, but will probably be again brought forward. We do not think the College has the most distant chance of increasing its number of representatives in the General Medical Council; nor do we desire this. Let Mr. Gay adopt the simple programme of giving the Fellows and Members the right to elect their representative, and he will find all true reformers ready to support him. We may say that Dr. Humphry, who is said to have been against such a move, is the representative of the University of Cambridge in the General Council, and that the election in that University is open, and that, therefore, he represents the University as a whole. Can he not believe that the College should be as liberal?

The late Dr. Anderson.

Dr. Thomas Anderson, who died on the 26th ult., was the Director of the Calcutta Botanic Gardens. Though only thirty-eight years of age, he had made his mark in those branches of science in which he most delighted. He was in India through the mutiny, and present in several encounters. He deserved great credit for the manner in which he pushed the cultivation of cinchona in India, and more recently he strove to do as much for ipecacuanha. He was in Edinburgh at the time of his decease, preparing a collection of ipecacuanha plants at the Botanic Gardens to send out to India. We hope his untimely decease may not hinder the work he had at heart.

Refusing to take Warning.

On two different occasions in these columns, within the last seven weeks, we drew attention to a certain Board of Guardians, who censured a certain medical officer for ordering nourishment for what the intelligent Board called *persons in dying circumstances*. We warned them of what one day would happen, and refusing to take advice, we again find our attention directed to the proceedings of an inquest held upon a man whom the officers of the same Board refused to succour, and who accordingly died whilst suffering from typhoid fever of destitution or starvation. The evidence of the medical attendant is, *He* (the deceased) *would have had a better chance of recovery had he had the nourishment I ordered*. There has been an unfortunate want of efficiency in applying Poor-law relief to the emergencies of the case, the man died through want and there is no mistake about it. The following condensed statement was made by the Coroner :—

1. On the 3rd October the medical officer should have stated in his certificate the extra support required. 2. When the deceased's wife was before the Guardians, and the removal of the deceased was required, some inquiry should have been made as to his fitness for removal, and she should have been informed of the arrangements. 3. The deceased's friends after receiving the certificate of the 5th October, should have applied to the overseers, either before or after having gone to the relieving officer's house to officiate in his absence. 5. The relieving officer having received the certificate of the 5th October on the following (Thursday) morning, should have given an order at once in compliance with the certificate.

And in these remarks the jury concurred. A third time, and we hope it is the last, we bid the Guardians and officers of the Mansfield Union beware, or something worse may result than the occurrence which has just happened at South Normanton. We do not make useless observations in these columns, and if this particular Board has not read what we have already written on the fact, we hope some subscriber in the neighbourhood will direct their attention to them, for a similar occurrence to that taking place at Normanton, and which we foretold would one day happen, will be a most serious affair for the officers of the Mansfield Union.

Our Widows and Orphans.

From the earliest period of creation the relief of the destitute widow or orphan has been considered the most meritorious of service. The Pagans themselves recognised this fact, and were never forgetful of its appliance, but when the needy are of our own kin, whether the relationship be that of country, profession, or creed, it has ever been considered as an additional claim upon the charity of its kinsmen.

In a recent article in one of our medical contemporaries, it is there laid down "broadly, as a general principle," that the widows or orphans of deceased members of the Profession have "no legitimate claim upon the charity of the Profession." The writer in question feels very acutely the appeals made to his charity; no doubt his ears have been dinned by the cry of want, and his eyes scalded at the sight of the orphan's tears, but in spite of all this terrible stimulant to his benevolence, he thinks that because their father has been unsuccessful, and, therefore, according to his code of ethics, improvident, the little one's cry for bread should be referred to the parish official, and they themselves shunted off to the door of the poorhouse. This is a fearful piece of logic, and against its unkind and un-Christian bearing too much cannot be said. We believe that those amongst us will not follow the advice of this writer, that they will not hold out the penny whilst they are enquiring whether the father or husband had been improvident or parsimonious, waiting to return it to their pocket in case the investigation was not satisfactory. No, but let them remember, in the plenitude of their success, that the widow or orphan of their poor brother has but few friends, and that they have a claim of kindred which should never be forgotten.

Prospects of Female Doctors.

The *Pacific Medical and Surgical Journal* says whilst the conservative members of the Profession are insisting that women are physically and mentally unfit for the study and practice of medicine, and must not be tolerated or acknowledged as regular practitioners, the incentives and facilities for the medical education of females are increasing notably in all directions, both in Europe and America. A wealthy citizen of Boston has lately bequeathed nearly a million and a half of dollars for the endowment of an institution for females—medicine being first named in the list of branches to be taught. If our good brothers in Philadelphia, and elsewhere, members of the Pennyslvania State Society, and of the National Association, and other organized bodies, who condemn as heretics all doctors in petticoats and their abettors, do not throw off their stiff stocks and suffer their heads to turn on their axis, they will run the risk of being crowded out of the Profession by the well-trained graduates of crinoline, who are mustering in these latter days like the soldiers of Germany. The opponents of female doctors are really their best friends. They do not

understand the nature of women, or they would not attempt to thwart her aspirings by proscription. "When she will she will, you may depend on't."

Importance of Proper Alimentation.

CRITICISING a paper which says that the subjects of dyspepsia comprise "four-fifths of the entire population," the *Pacific Medical and Surgical Journal* says, we think one-fifth would be nearer the mark, even restricting the range to adults—for children very seldom have dyspepsia. The term does not apply properly to the transient rebellion of the stomach against abuse. A man is not a dyspeptic because he cannot play the glutton with impunity by an hour's industrious stuffing; or because he cannot sit till midnight taking in oysters and lager, and then carry the load home quietly.

Why don't the Doctors use Common Names?

A PHYSICIAN in Texas writes to the *Philadelphia Medical and Surgical Reporter*, extolling the juice of the leaves of "*cockle-burr*" as a hemostatic, and inviting practitioners everywhere to give it a trial. Upon this, one other *Medical Journal* asks what is the "cockle-burr?" and tells us that there are probably half-a-dozen plants of that name in the United States—each section of country having one of its own. So much for the advantage of using common names instead of precise and definite scientific appellations, which cannot lead to error.

Royal College of Surgeons of England.

TWENTY-SIX gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Court of Examiners on the 8th inst. Thirteen other candidates were examined; but failed to acquit themselves to the satisfaction of the Court, and were consequently referred to their anatomical and physiological studies for three months. At this meeting of the Court the recently elected examiners, Messrs. Henry Hancock, Vice-president of the College, surgeon to the Charing-cross Hospital; Frederick Le Gros Clark, surgeon to St. Thomas's Hospital; and William Scovell Savory, F.R.S., surgeon to St. Bartholomew's Hospital, late Professors in the College, took their seats as members of the Court of Examiners. The next pass examination for the diploma of membership of the College will commence on Friday next.

The Yellow Fever in Spain.

THOSE who are fond of coincidences will find a remarkable chain of them in the fact that in 1821, when the yellow fever last attacked Barcelona and its environs, it appeared on the same day as it did this year; it broke out at first in the same street, suddenly increased on the same day, and attained its *maximum* of victims on the same day. In 1821 it ceased on the 11th of November, and should, as is fervently to be hoped, a similar fate befall it when that date arrives this year, the series will be complete. On the 26th, the number of fresh cases amounted to forty-four, and the deaths to twenty-two; in Alicante they were twenty-nine and nineteen respectively; in Valencia one case only. In Palma de Majorca four persons were attacked between noon on the 22nd and the same hour on the 24th, and eight died; on the 25th the totals were ten and six. On the 27th the numbers in Barcelona and Alicante showed neither increase nor decrease; Valencia had not a single case.—*Gibraltar Chronicle*, Oct. 31.

Moonstruck Fish.

THE generation of an irritant poison by a peculiar degree of decomposition in shellfish is a familiar fact, and cases of acute, but transient, poisoning from this cause are frequent in hospital practice. We are not, however, equally familiar with another change to which fish is said to be liable, and which, if it be real, is a very remarkable metamorphosis of animal matter from a very unwonted cause. In the August number of the *Australian Medical Journal*, Dr. Munway notices at length the generation of poison in fish by the action of the moon's rays.

About two years previously he had been engaged as chemist and geologist, to go to the south-west coast of Tasmania. While returning, they caught a number of barracoutta, which were cut open down the back, cleaned, sprinkled with a little salt, spread out on the deck, and covered with a sail during moonlight, and were eaten without any unpleasant effect. On a subsequent occasion he purchased one and sent it to his lodgings. On his return, the landlord informed him that the fish was moonstruck and unwholesome. Being sceptical, he resolved to test the truth of it. The fish, which was fried for breakfast, was found to have the usual taste and flavour; but about half an hour after the meal, his wife complained of headache and nausea, heat in the face and head, and a sensation as of the head and face swelling greatly. Her countenance became suffused of a deep red, and the headache increased. Dr. Munway was also affected with similar symptoms, but had no headache. Brandy was immediately administered to the extent of two or three wine-glassfuls which very soon relieved them. The redness of Dr. Munway's face and head gradually diminished; but not so with his wife, whose symptoms were only partially mitigated. Having occasion to leave home for a couple of hours, and finding, on return, that his wife still complained of severe nausea and headache, he gave her some brandy and water. This almost immediately produced a full emetic discharge, whereby the severe and distressing symptoms were quickly removed. On inquiry of the landlord how he knew the fish was moonstruck and poisoned, he replied that there was a peculiar soft and slimy feel to the finger when rubbed along the lower part of the belly at the junction of the two sides.

Whether the other kinds of fish, such as the trumpeter, butter-fish, &c., are similarly affected, he does not know, as Dr. Munway has never seen them cut up and exposed for sale like the barracoutta; he is disposed to believe that all fish are liable to the same action of the moon's rays.

The symptoms detailed by Dr. Munway are not at all similar to those which arise from the use of decomposed shellfish, so that although we may have a difficulty in assuming that the action of the moon has anything to say to the development of a poison, yet we know, as yet, of no metamorphosis which would give rise to such symptoms as are detailed by Dr. Munway, It is a fact well known to photographers that moonlight has no chemical or actinic power whatever, and it can, therefore, hardly exercise any such effect on animal matter.

Mr. John Clay has been elected Obstetric Surgeon to the Queen's Hospital, Birmingham.

Scarlatina is epidemic at Liverpool, and relapsing fever has not abated there.

Dr. Humphrey Sandwith has published in *Macmillan* an article on "The War and the Ambulance."

Sir Stafford Northcote is to be Chairman of the new Royal Commission on Friendly Societies. Medical men ought to be in the Commission, none are so familiar with the working of these associations.

The Senate of the University of London have re-appointed Dr. Storrar, Member of the General Medical Council. Dr. Storrar's position would be more honourable were he elected by the Graduates of the University.

Dr. Gavin Milroy has been invited to go to Trinidad as the representative of the Royal College of Physicians of London, in an enquiry to be made into the modes of treatment of leprosy.

Small-pox still prevails in London. A friend informs us that he has lately met with it in the most malignant form. There were twenty-three deaths from the disease in the last weekly return, and yet the vaccino-phobiacs have not displayed any signs of returning reason.

We learn that Dr. William MacCormac, of Belfast, Surgeon to the General Hospital in that town, and late *Chef d'Ambulance* at Sedan, is about to take up the practice of his Profession in London. It is understood that he will probably be connected with St. Thomas's Hospital.

A General Meeting of the Royal Irish Academy was held on Monday evening last, when the following papers were set down for reading:—

1. Rev. Maxwell Close, "On M. Delaunay's Views relative to the condition of the interior of the earth."

2. Samuel Ferguson, LL.D., "On the difficulties attendant on the transcription of Ogham Legends, and the means of avoiding them."

3. W. Archer, Esq., "On some new or little-known freshwater Rhizopods."

Horse-flesh eating seems to be quite an acquired taste, like tobacco smoking, and as difficult for some persons to abandon as smoking is. The poor French soldiers who eat so much of it in Metz don't like to go back to mutton and beef. This is a lesson to us all not to think any food common or unclean. Philosophers of the Diogenes school, who desire to rail against the faults and follies of their neighbours, will be starved with more difficulty if they consent to become hippophagists. Cats, too, seem admirable makeshifts for rabbits.

The first meeting of the Royal Medical and Chirurgical Society was an interesting one. Messrs. Fagge and Durham related some cases in which they had successfully treated Hydatid Tumours of the Liver by Dr. Althaus' plan of Electrolysis. Nine cases were given where successful results were obtained; no suppuration followed which is sometimes observed after the ordinary process of tapping. There is some doubt, however, whether this plan may not succeed only in so far as the process of acupuncture by the grooved needle has done, by allowing the escape of the fluid contents of the cysts.

SCOTLAND.

University of Glasgow.—The new University was formally opened on Monday, the 7th, His Grace, the Duke of Montrose, Chancellor, presiding. The proceedings were held in the large hall, which is to be devoted to the Hunterian Museum. His grace was accompanied to the hall by the Members of the Senatus Academicus, the Provost of Glasgow, the Marquis of Bute, the Chancellor, and the Principal of the University of Edinburgh, the Lord Provost of Edinburgh, Mr. Gordon, M.P., and others. The Introductory Address to the students was delivered by Professor Lushington, Senior Professor in the University. In the evening the event was celebrated by a banquet, at which the Members of the Senatus, the Duke of Montrose, the Lord Advocate, the Lord-Justice General, Sir. A. Grant, the Lord Provost of Edinburgh, the Marquis of Bute, and others, were entertained by the Provost, and a number of subscribers to the University buildings. The new University buildings are placed on the summit of Gilmare hill, and occupy a space of four acres. In length the building is 600 ft., and 300 in breadth, and it will be divided into two quadrangles by the common hall, which, however, is not yet constructed. There is a central tower of 150 feet in height, and surmounting the common hall there will be a graceful spire 170 feet high. A sum of £60,000 is still required to complete the building.

In the *Edinburgh Medical Journal* for this month, Professor George Buchanan, of Glasgow, relates three cases of successful excision of the lateral half of the tongue. Dr. Buchanan states that a patient, on whom he operated in 1865, is still well, and free from any return of the disease.

Mr. W. A. Jamieson, Berwick-on-Tweed, recommends injections of carbolic-acid lotion in metritis. Apart from its disinfecting and deodorizing properties, he considers carbolic acid to be "a special sedative to the uterine nerves." In any case, where from the length of the labour, or from the use of instruments there is a risk of metritis following, the attack, he believes, may be warded off by employing the injection early, within a few hours after the completion of labour, when the primary fatigue has been recovered from. The strength of the lotion should be one or too drachms of acid to each pint of warm water.

As compared with last year, the number of medical students at the University of Edinburgh who have already matriculated shows an increase of fifty.

A Rival to the far-famed Mont Cenis tunnel is announced (says *Nature*) from America. The tunnel through the Hoosac Mountain, on the Troy and Greenfield Railway, is steadily progressing, and has now overcome the great difficulties with which it started. It is 4¾ miles in length (more than half that of Mont Cenis), and of this distance above one-third is already penetrated. The work is actively proceeding night and day from both ends, and it is expected it will be finished before the expiration of the contract in 1874.

PHARMACY BILL FOR IRELAND, PROPOSED BY THE GOVERNOR AND COMPANY OF THE APOTHECARIES' HALL, DUBLIN.

DRAFT BILL

To regulate the Practice of Pharmacy in Ireland, to institute a Pharmaceuticai Society, and to alter and amend the Act passed by the Parliament of Ireland, in the Thirty-first year of the Reign of His Majesty George the Third, intituled "An Act for the more Effectually Preserving the Health of His Majesty's Subjects, for Erecting an Apothecaries' Hall in the City ef Dublin, and Regulating the Profession of an Apothecary throughout the Kingdom of Ireland."

WHEREAS it is expedient, to enable the Governor and Company of the Apothecaries' Hall of Dublin to grant Licences to persons (other than duly-qualified Apothecaries) to assume the name of Pharmaceutical Chemists, and to keep open shop for the retailing, dispensing, or compounding of Prescriptions of duly-qualified Medical Practitioners, and also to grant Certificates enabling persons to be engaged or employed as Students, Apprentices, or Assistants, respectively.

And whereas, it is expedient and necessary that such persons should possess a competent practical knowledge of their business, and to that end, that from and after the day herein named, all persons should, before commencing such business, be duly examined as to their qualifications and practical knowledge, and that a Register should be kept, as herein provided, and that there should be instituted a Pharmaceutical Society for Ireland, and also that the Act passed in the Parliament of Ireland, in the Thirty-first year of His Majesty George the Third, intituled "An Act for the more Effectually Preserving the Health of His Majesty's Subjects, for erecting an Apothecaries' Hall in the City of Dublin, and Regulating the Profession of an Apothecary throughout the Kingdom of Ireland," should be amended :—

Be it enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same as follows :—

1. From and after One Thousand Eight Hundred and Seventy-one, it shall be unlawful for any person, other than a duly-qualified Apothecary, to sell or to keep open shop for retailing, dispensing, or compounding Medical Prescriptions in Ireland, unless such person shall be a Pharmaceutical Chemist within the meaning of this Act, and be registered under this Act.

2. Pharmaceutical Chemists within the meaning of this Act shall consist of all persons who shall be duly examined and licensed in Pharmacy, and registered as Pharmaceutical Chemists under the provisions of this Act.

3. The Examiners for the purposes of this Act shall consist of the Governor or Deputy-Governor, with six members of the Court of the Apothecaries' Hall, who examine on the subjects specified in Clause 4 of this Act, together with six other Examiners selected by Members of the Pharmaceutical Society of Ireland, provided that until said conjoint Board be formed, the examinations may be carried on for the time being by the aforesaid Members of the Court of the Apothecaries' Hall.

4. All such persons as shall have been so appointed to conduct examinations under this Act shall be, and the same are hereby declared to be, fit and proper persons to conduct all such examinations as are provided for or contemplated by this Act, and shall respectively have full power and authority, and are hereby authorised and required to examine all persons who shall present themselves for examination under the provisions of this Act in their knowledge of the Latin and English Languages, in Arithmetic, in Botany, in Materia Medica, in Pharmaceutical and General Chemistry, in Practical Pharmaco, in the British Pharmacopœia, and such other subjects, as may from time to time be determined, by any by-law of the General Council of the Pharmaceutical Society of Ireland. Provided always, that such examinations shall not include the Theory and Practice of Medicine, Surgery, or Midwifery, or any branch of Medicine or Surgery ; and the said Examiners are hereby empowered to grant or refuse to such persons, as in their discretion may seem fit,—Certificates of competent knowledge and qualification and skill to exercise the business or calling of Pharmaceutical Chemists, or, as the case may require, to be engaged or employed as Students, Apprentices, or Assistants, respectively ; provided, nevertheless, that in case of rejection, a rejected Candidate may present himself for re-examination after six months.

5. The Council of the Pharmaceutical Society of Ireland shall, within three calendar months after its formation, appoint a fit and proper person to act as Registrar under this Act, and said Council shall have power to remove the said Registrar, or any future Registrar to be appointed under this Act, from said office, and from time to time to appoint a new Registrar in the room of any Registrar who may die, or retire, or be removed from office, as aforesaid, and also to appoint and remove from time to time a Treasurer, and such Clerks and other Officers as may be requisite for carrying out the purposes of this Act, and also to pay suitable salaries to the said Registrar, Treasurer, Clerks, and Officers, provided that pending the formation of such Society, the Governor and Council of the Apothecaries' Hall shall appoint fit and proper persons as Registrar, Treasurer, Clerks, and Officers.

6. For every examination and registration, and for every certificate of same such reasonable fees or charges shall be paid as shall from time to time be fixed and determined by any by-law to be made by the General Council of the Apothecaries' Hall of Dublin, or by the Council of the Pharmaceutical Society, as the case may be, provided always, such fees or charges shall at no time exceed the fees laid down respectively in each case in Schedule (A) to this Act annexed, and such fees shall be paid to the Treasurer, and shall by him be applied as the said Council of the Apothecaries' Hall or of the Pharmaceutical Society shall direct in furtherance of the provisions of this Act.

7. The Registrar to be appointed under or by virtue of this Act shall from time to time make out and maintain a complete Register of all persons certified as Pharmaceutical Chemists by the Examiners appointed under this Act, also of all persons certified in like manner as Apprentices, Students, or Assistants, respectively, and shall keep a proper Index of the Register, and all such other Registers and Books as may be necessary for giving effect to the by-laws which shall from time to time be made in conformity with the provisions of this Act.

8. It shall be the duty of the Registrar to make and keep a correct Register, in accordance with the provisions of this Act, of all persons who shall be entitled to be registered under this Act, and to erase the names of all registered persons who shall have died, and from time to time to make the necessary alterations in the addresses of the persons registered under this Act. To enable the Registrar duly to fulfil the duties imposed upon him, it shall be lawful for the Registrar to write a letter to any registered person, addressed to him according to his address on the Register, to inquire whether he has ceased to carry on business, or has changed his residence, such letter to be forwarded by post as a registered letter, according to the Post Office regulations for the time being, and if no answer shall be returned to such letter within six months from the sending of the letter, a second of similar purport shall be sent in like manner, and if no answer be given thereto within three months from date thereof, it shall be lawful to erase the name of such person from the Register, provided always, that the same may be restored by direction of the Council of the Apothecaries' Hall of Dublin, or of the Council of the Pharmaceutical Society, as the case may happen to be, should they think fit to make an order to that effect.

9. No name shall be entered in the Register, except of persons authorised by this Act to be registered, nor unless the Registrar be satisfied by the proper evidence that the person claiming is entitled to be registered ; and any appeal from the decision of the Registrar may be decided by the Council of the Apothecaries' Hall of Dublin, or of the Pharmaceutical Society, as the case may be ; and any entry which shall be proved to the satisfaction of such Council to have been fraudulently or incorrectly made, may be erased from, or amended in, the Register, by order in writing of such Council.

10. The Registrar shall, in the month of January, in every year, cause to be printed, published, and sold a correct Register of the names of all Pharmaceutical Chemists, and a correct Register of all persons registered as Students, Apprentices, and Assistants, and in such Registers, respectively, the names shall be in alphabetical order, according to the surnames, with the respective residences, in the form set forth in Schedule (B)

to this Act, and such printed Registers shall be called "The Registers of Pharmaceutical Chemists, and of Pharmaceutical Students, Apprentices, and Assistants for Ireland," and a printed copy of such Registers for the time being, purporting to be so printed and published, as aforesaid, or any certificate under the hand of the said Registrar, and countersigned by the Governor or two Members of the Council of the Apothecaries' Hall of Dublin, or by the President or two Members of the Pharmaceutical Society, shall be evidence in all Courts, and before all Justices of the Peace, and others, that the persons therein specified are registered according to the provisions of this Act, and the absence of the name of any person from such printed Register shall be evidence, until the contrary shall be made to appear, that such person is not registered according to the provisions of this Act.

11. Any Registrar who shall wilfully make, or cause to be made, any falsification in any matter relating to the said Registers, and any person who shall wilfully procure, or attempt to procure, himself to be registered under this Act, by making or producing, or causing to be made or produced, any false or fraudulent representation or declaration, either verbally or in writing, and any person aiding or assisting him therein, shall be deemed guilty of a misdemeanor, punishable by fine or imprisonment, and shall, on conviction thereof, be sentenced to be imprisoned for any term not exceeding twelve months.

12. Every Registrar of Deaths in Ireland, on receiving notice of the death of any Pharmaceutical Chemist, or Pharmaceutical Student, Apprentice, or Assistant, shall forthwith transmit by post to the Registrar under this Act a certificate, under his own hand, of such death, with the particulars of the time and place of death; and on receipt of such certificate, the said Registrar under this Act shall erase the name of such deceased Pharmaceutical Chemist, or Student, Apprentice, or Assistant, as the case may be, from the Register, and shall transmit to the said Registrar of Deaths the cost of such certificate and transmission, and may charge the cost thereof as an expense of his office.

13. From and after the One Thousand Eight Hundred and Seventy-one, any person who, not being a duly-registered Pharmaceutical Chemist, or duly-qualified Apothecary, shall keep an open shop or wareroom for the retailing, dispensing, or compounding medical prescriptions, or who shall take, use, or exhibit the name or title of Apothecary, Pharmaceutical Chemist, or Pharmaceutist, or Pharmacist, or Dispensing Chemist, in Ireland, or make use of any sign or title, implying that he is a qualified Apothecary, or that he is registered as a Pharmaceutical Chemist under this Act, or any Pharmaceutical Chemist or Apothecary who shall take or employ any person as Student, Apprentice, or Assistant, without such person having obtained the proper certificates hereinbefore directed, or who shall compound any medicines of the British Pharmacopœia except according to the formularies of the said Pharmacopœia, each and every person so offending shall for every such offence be liable, on summary conviction before one or more Justices of the Peace, to pay a penalty of five pounds, and when recovered, such penalties shall be applied to the purposes of this Act; but nothing in this Act contained shall prevent any person from being liable to any other penalty, damage, or punishment, to which he would have been subject if this Act had not passed.

14. Upon the decease of any Pharmaceutical Chemist or Apothecary actually in business at the time of his death, it shall be lawful for any executor, administrator, or trustee of the estate of such Pharmaceutical Chemist or Apothecary, to continue such business for a period not exceeding six months, and provided such business shall be *bona-fide* conducted by a duly-qualified Apothecary, or by a Pharmaceutical Chemist registered under this Act, provided always, that registration under this Act shall not entitle any person so registered to practise Medicine or Surgery, or any branch of Medicine or Surgery.

15. It shall, nevertheless, be lawful, anything to the contrary notwithstanding, for the Examiners appointed under this Act to admit to examination any Chemist and Druggist who shall have been in business, as such, on his own account for a period of not less than five years before the passing of this Act, and who shall, within six months after it has passed into law, make application in writing for examination to the Registrar under this Act, accompanied with a Certificate according to Schedule (C) to this Act; and every such Chemist and Druggist who shall have satisfied the Examiners as to his knowledge, skill, and competency to carry on and conduct the business of a Pharmaceutical Chemist, shall receive the Certificate of Pharmacy from the said Exnminers, and shall be entitled to be placed on the Register of Pharmaceutical Chemists of Ireland; and the person so certified shall pay the same fees as other Pharmaceutical Chemists under this Act; provided always, that in case of rejection, the rejected candidate may be re-examined after six months.

16. It is hereby further enacted, that a Pharmaceutical Society shall be instituted, to be named, "The Pharmaceutical Society of Ireland;" and authority is hereby given for the formation of such Society; and in order to the formation of same it shall be lawful for every person who has been duly licensed and registered as a Pharmaceutical Chemist by this Act, and also for every duly-qualified Apothecary, upon payment of an annual subscription of One Guinea each to the Treasurer appointed under this Act, to become a member of said Society, and to have a voice and vote in all general meetings of the Society; and the Governor and Council of the Apothecaries' Hall of Dublin are hereby authorised and required, within one year after the passing of this Act, to convene a meeting of all members of the Society, to be held at their Hall in Dublin, by written or printed summonses, to be issued ten days previous to the day agreed upon for holding such meeting; and it shall be lawful for the members in assembly at such meetings to appoint a President, Vice-President, Council, and Secretary, for conducting the business of the Society; and like meetings of the Society shall be holden annually.

17. At all general meetings of the Society, it shall be lawful for the Society to make all such By-laws and Rules for the advancement of Pharmacy and for the good government of the Society as the members present shall in their wisdom, and by a majority of votes determine, provided always, that said By-laws and Rules shall be consonant with, and not contrary to, any of the provisions of this Act; and it shall also be lawful for the Society at every such annual meeting, for the members present to elect from among themselves, by a majority of votes, six persons to be conjoint Examiners with the Examiners on the Pharmacy Court of the Apothecaries' Hall, to record their votes as to the merits of the several candidates who have undergone examination.

18. The parts hereinafter mentioned of the aforesaid Act of the "Thirty-first of George the Third, chapter thirty-four," shall be, and the same are hereby repealed; that is to say, so much of the tenth clause as relates to seven years' apprenticeship, the whole of the twenty-third clause, so much of the twenty-forth clause as relates to fees for Certificates, and the whole of the twenty-fifth and twenty-sixth clauses.

19. This Act may be cited as the Pharmacy Act, Ireland, 1870.

20. This Act shall apply to Ireland only.

SCHEDULE A.

Scale of Fees for Certificates.

Apprentices and Students	... ...	2 Guineas.
Assistants	... ...	3 Guineas.
Pharmaceutical Chemists	... ...	5 Guineas.
The Fee for Registration	... ...	5 Shillings.

SCHEDULE B.

Name.	Residence.	Date of Registration.
A. B.	Grafton street, Dublin.	Jan. 10th, 1871.
C. D.	Patrick street, Cork.	March 4th, 1871.
E. F.	Corn market, Belfast.	June 15th, 1871.

SCHEDULE C.

Certificate to be signed by a *duly qualified Medical Practitioner* or *Magistrate* respecting a person who was in business as a Chemist and Druggist in Ireland for five years on his own account.

To the Registrar appointed under the Pharmacy Act, Ireland, 1871.

I, residing at in the County of hereby certify that I am a duly qualified Medical Practitioner, (or Magistrate,) and that to my knowledge residing at in the County of has been in business as a Chemist and Druggist on his own account for a period of not less than five years.

(Signed)

This day of 1871.

Literature.

TWELFTH REPORT OF THE MEDICAL OFFICERS OF THE PRIVY COUNCIL BLUE-BOOK.

This Blue-book contains some very interesting matter among a good deal that is unreadable. Among the most important of all the reports, is one by the deep-thinking Dr. Burdon Sanderson, entitled, "Introductory Report on the Intimate Pathology of Contagion." The author first refers to the "Physical Properties of Contagion," and next, to the "Organic Forms which occur in Infecting Liquids." With regard to the former of these points, Dr. Sanderson thinks it proved by Dr. Chauveau and himself, that the contagious principle is neither soluble in water, nor capable of assuming the form of vapour, but that every kind of contagion consists of particles of a very minute character, rarely more than 1-20th thousand in diameter, similar to those described in 1864 by Dr. Lionel Beale as existing in vaccine matter. Dr. Sanderson thinks it probable that the contagium particles "are spheroidal transparent, of gelatinous consistence, of density nearly equal to that of the fluids in which they float, and that they are nearly, although perhaps not exclusively, composed of albuminous matter. With reference to their mode of action, we have examined into these considerations which seem to render it probable that they are organised beings, and that their powers of producing disease are due to their organic development, and we have accepted this doctrine as the only one which affords a satisfactory explanation of the facts of infection." Dr. Sanderson proposes to call the microscopic forms alluded to, *mycrozymes*. With regard to the way in which these organisms work, Dr. Sanderson thinks that "Pepsine is but one of a group of substances which perform, what in a general sense may be called zymotic functions in the animal economy, all of which have this peculiarity in common, that they induce important chemical changes in other kinds of substances, without themselves participating in the transformations they effect. This faculty of causing chemical changes in other contiguous matter is all that is implied when the process of infection is compared to a ferment." We recommend all interested in the progress of positive medical theories to read carefully the admirable report by Dr. B. Sanderson.

Assistant-Surgeon Myers, has published his prize essay * on Heart Diseases among Soldiers, and his work deserves general attention. He commences with a comparison of civil and military statistics, and goes fully into the many causes that have been alleged to give rise to the prevalence of heart disease among troops. The prejudicial construction of the uniform and accoutrements come in for severe blame, and are, in the author's opinion, the special causes which develop cardiac disease. Whatever doubts may still remain in the minds of some, we presume no one will now deny that, the existing mode of clothing our soldiers is highly prejudicial, and if not, the only cause is one of the most potent causes of such interference, with the circulation as would be likely to distress the heart, and after a time even set up organic disease. We are glad this Essay has been published. It is a most useful contribution to the question, and one which ought to be digested by those who are responsible for the existing evils of army tailoring.

Hospitalism.—*Nature* announces that the unpublished manuscripts left by the late Sir James Simpson on the important subject of Hospitalism have been confided to the care of Mr. Lawson Tait, of Birmingham, for completion and editing.

* On the Etiology and Prevalence of Diseases of the Heart among Soldiers. The Alexandra Prize Essay. By Arthur B. R. Myers. London J. Churchill and Sons.

Correspondence.

SUDDEN LOSS OF VOICE OF SINGERS—ITS CURE BY ACONITE—USE OF ACONITE IN VETERINARY MEDICINE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Cabarus, a famous homœopathist, who died some months since at Paris, enjoyed a great reputation for curing, with rapidity, the sudden loss of voice, to which singers are subject. This he used to accomplish in a few hours. A person having once sought to learn his secret, "My friend," replied he, "when I die my tomb shall be wreathed with aconite; the allopaths give aconite in doses of a few drops, I, a homœopathist give it by the spoonful, and I enable my patients to sing; that was all I did to Madam Borghi," alluding to some celebrated cantatrice, whose sudden extinction of voice, on the afternoon of a night when she had to sing before a brilliant audience, and perfect cure by Cabarus within a few hours, created a sensation among operatic folk.

Now, a teaspoonful of the stronger tincture of aconite (Fleming's), would in all likelihood be a poisonous dose, but, might our ordinary tincture be given in drachm doses, or is that of the Paris Codex so much weaker? And, setting aside this statement of Cabarus, is there any other evidence that aconite in heroic doses has so remarkable a therapeutic action upon the larynx or bronchi? I saw it recently advertised as an infallible cure for a roarer or broken-winded horse. I fancy that we might often take hints from veterinary practitioners, who generally use telling remedies, and have the corpus vilum to experiment on.

F. M. Luther, M.D.

VIVE MEMOR LETHI.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—I think the above advice may be truly given to all the persons employed in very many of the various work-rooms in this Metropolis. Here is a specimen. I was called to visit a young married woman whom I found suffering with rheumatic fever and constipation, the bowels not having been relieved for ten days. Upon expressing surprise at this, she told me she sometimes went *three weeks* without alvine dejection. She is one of eighteen or twenty hands employed at a work-shop, at the machine boot making. The said shop is a very low room at the top of the house. When the gas is lighted, they are all nearly smothered, there are eight gas burners in this room, which is about thirty feet long by ten feet wide. There is a coke stove in the centre of the room, which causes incessant headache to those working near, whilst their feet and legs become stone-cold and ache very much, from the cold air rushing through the crevices in the floor and sides of the room. Hardly a person quite well in the shop. As regards the chinks and crevices, upon making complaints to the proprietor, he told them they must paste them over with brown paper. There is but one water-closet, which is situated just within the gateway in the yard, and which sometimes is quite unfit for any human being to go into. Thus far, my patient's oral deposition. I wonder what *Dr. Cyclops* would say to conservation of the bowels under these circumstances? The young women are at least, I think, very awkwardly fixed in respect of obeying the calls of nature. Only think too this "establishment" being only one of *hundreds* in no better condition. A short time since, I was called to attend a young woman labouring under an attack of *coup de soleil*, occasioned by the sun's rays streaming down through the glazed roof of a low work-room, and much indignation was expressed against me, for freely giving my opinion. What made the case worse, was the fact of the employer's medical adviser, concurring with himself that there was no fault to be found with the room. Sometime since, I was called to a workman in the cabinet-making line, who died from cholera. In this case, although there were several workmen, there was but one convenience, which I found in a disgusting and dilapidated condition, and very badly drained. Some people call out "Where are the Police?" I say "Where are the Sanitary Inspectors"?!

Yours, &c.

Live and Let Live.

THE WAR AND WOUNDED.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

DEAR SIR,—I send you further extracts from my war letters.

Oct. 29th.—I have been several times round the wards in Dusseldorf with a Dutch surgeon named Wartmann, and seen many interesting cases. One was a man wounded by a shell in the foot; a large portion of integument was removed, and when he was admitted the wound was sloughy and gangrenous. After being in hospital for two days, profuse hæmorrhage set in, to check which Wartmann tied the posterior tibial at the ankle. This did not control the bleeding, and he tied the femoral in Scarpa's angle, a course which proved successful, and still more, from the moment the femoral was tied the wound began to improve, lose its gangrenous appearance, and healed rapidly. From this and a few other analogous cases, he draws the conclusion that in cases of impending gangrene ligature of the main artery would probably avert the danger.

There were several cases of wounds of the knee-joint, and he holds the same opinion that has forced itself on me, that all cases of knee-joints laid open by gun-shot wounds demand primary amputation to save the patient's life. Three cases we had at Gelsenkenhm died of "irritative hectic," if I may so call it, and when this once sets in, operative interference is found to hasten the fatal result. Wartmann says that resections have turned out very badly; but I saw a large number of amputations of leg, arm, thigh, and shoulder joints, all doing well. I have no statistics, but from what I saw I infer that he has had more than average success. I have been to Strasburg, which has been badly knocked about. The Prussian trenches seem to have been very carefully constructed, as there were seats for the men, and regular fire-places.

I applied for an appointment at Metz, but was told that I would not be sent there officially, but that if I went I would get plenty to do, so I start to-morrow.

I am, &c.,

A. H. MARTIN.

WINTER CLIMATES—BRITISH v., FOREIGN.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Once or twice you have allowed me to protest in your columns, against the ridiculous fashion of "going abroad" in search of climatic influences that may be found in nearly equal and in many cases superior suitability in our own island home. The subject is this winter of so much greater importance, in consequence of the dangerous state of the continent, that I hope you will find room for the enclosed extract from your spirited little contemporary the *Echo*. It is a most appropriate article.

I am, &c.

ONE WHO HAS CEASED TO WANDER.

"Of course South Cornwall is not quite the same thing; you can't have oranges on the trees and fields of blue and red anemones, as well as of all the scented blooms which have made Grasse so famous. You can't get ortolans, or sea-urchins—which, ten to one, you wouldn't like if you could. But then to compensate for a sober spring, grey, though not grey after the usual English style of greyness, you have in Cornwall no *mistral*, no wind that cuts you to the bone on the shady side of the street, while in the sun you are baked with heat. You have, what for some invalids is better than any amount of natural beauty, one of the most equable climates in the world; and you may reckon, too, on securing house accommodation far fitter for delicate people than the fine-weather homes of the Provencals.

"Michelet,—shrewd enough on medical matters, though he out-Carlyles Carlyle in historical vagaries long ago warned us, in *La Mer*, that the Mediterranean coast has *un climat apre*, a harsh climate. He prefers the Bay of Biscay, or even the grey rocks of Lower Brittany as a 'change of air' for delicate Parisian mammas and their children. Falmouth or Penzance is just the place he would recommend; you are sure, all along that coast, of being never to hot or too cold—of never meeting those extremes which in Nice, nay even in San Rémo or Mentone, too often put a sadly summary end to the journey in search of health. Both places, too, are really beautiful country. At Falmouth you have a noble 'lough,' sheltered from every wind; while within easy reach for the convalescent is the Lizard country, with its own flora, its fairy rock-work, and its water with the true southern tinge—a bit of Plato's Atlantis still preserved for the confusion of sceptics. At Penzance is a bay which others besides the natives compare with the Bay of Naples. Shelter there is, too, though the east wind, which is so hard upon Torquay, does find out weak points in Penzance, as it does in nearly all our sea-side places. The fact is, 'going abroad' is such an institution that, except Bournemouth, we have no place which has been 'made' simply by its reputation for climate. Anywhere but in England three or four 'nooks' such as abound in the Lizard country—St. Ruan; for instance, or Mullion, would have been seized on by doctor and hotel-keeper. As it is, our people prefer working on established bases, and playing into the hands of the owners of 'building sites.' Thus Torquay existed before it somehow—and not altogether deservedly—become famous; and at Penzance there is a thriving town, which tries by exceptional liveliness to atone for its remote position. There, too, is the best public library west of Bath, and a parade, and a hotel which can hold its own with any in the kingdom. At Falmouth, again, there is a town, a quaint, half Dutch place; and along the hills rise terraces and villas for those who are strong enough to do a little climbing. Either place is attractive enough, and both are very accessible; and though a 'nook' by the Lizard might afford completer shelter, we must become much more Americanised and Germanised before we can hope for our 'nooks' to produce the perfectly-appointed hotel which, wholly self-contained, does away with the need of a town and what a town supplies. Surely, on this showing, a Penzance or Falmouth hotel-keeper is justified in asking, 'Why go further?' Here are the places: and those whose Mediterranean refuge is cut off may very probably find that in South Cornwall they can do better, and at a far less sacrifice."

Medical News.

Royal College of Surgeons of England.—The council of this institution have elected Fellows of the College, Messrs. Peter Marshall, L.S.A., Bedford square, diploma of membership dated March 28, 1828; John Emilius Mayer, of her Majesty's Indian Army, January 18, 1833; and Murdoch Kelburne King, M.D. and F.R.C.S. Edinb., Hull. The last-named gentleman was elected an *ad eundem* Fellow, which, it is stated, is the first occasion in which this honour has been so bestowed since the charter for conferring the Fellowship was granted to the College of Surgeons. The following gentlemen have passed their primary examinations in anatomy and physiology, and, when eligible, will be admitted to the pass examination: Messrs. William Rendall, William Williams, William Dryland, and T. D. Ransford, students of Guy's Hospital; E. L. Archer, A. T. Corrie, and R. W. Stewart, of St. Bartholomew's Hospital; A. J. M. Bentley, J. H. Webster, and Robert Jolly, of Edinburgh; R. J. Carey, and F. G. R. Tooze, of University College; W. J. Foster, and J. J. Hues, of Birmingham; C. De M. Palmer, of Dublin; James Perrigo, of M'Gill, Montreal; J. A. Hendry, of Liverpool; A. J. Johnson, of Toronto and St. Thomas's Hospital; W. McN. Whistler, of Pennsylvania; Donald Murdoch, of Cork and Guy's Hospital; G. H. Heald, of Leeds; Charles Oldman, B. A. Cantab., of Cambridge and Guy's Hospital; Charles Raines, of Hull; W. T. Hawthorn, of the London Hospital; Edward Fretwell, of Sheffield; and E. K. Corbin, of Paris and St. Thomas's Hospital. Thirteen other candidates were examined, but failed to acquit themselves to the satisfaction of the Court, and were consequently referred to the anatomical and physiological studies for three months. The recently-elected examiners, viz., Messrs. Henry Hancock, Vice-President of the College; and Messrs. F. Le Gros Clark, and W. S. Savory, former professors of the College, took their seats on this occasion.

Modern Quackery.—The fable of the Spider and the Fly has a much more universal application than many of us are disposed to admit. Even at the present day, there are more spiders about our path than people imagine; and it is little flattering to our vanity to know that they find a goodly harvest of flies. Some forms of commercial imposture, for instance, ease men of their money; but however loud and violent the denunciations of the sufferers against swindles of this kind, the ruin and desolation they occasion are too insignificant to admit

of a moment's comparison between them and the forms of imposture that lead men and women to imagine themselves victims of the untold miseries born of a diseased imagination. All classes of society, of both sexes, are exposed to the latter kind of imposture, while the greater their wealth and means of happiness and enjoyment, the greater the harvest they afford the quacks. The dupes of the commercial swindles are often men over greedy of gain, for whose protection it is not necessary to take much trouble. What they lose in money they sometimes gain in common sense and prudence; the investment bringing them in a rich return in a way they never expected. There are many people who in early life have lost their fortune and suffered ruin by some commercial swindle, and who have so far profited by their first experience, as ultimately to become wiser and better men. No such compensating process, however, can be alleged for the man or woman who has suffered loss of health, and whose mind and body have been ruined by the withering touch of quackery.—*Dr. Lory Marsh's "Book about Shams."*

The Hospital Accommodation at the Belper Workhouse.—It will be seen from a report of the last meeting of the Belper Guardians, that the Poor-law Board have intimated to the Guardians at Belper, that unless they take some steps to remedy the defects in the Hospital accommodation, which their own special committee unanimously recommended them to do, the Board in London will issue an order to have what is necessary done. The Guardians on Saturday decided to have the letter printed, and a copy sent to each member of the Board, with a summons, to discuss the question next Saturday week. The Poor-law Board intimate that the provision required might be made at a less cost than that which the architect employed estimated would be required for carrying out his plans. At the same meeting Mr. Huish, and Mr. W. Waite, of Duffield, waited on the Board to repeat a request for the appointment of an Inspector of Nuisances at Duffield, where fever prevails, and where sanitary restrictions seem to be greatly needed. The appointment is to be made next Saturday. We hope that next Session the Government will secure the passing of a measure which will provide for every village and rural district a simple and effective means of local Government.—*Derby and Chesterfield Reporter.*

The Burton Sewage.—A weekly paper says:—The Improvement Commissioners at Burton are experiencing the difficulty which has arisen in almost every place where sewerage has been carried out without adequate means being provided for its disposal and disinfection at the outlets. The people who live near the place of exit of the sewage have for some time been threatening an application for an injunction. A large sum has been expended on tanks at Stretton, but the complaints have not ceased, and at the last meeting it was reported that Mr. Leech, of Derby, who acts for the complainants, had renewed the threat of an injunction unless the nuisance were abated, which the Board contend has already been done. As yet the mode of dealing with offensive matter generally adopted in towns only resembles the children's play —"Pass it on."

Naval Medical Service Competitive Examination.—Names of the successful candidates who passed the recent competitive examination for admission into the medical service of the Royal navy, held at the London University between the 7th and 10th November, in the order of merit in which they passed, and the number of marks obtained:—Richard William Coppinger, M.D., Queen's College, Cork, 2,060 marks; William Edward Robson, Royal College of Surgeons, Ireland, 1,700; Robert Waller Biddulph, M.B., Trinity College, Dublin, 1,340; John Jennings, Queen's College, Cork, 1,290; Marcus Allen, Dublin University, 1,205; Henry Beaumont, Royal College of Surgeons, Ireland, 1,130.

British Association.—Dr. Hirst resigns the General Secretaryship of British Association, an honorary post which he has long filled with the greatest advantage to Science.

Royal Society.—*Nature* believes that Mr. W. Spottiswoode will succeed the late Dr. W. A. Miller as Treasurer of the Royal Society.

Apothecaries Society of England.—At a court of examiners held on the 10th inst., the following gentlemen were admitted licentiates of the Society of Apothecaries, viz.:—Messrs. John Heyes Anderton, of Leigh, Manchester; William Cotterill, of Westport, New Zealand; Augustus Edgar Burch Love, of London; and Frederic William Skrimshire, of Hotl, Norfolk. And at the same court Mr. Russell Watson, of University College Hospital, passed the primary professional education.

NOTICES TO CORRESPONDENTS.

☞ Correspondents requiring a reply in this column, are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Out of thousands of such persons it may cause enquiries so signed, on very various subjects much confusion.

*** We must also request our Correspondents to write only on one side of the paper and in *legible* characters. We are often compelled to consign MSS. to the waste-paper-basket merely because it is illegible.

Correspondents not answered in the current Number are requested to look to the Notices the following week.

Dr. Davis, Newry, Dr. Phelan, Mitchelstown, Dr. Nixon, Shinrone, Dr. Deverill, Ardglass.—The *Irish Medical Association Journal* was unavoidably omitted last week.

Dr. Greene, Kilmacthomas.—Letter to hand shall be inserted at earliest possible date.

Pressure on our space obliges us to hold over several abstracts of Introductory Lectures and other communications.

B. A.—You will have no preliminary examination to pass for the fellowship as the degree will be accepted. By all means arrange for that diploma if you intend to practise surgery. The M.B. of your own university would be an excellent medical qualification.

The Editor of the *Medical Mirror* writes to express his regret at some articles quoted from the Medical Press and Circular having appeared without acknowledgement of their source, the printer having forgotten to place, as directed, the name of the Medical Press at foot.

Chirurgus.—Common courtesy would have prevented the misunderstanding. You ought not to have visited the patient. Call on your neighbour, offer an apology, and we hope your former pleasant intercourse will be resumed.

Alpha, Beta, Gamma.—Your *nom de plume* is probably distinct enough. That is better than the confusion we sometimes have. Your qualifications are quite sufficient for the appointment. Send a few select testimonials. Canvassing should be avoided when possible.

Looking out.—We would advise you to apply to Dr. Baxter Langley.

Bachelier-en-Sciences.—You can obtain all the foreign books you want of Messrs. Baillière and Co., King William street, Charing cross.

Puzzled.—It was probably a case of Atalectasis. There ought to have been a P.M.

L. M.—The fee of £2 2s. is very moderate.

P. L.—A division of the fees would be quite right in the case.

L.C.R.—1. You should certainly expect no remuneration for professional attendance on your late partner's widow. 2. We should advise you to make a proposal based on the value of the practice during the past seven years.

F.R.S.—Furnish us with proof of the facts you allege and we promise not to spare the lash, but the position of those involved is so high that, until proved by undeniable evidence, we shall remain incredulous.

Dr. J. H., Horncastle.—Were you to remonstrate with the authorities at your end, you would probably find the annoyance cease. The addresses of our subscribers are printed and checked regularly every week, and the fact of six successive numbers having miscarried, is, in the opinion of our publishers, conclusive proof that some individual has abstracted the copies in transit through the post.

"M. A. B."—The correspondence and advertisements, appearing from time to time, in some of the daily and other papers, and having a signature attached similar to your own, are not likely to be attributed to you; it would be well, however, to adopt some distinctive mark or sign.

Dr. Rooke, the newly-elected Mayor of Scarborough, took his M.D., Edin., 1856; M.R.C.S., Eng., 1858; L.R.C.S., Edin., and L.M., 1855; L.S.A., 1863 (Univ. Edin); he is J.P. for Scarborough, and author of "Debility, the Cause and Consequence of Pulmonary Consumption." "Chapters from the Life of a Young Physician; or, Glimpses of Turkey and the Crimea in 1855-6." "Cod Liver Oil, its Nature and Medical Properties," and other papers.

"THE SEWAGE REPORTS."

To the Editor of "The Medical Press and Circular."

Sir,—Permit me to point out a slight inaccuracy into which has fallen your able writer on the Sewage Question in his contribution of last week. It is an error to class me among the authors of "unprofitable patent inventions" for the treatment of sewage by disinfectants. Condy's Fluid was not introduced by me for that purpose. What I did in connection with this matter was, to demonstrate that in the event of it being determined completely to disinfect sewage, that object could be accomplished by means of my preparation. That the results obtained therefrom were not "futile," may be seen by reference to the table quoted in your last week's paper from Dr. Letheby's report where they are set down as *complete*.

Yours obediently,

Battersea, Nov. 14, 1870. A. B. Condy.

MEDICAL FEES.

To the Editor of "The Medical Press and Circular."

Sir,—May I ask your opinion on a right to fees. Case, a gentleman not twenty-one years old, therefore, not of age in law, applies to me with the sanction of his military tutor, with whom he resides, for professional advice. He is duly informed that my fees are one guinea each consultation, either at my residence or on my visits within reasonable distance, say two miles in town. Over a period of time I was consulted either at my residence or his tutor's twenty-six times, for which I sent in a memo for twenty-six guineas. His father, a wealthy country gentleman, declines to pay the amount as exorbitant, on the ground that his son derived little benefit from my treatment for the skin eruption on his neck, and that his son told him I treated him *for nothing else*, which was a falsehood, as the young man was treated principally by me for another disease, which he greatly neglected, so much so, that I told his tutor of it, and reproved the patient himself, in so much I would not be troubled with him if he did not follow my wishes. Delay in cure decidedly followed his own neglect, and now

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 23, 1870.

CONTENTS.

Introductory Lecture.

ROYAL COLLEGE OF SURGEONS, IRELAND.

SESSION, 1870-71.

INTRODUCTORY LECTURE DELIVERED BY MR. MORGAN, F.R.C.S.I.,

Professor of Surgical and Descriptive Anatomy, &c.

THE PRESIDENT OF THE COLLEGE IN THE CHAIR.

(*Continued from page* 369).

WHILE I have thus sketched out the general tenor of your studies, and the system in which this College has thought best to exercise your minds, I will now endeavour to illustrate one of the most important features of our art; that by reasoning, based on facts, of apparently trivial import, we may ever, as even now, obtain fresh additions to our store in explaining the apparently inscrutable progress of epidemics, the subtle extension of infectious diseases, or the more apparent, yet equally unopened mystery of contagion. For this purpose, I cannot pass by the opportunity afforded by a consideration of the address of Professor Huxley, President of the British Association for the Advancement of Science, last month, whereby a vista is opened of hitherto unseen dangers and unconsidered causes of disease. It is but a few months since Professor Tyndall drew attention to the composition of the floating particles in the sunbeam of our rooms, and of what materials they may consist. The consideration of these constituents may well excite our curiosity when we find that they may contain living organisms, capable of indefinite propagation, and that, undoubtedly, they can be found to affect living bodies, and be carried in their very circulating fluid.

The theory of Biogenesis started by Redi, has been the subject of much discussion and interest; and the simplicity of his experiment can on this subject be likened to Newton's apple, as the cause of a train of thought being directed to a subject of much import. The progresssive development of this theory, and the series of experiments by Needham, Spallazani, Helmholtz, Schroeder, and Pasteur, gradually carry with them increasing conviction in the existence of atmospheric germs of disease, capable of rapid and copious development as living organisms.

The immense improvements in optical instruments have opened up vast sources of wonder—living specs can now be detected one-forty-thousandth of an inch in diameter. Organisms can be seen in the blood to which the discs themselves are as Brobdinags and Lilliputians. Could Galileo have gazed through the telescope of Lord Ross, what would have been his ideas? Mere spots of milkiness in the heavens, appearing as worlds and systems. What would have been his sensations as he would gaze in wrapt attention while they careered through space? The same applies to the microscope and other instruments of modern make. It is no wonder, now, that extraordinary progress has been made in accuracy and in definition of objects under examination, that we should hope for increased knowledge as to the secrets of contagion and the extension of epidemic diseases.

The remarkable explanation of the Pébrine, or silkworm disease—the existence of microscopic organisms in the shape of the Panhistophyton, and the permeation of these throughout every part of the caterpillar, in the circulatory fluid, and even in the undeveloped eggs of the moth, is extremely interesting; and, as the existence of these organisms, in the shape of cylindrical corpuscles of 1-6th thousandth inch in diameter, or, in fact, one-half that of our own blood discs, can be demonstrated beyond doubt, there is no difficulty in conceiving the importance and bearing of such observations. Indeed, in this very Panhistophyton, we may have, in so insignificant a creature, a practical illustration of contagion, infection, and hereditary taint.

May not these facts which have been proved by earnest and careful study and patience throw some light on the destructive influence of the pyæmic poison, which has so plagued the camps and the hospitals on the Continent, which has carried off so many victims, and has vitiated the greatest care and anxious efforts of the surgeon. May not

the germ of pyæmia be wafted unseen, or carried by friendly hands, may have been unconsciously disseminated on the suitable ground of open wounds, or suppurating surfaces. May we not hope that by directing our attention more closely to this startling subject of the existence of contagious and infectious floating organisms, that we may remove or alleviate this plague. How far the advance in our estimate of floating dangers is of importance, may be gathered from some remarkable facts known to the physician. Thus, in hay asthma, where the most intense distress and *malaise* is caused in some individuals only, by the floating particles of certain herbs. There seems no doubt but that there is a direct irritation by the particles carried through the air, for if you remove the person from the district, or let him wear a cotton respirator the attack ceases directly. May we not in this phenomena, coupled with a more close investigation of the floating germ process, *at least hope* to obtain some clue as to the prevalence of that terrible scourge of our island—consumption ; attacking, as it does so often, the fairest and most promising, when just bursting into manhood or womanhood, too often suggesting the touchingly poetic sentiment, that—

"Heaven gives its favourites easy death."

May we not venture to see in the evidence of contagion, which is not unfrequently forced on some, proof of a process analogous to the Panhistophyton, I have alluded to. If herbaceous particles can be wafted along of such extreme minuteness, as to be capable of filtration by a cotton respirator, and yet when admitted cause the most intense irritation of the pulmonary membrane, in certain temperaments, may not the victim of phthisis breathe forth germs, as in the instances quoted, which will sooner or later, when deposited on a suitable soil, fructify to the destruction of the recipient. The idea may seem startling, but with the present direction given to our knowledge, and the incontrovertible evidences that such things do exist, we should studiously and anxiously enquire into these occult mysteries.

During the past year, we have witnessed the most acutely debated arguments as to the cause and propagation of metria—a disease peculiar to the puerperal condition. An institutions of municipal importance, as a lying-in hospital, and affording vast relief to the city, has been called in question as to its suitability for its purpose, owing to the occasional and fitful eruption of this dangerous and insidious disease. The most keen discussions have taken place as to the cause and origin of this inscrutable affection. Yet, may we not learn a lesson from the microscopical morbific germs of the fly or the silkworm, or the floating particles of the sunbeam in our rooms, and nothing daunted by the difficulties, still seek to ascertain the means by which such fatal diseases are propagated—in what consists the morbific agent, and how they may be neutralised. Another exemplification of the extraordinary power of these corpuscles : as I have mentioned, is that from their minuteness not only do they swarm in every tissue of the caterpillar's body, but they also in the imago or moth, pass into the undeveloped eggs, so that we have absolutely a disease, which is not only contagious from one individual to another, but in the ova the lethal corpuscles are found. Here, again, may we not from this seek some analogical information in considering the remarkable contagious disease which causes so much misery to the individual, so many premature and early deaths, and so many deteriorations of the offspring. It is not unreasonable to presume that microzymes may here exist, as in the fluid of vaccinia, sheep pox, or glanders. M. Chauveau and Sanderson have shown that in the fluid of the vacccination vesicle certain particles exist, which are not diffusible, but are suspended and floating in the lymph ; these microzymes are so small as one-twenty-thousandth of an inch in diameter. We have seen already that germs half that size have been found to exist in solutions, and that the Panhistophyton of the silkworm is not only circulated in the blood, but is actually found incorporated with the contents of the ova. It may, therefore, be readily understood that particles, such as these microzymes, of the vaccination vesicle, may readily gain admission to the circulation, and so influence the system as to impress it permanently for life.

The doctrines of Biogenesis and Abiogenesis have had, and still have, their supporters; but whatever be their mode of propagation, the existence of such floating and living organisms is of great interest, and, if studied carefully, may furnish us with a further insight into the nature of contagious infection and hereditary transmission. The subject may well commend itself to your consideration.

A word now as to your hospital practice—that great field where you are to learn the business of your life—where you are brought face to face with disease and accidental injuries, and become conversant with the many and wonderful varieties of the ills of our flesh. The importance of hospital study and clinical study is increasing daily. For your own information and credit sake you must there seek constantly and assiduously for that practical information which alone can enable you hereafter in life to withstand disease to the face—to feel confidence in yourself and inspire your patient with confidence in you. How could you presume to undertake the care or safe conduct of a disease if you had practically been unacquainted with its form. You will, therefore, understand, gentlemen, that the course of study you have initiated, many of you to-day, is to be pursued steadily, and step by step. As students, your motto must be, "*Nihil per saltem.*" You must keep the goal you are determined to reach ever in view. You will master each department and branch of our art one by one, and so fit yourselves for the practice of a profession which has been the just pride and ambition of so many great and good men. Before long, I doubt not, that the testing of your information, and advance in professional knowledge, will be made more progressive even than now, and that a system of examination shall be adopted by this College, which will, I think, be more conducive to your equable and gradual training, ensuring at the same time a more close acquaintance with the special departments to which your attention is directed, which are so essential to the more perfect practice of your profession. Having become members of that Profession, you will ever remember, gentlemen, to support its honour, its dignity, and its truth, in such a manner as will best become those whose privilege it is to be concerned about the tenement of the Divine anima ; who have sought to investigate the mysteries of the body, made after the image of the Omnipotent Creator, and who are the frequent witnesses of the final and solemn liberation of the sempiternal spirit from "the body of this death." You will ever keep in view the good of your fellow man and your country's. You will remember that the great object of our investigations is *truth*. All the success of our researches and our labours depend on it. The sentiment uttered by the great and admirable moralist, so many years since, to us happily applies—

"Still in thy right hand carry gentle peace
To silence envious tongues—
Be just and fear not—
Let all the ends thou aims't at be thy country's—thy God's and truths."

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS, EDINBURGH.—INTRODUCTORY ADDRESS IN THE MEDICAL AND SURGICAL SCHOOL.

By Dr. Joseph Bell.

After congratulating the students on their choice of a school of medicine, Dr. Joseph Bell said :—Edinburgh had for centuries been a noted centre of education, and for nearly 200 years unrivalled in the world as a Medical School.

The explanation of this undoubted fact might possibly be that the proverbial industry and perseverence of Scotchmen had given Edinburgh many hard working and accomplished professors; but he believed the main reason was because it consisted of two rival or apparently rival but really co-operating schools, which were so near each other as practically to be under the same roof. He referred to the losses of the University. Simpson, the versatile, many-sided, many-counselled, shifty man, whose never-resting, inexhaustible brain found relaxation in change of labour. Full of expedients, eminently helpful, loveable, and winning; inventive almost to a fault, yet still eminently practical; one who could not only use his own brains, but show others how to use theirs—the difficulty with him was to believe that he was one, not legion. He was Ulysses in his travels, and his shifts; Marquis of Worcester in his century of inventions; Captain Grose in his love for antiquities; a voluminous author, the best of nurses, a noted pamphleteer, besides in the intervals conducting probably the largest practice ever attempted by one man in Scotland. It would be many years before Edinburgh, Scotland, and the world even recognised what a loss that was when Simpson died. How could he trust himself to speak of Syme, the grave, honest, manly gentleman—the man who had done more for surgery, had been favoured to make more actual improvements than any other man who ever lived?—the teacher who somehow or other taught his pupils what they wanted to know, not by fluent oratory or eloquence, but by a sledge-hammer directness, brevity, and pith; the faithful friend, the fearless foe—his death was not only a public misfortune, but to many of those present a personal affliction. Dr. Bell then referred to the profession the students had chosen, and, in the first place, said he believed that many of them were unfit to begin the study of medicine as they ought, owing to the previous misdirection of their studies. He did not disparage properly-directed classical studies, but he did think the devotion of the student's whole energies from the age of ten to seventeen, wading through Latin poets or Greek prose, with intentions of making nonsense verses and getting up the loves of the gods and the murders of heroes, did not train the mind for medical studies. Anatomy they must know, and also the first principles of chemistry, if they wished to escape the accusation of pouring drugs, of which they knew little, into a body of which they knew less. The importance of a knowledge of physiology could not be over-estimated, but he was unable to see that botany and natural history were "necessary" parts of a medical curriculum. Medicine and surgery must be taught in the lecture-room but learned at the bedside. The pathology they read and heard of, and watched in the sick man's sufferings must be followed to the *post-mortem* theatre and verified or corrected there. They must study therapeutics: the actions and uses of remedies, and they must thoroughly master dietetics. The kitchen range was a far more important agent than the druggist's shop; the cookery book quite as worthy of study as the pharmacopœia. He could not see the use of stuffing students' heads with such pernicious absurdities as the colour, taste, smell and appearance of drugs, the tests of their purity, habitât, origin, price, and adulterations. The student must learn the use of his hands and also of his tools; also a little optics and acoustics. In a word, a well-educated medical man must emulate the versatility of the Admirable Crichton, the observation of Aristotle, and the inductive powers of a Bacon. Dr. Bell concluded by referring to the manner in which medical gentlemen should conduct themselves in their relations with their patients and others.

THIS evening, the 23rd, Dr. De Berdt Hovell will bring forward his views "On Hysteria," at the Hunterian Society. Members of the Profession are invited to attend and take part in the discussion. The Society meets at the London Institution, Finsbury Circus, at eight p.m.

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the MEDICAL PRESS.)

No. XIII.

PRECIPITATION OF SEWAGE WITH CAUSTIC LIME.

AT first the patentees of this process were so sanguine of commercial success, and entertained such extravagant opinions of the fertilising power of the dried sewage precipitate, which they called "sewage guano," that great and unnecessary expense was encountered in the construction of the works at Tottenham and Leicester. They were built, in fact, with a view to commercial profit rather than for sanitary purposes; and, therefore, as soon as it was found, from experience, that the manufactured product had little or no agricultural value, and that the undertaking was unprofitable, the works were abandoned by the patentees, and transferred to the local authorities. In the case of Tottenham, the machinery and plant erected at great cost by Mr. Higgs were purchased at an almost nominal price by the local board, who could, therefore, have well afforded to use them properly for sanitary purposes; but instead of this, although ample proof had been furnished of their sanitary capabilities (as witnessed by the testimonial of the Board to Mr. Higgs in the month of February, 1857), yet they were so neglected and improperly managed as to have become at last a mere pretence of the objects for which they were designed and employed. The contrast, indeed, between the condition of things in 1857, as described in the testimonial of the Board, and subsequently, was most marked; for at that time, to use the language of the testimonial, "the supernatant water was discharged in a comparatively pure state into the river," so that "the Board, by these means, was able satisfactorily to sewer and drain their populous district, and dispose of the sewage without annoyance to anyone." Almost as soon, however, as the works had passed into the hands of the local authority, the process was so imperfectly conducted that the trustees of the River Lea were obliged to commence legal proceedings on account of the pollution of the river, and the nuisance created by the discharge of foul undefæcated sewage from the works; and this at last became so serious that an injunction was obtained to prohibit the offensive practice of the Board. In this manner the local authority became involved in expensive litigation, which might not only have been altogether avoided, but which, by being avoided, would have cost far less of the public money.

At Leicester, the sewage works, which were erected by the patentee and his company at a charge of from £30,000 to £40,000, were handed over to the local authority, according to the original agreement, free of cost; and from that time (1858) until now they have been used for sanitary purposes. At first they were

managed with considerable success, so that the River Soar, which receives the defæcated sewage water, was maintained in a wholesome condition; but lately the process has been seriously neglected, and the river is fast becoming as foul as it was before the works were erected. At the close of the year 1867, when we last visited the place, the operations at the works were as follows:—The City of Leicester, which is well sewered and drained, had a population of about 90,000 persons, and the water supply was from twenty-five to thirty gallons per head daily. The sewage, therefore, ought not to have exceeded three millions of gallons per day, but in reality it amounted to from four to five millions of gallons a day, so that it was evidently much diluted with subsoil water. The main sewer conveys the whole of the sewage to the works in the Abbey Meadows, which are on the bank of the River Soar, about half-a-mile from the town. On reaching the works the sewage is discharged into a well, from which it is lifted to a height of fifteen feet by two Cornish engines, each of 25-horse power, working night and day, according to the rate of flow. Each stroke of the pumps also delivers a graduated quantity of cream of lime, which mixes with the sewage in the channel into which it is pumped. It then passes into a trough about forty-five feet long, where it is violently agitated by means of revolving stirrers extending the whole length of the trough. This flocculates the precipitate occasioned by the chemical action of the lime upon the sewage, and so facilitates the subsidence of all suspended matters. It then flows into two subsiding tanks each sixty feet long and forty-five wide, having a shelving bottom which slopes from a depth of four feet at the sides to seventeen feet in the middle, where there is a channel or gutter with an Archimedian screw-race thirty-two inches in diameter, leading to a well provided with a Jacob's ladder of endless buckets. Here the great bulk of sedimentary matter is deposited, and the supernatant water flows over a cross weir into two other subsiding tanks, which are 120 feet long and forty-five feet wide, the bottoms being, as in the last case, on a lateral incline which slopes from a depth of six feet at the sides to nine feet in the middle, where there is a gutter that leads into the channel just mentioned. These tanks are covered; and the defæcated sewage leaves them by a shallow weir, about three-quarters of an inch below the surface, and falls into the main channel, which conveys it to the river. The total time of flow in the tanks is about four hours, and the lime was said to be used in the proportion of one ton per million gallons of sewage—that is, at the rate of 15·68 grains per gallon, but there is good reason for believing that this quantity was not actually being used. The main depositing tanks are worked alternately for about three weeks or a month, when the sewage is diverted, and the consolidated precipitate is driven forward to the well by the Archimedian screw, which rotates in the centre channel of the tank, and it is thence drawn up by the Jacob's ladder and discharged into a shoot which conveys it to the outside pits, where it drains and consolidates. The covered tanks continue in operation for about three months, when the sludge is scraped into the screw channel and so removed. The precipitated matter is exposed to the air in large quantity for a considerable time before it is sufficiently consolidated to sell for manure; and even then it contains from 30 to 40 per cent. of water.

The following was the composition of the sewage before and after this treatment:—

Constituents per gallon.	Raw sewage.	Effluent water.
	Grains.	Grains.
Solid matter in solution . .	60·33	48·33
Organic matter . . .	8·50	4·68
Ammonia	2·236	1·471
Ditto organic . . .	0·160	0·120
Nitrogen as nitrates . .	0·025	0·193
Oxygen required to oxydise .	0·969	0·750
Matters in suspension . . .	11·45	4·54
Organic matters . . .	6·63	0·63
Mineral ditto . . .	4·82	3·91

The matters precipitated from the sewage by the lime, together with the carbonate of lime so formed, amounted to 36·72 grains per gallon, of which 14·93 were organic, and 22·39 mineral. This shows that the lime was not being used at the time of our visit in the estimated quantity of 15·68 grains per gallon of sewage, as this would have produced at least 32·82 grains of mineral matter. The precipitate has been frequently analysed, and it generally contains in its dry state from one-third to nearly half its weight of organic matter, with about 2·5 per cent. of phosphate of lime, and about 1 per cent. of nitrogen, capable of yielding about 1·21 per cent. of ammonia. The value of the manure has been variously estimated by agricultural chemists at from 13s. 6d. to 17s. per ton; but the price realised at the works is only about 1s. a load. In its dry state, however, a good deal of it is sold to manure makers for 7s. 6d. per ton. The annual cost of conducting the works is about £1,400 a-year, of which £400 is returned to the Corporation by the sale of manure. This loss, which is inconsiderable in a sanitary point of view, and which might be much diminished by proper management, has led to greater and greater neglect in the conduct of the works, until now, as we are informed, the sewage is so imperfectly defæcated that the river is fast becoming as foul as it was in 1855, when the works were established by Mr. Wicksteed; and it is not unlikely that the foul condition of the river may be wrongly attributed to a failure of the lime process, *per se*, rather than to the carelessness and false economy of those who have had the management of it.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

DUST AS A FERMENT.

By Charles R. C. Tichborne, F.C.S., M.R.I.A.,
Chemist to the Apothecaries' Hall of Ireland, &c.

The celebrated lecture and papers upon "Atmospheric Dust," published last year by Professor Tyndall, brought prominently before the public a subject which is intimately connected with the one which I have taken for my text on this occasion, and which for many years I have looked upon as one of our most fertile sources of disease in large towns, having, in 1866, when the cholera was raging in Dublin, drawn attention to the dangerous character of our street dust.

It is, however, my intention, in the present paper, to place simply on record some experiments which have been performed from time to time which bear upon this most important subject.

Metropolitan towns are unfortunately those which, as a rule, suffer most from zymotic diseases, for the accumulations in a town of importance bring their attendant ills. Every acre of buildings, and every increase in population, bring irremovable dirt. The vitiation of localities is not merely a matter of the numerical proportion of the inhabitants, but it becomes changed in character and more dangerous from the destruction of the numerous compensators or renovators provided by nature. The population seek suburban dwellings, and expend fabulous sums in the extra expenses incurred thereby. Those who are forced to remain in the seething mass are, but too frequently, those who suffer most from this dirt, and who, from their careless habits of living tend most towards its advancement.

A good supply of water has been insisted upon for many years, and sanitary measures have been taken in most large towns in regard to this important subject. The gaseous condition of the atmosphere has also received some considerable attention, particularly in connection with the effects produced by manufactories. I cannot help thinking that, as regards epidemic diseases at least, the influence of these sources of contamination has been a little exaggerated, except in the cases of a few of the direct blood-poisoners, such as sulphuretted hydrogen. A most important substance, however, in connection with our sanitary condition, is what has been termed "Atmospheric Dust," or the floating solid constituents of our air. Although well known, it was not much investigated from a scientific point of view in this country until Dr. Tyndall, Professor Lister, and a few others drew attention to it. Tyndall in his experiments has demonstrated, however, one important point, namely, that this "Atmospheric Dust" may be viewed as organic matter. But its proximate analysis is one of extreme difficulty, and the researches which have been made in this direction do not throw much light upon the subject. Dr. Angus Smith has, however, with great perseverance, worked out some valuable facts, bearing upon this part of the investigation.

It is evident from the difficulty in giving a critical examination of atmospheric dust that the point of enquiry tends more in the direction of the local pabulum of these particles, and here it may be as well to state I strictly confine the term atmospheric dust to that dust which floats at a certain altitude, and which has been winnowed from the inorganic particles, if we except small traces of sodium that are not worth consideration. It is this organic portion that contains the germs which, if not absolutely essential to all changes coming under the names of fermentation and putrefaction, are the prime movers in such phenomena. As Professor Lister says: —"The sporules, besides being produced in incalculable multitudes, are of extreme minuteness, and constitute a very fine dust, which cannot fail to be wafted and extensively diffused through the air." "The particles of dust which are rendered visible to the eye by being illuminated are gross compared with the sporules of a fungus."

As regards much of the pabulum of the atmospheric ferments and the ferment itself, it lies on our shelves, floors, and streets. This is the nest in which germinal matter is fostered and wafted through our atmosphere. Each dust must partake more or less of the local condition of the place.*

The following paper is written with a view to give the analyses of some of the dusts, which, to a certain extent, may be considered as typical; also to determine as far as possible their chemical activity as ferments, or their adaptability to become ferments.

Street Dust.

The two following samples were taken from our principal streets, both of which are paved with a very hard and non-absorbent stone.

Grafton Street Dust, dried at 100 deg. C.

Inorganic matter - - - - -	68·9
Organic ,, - - - - -	31·1
(Containing nitrogen, 1·37) - - -	
	100·0

Nassau Street.

Inorganic matter - - - -	54·8
Organic ,, - - - - -	45·2
(Containing nitrogen, 2·1) - - -	
	100·0

* Dr. Percy says that the Library of the British Museum gives a dust having 50 per cent. of organic matter in it. ("Dust and Disease," page 4.)

The organic matter in both these dusts consisted of stable manure finely ground; a glass of very low power was all that was necessary to prove this fact, but part of it, from its minute state of division, was evidently very old.

Nassau Street Dust was taken from the locality of a cab stand, and the organic matter was here in an incipient state of change; it exhibited traces of ammonia, whilst dusts as a rule generally give, if anything, a slightly acid reaction. Street dust, then, consists of stable manure and stone finely ground; the traffic supplying the grinding power. On a macadamised road, irrespective of the effects of the traffic, the inorganic matter greatly preponderates, and as it is soil with which the animal matter is attenuated, the mischief is at its minimum. Not so as regards the streets of large municipal boroughs, which are generally paved with a hard stone, which would have no other effect upon this substance than that of an attenuator.

Dust taken from the Top Seats at Merrion Hall, Dublin.

Organic matter - -	32·1
Inorganic matter - -	67·9
	100·0

Dust from Gallery of the Theatre Royal, Dublin.

Organic matter - -	53·2
Inorganic matter - -	46·8
	100·0

Dust from the Ventilatory Space above the Gas in Ancient Concert Room, Dublin.

Organic matter - -	35·7
Inorganic matter - -	64·3
	100·0

These three last specimens as regards general appearance resemble each other considerably. Merrion Hall is the largest place of worship in Dublin, and is comparatively a new building. The other two buildings are much older. The Theatre we presume receives a much greater number of visitors in the course of the tenanted months. All these buildings are well ventilated. The large amount of iron in such dust is peculiar; for instance, that obtained from the Ancient Concert Rooms gave twenty-one per cent as the amount of peroxide in the inorganic matter. This is probably due to a slow combustion of the gas burner.

Dust from the Walls at the Top of Nelson's Pillar, Sackville Street, Dublin.

Organic matter - -	29·7
Inorganic matter - -	70·3
	100·0

Height, 134 feet.

This monument is built of granite, and the residue of inorganic matter in this case, consisted of mica felspar, &c. If we take into consideration the position and the difficulty in not detaching a considerable quantity of stone, although a feather was used, the amount of organic matter was truly extraordinary, and if we put it down as containing over fifty per cent. of organic matter (as actually contained in the dust if it could have been removed by itself), we shall not be far off the mark.

Some further experiments were then instituted to determine how far, and to what extent, these dusts would operate as ferments, and a volumetric system of measuring the intensity of any process of fermentation was contrived. It enables the operator to watch the process much more definitely than he could by ordinary observation. The process is based upon the reduction of the nitrate of any base to a nitrite in the presence of substances undergoing putrefactive fermentation. In these experiments the following precautionary measures were adopted, so that, as far as possible, all the fermentations induced were proper to the ferments used in the experiments.

Distilled water was taken and permanganate of potassium added until a distinct red colour remained, it was then distilled, the first portion being rejected. The remainder was then used for the experiments. The ashes of yeast may be employed to supply the mineral ingredients, but in these experiments a mixture of nitrate of potassium, phosphate of sodium, and a little sulphate of potassium, and chalk to neutralise the acids formed were employed, the pabulum used being a mixture of cane and milk sugar. The mixtures were

well boiled in each experiment in their respective flasks, and after closing with cotton wool and cooling, the ferments were added. They were all placed in a similar position and submitted to a pretty constant temperature night and day, varying from twenty deg., to twenty-eight deg., C.

Expt. 1.—In this case the above mixture, which was found by experience to be one easily convertible into lactate of calcium in the presence of ferments, was submitted for some two or three weeks to the temperature conducive to such changes. It showed no decomposition for fourteen days, but at the expiration of that time there were indications of a fresh molecular arrangement, but no particular development of organisms. This evidently showed that the precautionary method taken for the destruction of the germinal matter had more or less been perfect. The opening and closing of the flask would more than account for the change evinced.

Expt. 2.—In this case ¼ of a grain of nitrate of potassium was used to the fluid ounce of the fermentable mixture. The ferment was the mould of cheese. It was examined from day to day in the following manner:—5 c.c. of the clear liquid were withdrawn with a graduated pipette, and the level of the remaining liquid marked on the flask, so that it can be made up to the original level if there is any loss from evaporation. The 5 c.c. were then mixed with a little mucilage of starch and iodide of potassium added. On acidulating with sulphuric acid, blue iodide of starch was at once formed, representing the $N_2 O_3$ present. A volumetric solution of hyposulphite of sodium was then added until decolourisation of the iodide of starch took place. Each degree of hyposulphite consumed would represent 0·28 of a grain of nitrate as being reduced to nitrite.

	Nitrites.	Nitrates.	Remarks.
After the 1st 24 hours	0·5 hyposulphite consumed.	Present.	Fermenting slowly.
,, 2nd 24 hours	Trace.	Present.	Increased fermentation.
,, 3rd 24 hours	None.	Present.	Vigorous fermentation, thick mycelium, and great quantity of spores.

In seven days the liquid had become thick with the mycelium, and crusts of lactate of calcium began to form; in forty-eight hours afterwards the contents of the vessel were solid.

This experiment was repeated again, but with three grains of nitrate of potassium to the fluid ounce the results were different, for in this case nitrites were present during the whole of the fermentation. This is rather a curious observation, for although the entire of the nitrates was not destroyed; in the first instance we had little or no evidence of the nitrous acid. It is probable that in the reduction of the nitrates preparatory to the assimilation of its nitrogen, a nitrite is the first stage, but that if the ferment bears a considerable proportion to the nitrate present, the nitrogen will be assimilation in the form of some lower compound of nitrogen. There is no evidence of the molecule $N_2 O_3$ during the fermentation, although the supernatant fluid is always slightly acid. One point of importance is evident that, in the examination of potable waters, if no nitrates are present, it is no proof that decomposition is not actually proceeding at the time as regards the organic matter therein.

Expt. 3.—Street dust was allowed to remain some time at a temperature of 20 deg., to 28 deg., C.; it became after a little while covered with a thick mould. This mould acts as a ferment of great activity when placed in the saccharine mixture described above. After being partially dried it seemed more active, weight for weight, than the mould from rotten cheese.

The following results were obtained on fermenting the usual solutions of sugar, &c., with the addition of three grains of nitrate of potassium, and sufficient street dust to represent 1-2000th part of the sugar. (In adding this and the other dusts as ferments, only the organic portion was taken into consideration, the weighing being regulated accordingly.)

Days.	Degrees of volumetric solution of hyposulphite of sodium required to decolourise the iodide of starch from the liberated $N_2 O_3$ in 5 c.c.	Remarks.
2	0·3	
3	3·5	Spores, &c., considerably developed.
4	9·5	Fermentation very active; beautiful mass of mycelium.
5	8·0	Fermentation going on very actively.
6	8·5	Fermentation very strong, large quantity of carbonic acid given off, and thick layers of mycelium on the surface.
7, 8, and 9	8·5, 7, and 9·5	Fermentation on the decline.
10 and 11	1	Liquid had become very thick and crusts of lactate of calcium beginning to form.

Expt. 4.—Was a similar examination of the activity of the dust obtained from Nelson's Pillar, a monument in Dublin, 1-2000th part being used.

Days.	Degrees of volumetric solution used.	Remarks.
2	3·5	Thick coating of mycelium at once formed.
3 and 4	4 and 7	Fermentation going on vigorously.
6 and 7	8·5 and 8·5	Fermentation seemed upon the decline.
10		Quite solid from lactate of calcium; vessels could be inverted without contents falling out.

Expt. 5.—The dust from the Ancient Concert Rooms was obtained from the ventilating space above the public room. This, it will be remembered, contained a considerable percentage of iron.

Days.	Degrees of volumetric solution.	Remarks.
2	trace of nitrite	No perceptible sign of fermentation.
3	1·0	Slight sign of fermentation.
4	3·5	
5	9·0	
7	10·0	
8 and 9	10·0	Fermentation seemed on the decline.
10	8·5	
12	4·0	Lactate of calcium began to form slowly.

Expts. 6 and 7 were, respectively, with dust from the Theatre Royal and Merrion Hall, Dublin. The first was almost exactly similar to the fifth experiment, but the dust from Merrion Hall approached more nearly to the fourth experiment in its results.

In conclusion, I may remark that, although if I had had time to repeat these experiments, many points in the details of manipulation would have been improved, still the results are of some importance.

They conclusively prove the power of dust as an active ferment.* Also the estimation of the $N_2 O_3$ as a criterion of the extent, or intensity, of such an action is, I believe, capable of further development. Thus, a slight fermentation that would not probably be perceived could not escape observation by this method. These experiments, as far as they go, seem to point to a curious phase of the subject—that is, that dust taken at a great height, and in such a position as in the fourth experiment, should appear to have as great, or greater, activity than that which would be obtained from a building which is nightly crowded to suffocation. This, in some measure, may be due to the extreme levity of the spores, which are supposed to be the life of the dust, and which lightness may be described as almost approaching volatility. *There is, probably, an altitude of the maximum of activity for all localities as regards dust.* Dust still is so light that even that obtained in an ordinary house contains a large portion that refuses to sink when thrown upon water; and, even when the vessel is placed beneath an air-pump, a large percentage still

* If it is required to manufacture butyrate or lactate of calcium practically, I would never advise the use of cheese as a ferment, if any active dust could be got (I do not think there will be any difficulty as regards this point); to get rid of the quantity of extraneous matter which is introduced by the cheese, is frequently very difficult. A little dust, separated from the coarser particles by elutriation, is the correct ferment.

floats. To me the activity of the dust taken from the top of the monument 134 feet high is something marvellous—this source so far removed from the busy streets—yet its organic matter contains what is capable of splitting up, in a short time, hundreds of times its own weight.

I am aware that the results obtained, and detailed in this paper, are not so elaborate as I should wish, but they are experiments in which time is an important item; they are, however, quite sufficient to prove the value of such investigations. Microscopy, at present, is not likely to throw much light upon this subject, except in conjunction with some such work as detailed in the present paper.

Transactions of Societies.

THE MEDICAL SOCIETY OF LONDON.

November 14th, 1870.

John Gay, Esq., F.R.C.S., President, in the Chair.

The President exhibited

SOME TRANSPARENT ELASTIC TISSUE, OILED SILK, AND GUTTA PERCHA, FOR DRESSING PURPOSES.

These were not to be affected by heat or moisture, and can be washed and used again.

Dr. Althaus brought forward a girl, aged sixteen years, who had rheumatic symptoms in 1870, followed by paralysis of right arm, sensation and motion were alike lost, but there was no atrophy of the limb nor change of temperature. The interrupted current had no effect on the arm, but the continuous current was followed by muscular contraction, and sensation was restored after four applications; in three weeks she was able to move her wrist; the progress of cure ceased when the treatment was suspended on the girl going into the country; but on the treatment being renewed, a cure resulted which the Fellows could observe. It might be noted here, how the muscular paralysis was not affected by the interrupted current, there was one point against the cerebral origin of the paralysis, its gradual cessation and limitation were also against cerebral origin, absence of paralysis of the intercostal muscles was against its being a spinal paralysis. There was no evidence of hysteria or of lead poisoning, and the absence of nutritive change was against paralysis of the cervical sympathetic. Dr. Althaus believes the paralysis to be quite a rheumatic affection of the right bronchial plexus.

Dr. Wiltshire had seen this case at the West London Hospital. He treated the patient with alkalies, iodide of potassium, and nux vomica, but no medicine did any good, and he sent the girl to Dr. Althaus at the Infirmary for Paralysis where she was cured.

Dr. Althaus then showed a very neat and portable machine made by Caiffe of Paris, for applying the interrupted current; also he showed a battery of fifty cells of zinc and platinum, for applying the continued current. This battery was contained in a box, and when closed, the plates were kept free from contact in vulcanite cells below. By opening the lid fully the cells were raised, and the liquid being thus brought in contact with the cells, action of the battery commenced. The battery was very durable, and gave off no noxious fumes, it was made by Weiss, of the Strand.

Mr. Teevan then showed

A CALCULUS THE SIZE OF AN ALMOND,

which he had removed from the ischio-rectal fossa of a patient at St. Peter's Hospital. The man was forty, and had been cut for stone when he was five years old, recently he had suffered from an escape of urine from the cicatrix, and, on examination, Mr. Teevan found a hard body which he removed by incision, and which proved to be a calculus having facets, so that doubtless it had been at one time in contact with other calculi in the bladder.

The President then showed a calculus which he had removed from the bladder of a very ricketty boy, twelve and a-half years old, it weighed two and a-quarter ounces. He performed the operation a few weeks back, and found it very difficult, owing to the contracted state of the pelvis, the lad was very feeble, and sank some days after the operation.

Mr. John Daniel Hill then read the paper of the evening,

AN ANALYSIS OF 140 CASES OF URINARY STRICTURE, TWENTY OF WHICH HAD BEEN SUBMITTED TO SYME'S OPERATION OF PERINEAL SECTION, AND 120 TO HOLT'S OPERATION OF FORCIBLE DILATATION.

The cases were classified, as—1st. Cases of single stricture; 2nd. Cases of multiple stricture; 3rd. Cases of complicated stricture. In these three classes Holt's operation was performed; the fourth class comprises cases of cartilaginous non-dilatable stricture, usually the result of injury, and these were treated by perineal section. The strictures were discovered as nodular and bead-like to the touch, or as fusiform and elongated. Sixty-nine cases of stricture on the bulbo-membraneous portion of the urethra were cured by Holt's operation; thirty-one cases of multiple stricture were also cured by the same operation. In the 120 cases, there were but two deaths to set aginst the 118 cases, and these took place from congestive pneumonia. The bladder, urethra, and kidneys of one of these fatal cases, were shown to the Fellows, they could see that no laceration had taken place where the stricture had been split by the instrument. The patients were usually discharged at the end of a week or ten days, with instructions to pass a No. 11 catheter occasionally. Cases where no instrument could be got through the strictures as well as those of stricture, where the passage of an instrument was followed by rigors, were treated after Syme's plan of perineal section; the loss of blood was small in the operation, and rarely did any unhealthy action occur in the wound; if there was any relapse, a second operation was performed. Mr. Hill laid great stress on preparatory treatment.

Mr. Barnard Holt said, that he did not desire to say much on the first class of cases, they were simple and easily cured by his operation, the real value of the operation was proved in cases that had been condemned as incurable, and he instanced the case of an officer from India, who had come under his care with stricture and fistula in the perineum, the buttock, the groin, and who had to set over a large pan whenever he made water, as it came from him as from a watering pot; this man's stricture was split, the fistula gradually treated and he got quite well. In another case, the patient was seventy-six years old, and for years he had laboured under a stricture, which was so tight that no instrument could be introduced; by accident, however, Mr. Holt was enabled to pass a very small instrument, and was then able to split the stricture; in three days the patient was enabled to go into the country relieved of his stricture. Mr. Holt considered his operation applicable in all cases where an instrument could be got through, but it was hazardous in cases when the kidneys were diseased. He very nearly lost a patient who had fatty heart and diseased kidneys after he had operated upon him. The man had a very dense stricture, and after it had been operated on he had a rigor, next day he was cold and pulseless, and the secretion of urine had ceased, it was only by great care that he was brought out of his precarious state, as for some time he had all the symptoms of uræmic poisoning. The ultimate results of the operation were good as when Mr. Holt's directions were followed, relapse never took place, and he believed from the few opportunities he had of making *post-mortem* examinations, that in his operation the mucous membrane was not torn, hence their never is infiltration of urine. Mr. Holt never leaves the catheter in the bladder, except in cases of traumatic stricture.

Mr. Teevan said, that he and his colleague Mr. Coulson, had treated more than a 1,000 cases of stricture in St. Peter's Hospital. He preferred the French method of gradual dilatation, by the bougie Olivain as used by Mercier. With this operation a bad result never occurred, and the cure was usually complete in from six weeks to two months' time. He alluded to a paper read by him on stricture at the British Medical Association at Leeds, and in the discussion there, Mr. Stokes, jun., said, that he had seen cases of rupture of the mucous membrane after the splitting operation. After fourteen days, such a rupture of mucous membrane would probably have healed, and so not be found at a *post-mortem* examination made at such a distance of time from the operation.

Mr. Hill in reply, said that with due care he did not think laceration of the mucous membrane need occur.

Yellow-fever is still prevalent at Barcelona. Letters describe the town as quite deserted. Camps are being formed up the mountains—a very wise plan.

ROYAL MEDICAL AND CHIRURGICL SOCIETY.

1st Meeting, November 8th, 1870

Dr. Burrows, F.R.S., President, in the Chair.

A paper was read on the

ELECTROLYTIC TREATMENT OF HYDATID TUMOURS OF THE LIVER.

By Dr. Hilton Fagge, and Mr. Arthur E. Durham.

Based upon eight cases of hydatid disease of the liver successfully treated by electrolysis. The authors believe that this method of treatment has not hitherto been adopted in any other case of the same nature in the human subject.

The operation was performed in the manner recommended by Dr. Althaus in his treatise "On the Electrolytic Treatment of Tumours." In each case two needles were passed into the tumour, and were connected with the negative pole of a modified Daniell's battery of ten cells. The positive pole, terminating in a moistened sponge, was placed upon the surface of the abdomen. The current was allowed to pass for a period varying from ten to twenty minutes, in different cases. The needles were then withdrawn. A little clear fluid in some cases appeared at the seat of the puncture.

No preliminary tapping nor exploratory puncture was made in any case. The diagnosis rested on the facts that the patient had a rounded, elastic tumour projecting from the liver, and that this was *cystic*, as proved by the needles rubbing freely against one another in its interior, although introduced an inch or two apart.

The operation was followed in most cases by rapid diminution of the tumour, which even shortly after the operation became soft and flaccid. At the same time, in some cases, fluctuation became perceptible in the lower part of the abdomen. The authors believe that some of the hydatid fluid probably escaped through the punctures made by the needles, having been possibly forced out by the accumulation of hydrogen gas in the interior of the cyst. The success of the operation would thus appear to depend, not on the direct action of the electric current, but on its effecting, as it were, a kind of subcutaneous tapping; and they suggest that simple acupuncture might possibly be followed by equally successful results.

Slight febrile symptoms, and more or less pain, in most cases followed the operation; these symptoms, however, rarely lasted more than three or four days. In one instance they were entirely absent. In most cases the patients were able to get about in a few days, and some of them were discharged from the hospital at the end of two or three weeks. Even at this early period the tumour had already, in some cases, very manifestly decreased in size; and, as a rule, this decrease, when once it had fairly commenced, steadily progressed. After the lapse of six months or a year, when each patient returned for examination, no trace of the diseased remained; or, at most, there was only some ill-defined fulness of the epigastrium.

In one case only the result still remained doubtful. In the remaining seven cases the favourable issue above described had already taken place. All the patients were in perfect health. In each of them the tumour had been large, and in at least one instance it had reached quite unusual dimensions. In three cases more than one cyst existed, and each cyst had then to be electrolysed separately. In the latter part of the paper the results of electrolysis are compared with those of simple tapping—the operation which has hitherto been most successful in the cure of hydatid disease of the liver. The authors claim for electrolysis that it rivals simple tapping in being unattended by immediate danger to the life of the patient, and that it is to be preferred, inasmuch as (according to their experience up to the present time) it involves no danger of suppuration within the cyst, and consequent risk and suffering—results which often follow simple tapping. The authors conclude their communication by referring to a case in which Dr. Playfair, in accordance with their suggestion, treated an hydatid tumour of the liver by simple acupuncture. The results of this case promised to be favourable; but as yet sufficient time had not elapsed to warrant any decided expression of opinion.

Dr. Robert Lee had met a case four years ago. The patient, a lady from Calcutta, had an abdominal swelling which was said to be ovarian, and she was sent home for operation. By chance she consulted him, and he diagnosed pregnancy. Another, however, diagnosed hydatid tumour of the liver, and recommended puncture. The case went on, and she was delivered; but a tumour was left behind which was still pronounced to be ovarian. Puncture caused it to shrink, and it did not recur.

Mr. Hulke said that years ago Dr. Budd had tapped a hydatid cyst, but only a few drops of fluid came away. Some years after the woman died in childbirth, and a shrunken cyst was discovered.

Mr. Barwell asked why two needles were employed, and why they were connected with the negative pole.

Dr. Althaus was glad to find that his suggestion had turned out well, as the treatment by tapping had not been very successful. If electricity was not required, it was good that acupuncture should be employed. Two needles were employed to extend the disengaging surface, and the negative pole was used as developing hydrogen, not oxygen.

Dr. Murchison said it would seem that fluid had escaped from the cyst, and yet no bad action had been set up. Was it advisable to allow the fluid to percolate into the peritoneum, or to allow it to escape? Suppuration generally followed secondary enlargement after tapping. This enlargement generally subsided of itself, The entry of air into the cyst depended on the care taken in tapping, and the use of the aspirator would prevent its entrance.

The authors replied briefly.

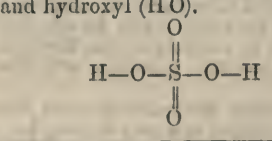
Literature.

LECTURE NOTES FOR CHEMICAL STUDENTS.*

Some six years ago, Dr. Frankland published the first edition of his Lecture-Notes. The work was very favourably received by this and other periodicals at the time, and although it is a work which must be limited in a certain degree as regards its sphere of usefulness, it has been found necessary to issue another edition. In its general character it differs very little from the original form. The book consists of notes to the Course of Lectures delivered at the College of Chemistry during the winter session. "It contains no description of properties of the bodies, but mainly consists of reactions or decompositions illustrated by graphic notation and glyptic formulæ." One of the chief changes is that it is divided into inorganic and organic chemistry, each being published in a separate volume. However unphilosophical such a division may seem, we suppose the author has some good reason for making this division for the sake of convenience in study, for we are told that it has been done at the request of numerous readers.

In the original edition, the graphic notation adopted is modified in the present by the omission of circles surrounding the symbols of elements. Dr. Frankland's book is now so well known that it seems almost superfluous to enter into details about it. He divides and groups the elements as having monad, diad, triad, tetrad, and hexad molecules, and again subdivides them into sections, containing those more closely allied in chemical character. The Greek prefixes representing their quantivalence towards the other molecules. The principal peculiarity of these Lecture Notes is the use, all through Prof. Frankland's formulæ, of thick symbols to indicate that the elements represented by the first symbol of a formula is directly united with all the active bonds of the other elements, or compound radicals following upon the same line. Such thick letter would occupy the centre of a graphic formula thus :—

S O_2 H O_2 sulphuric acid signifies that the hexad atom of sulphur is combined with the four bonds of two atoms of oxygen and hydroxyl (H O).



* Lecture Notes for Chemical Students. By Ed. Frankland, F.R.S. &c. Vol. I., Inorganic Chemistry. Second edition. London: J. Van Voorst. 1870.

In the above notation, H o_2 means $H_2 O_2$ or $(H O)_2$ as it would be ordinarily written, and is called by Frankland hydroxyl. It is a supposed compound radical, and is familiarly known as peroxide of hydrogen.

We recommend these Lecture-Notes to the careful consideration of every student of chemistry that wishes to have more than a superficial notion of his science. The book is evidently a carefully considered attempt to methodically systematize the science of chemistry, or the molecular changes that take place in matter from the action of external force or other cause.

A MANUAL OF QUALITATIVE ANALYSIS.*

The chief additions to this well known work are as enumerated by the author in the Preface :—"1st. Bunsen's Flame Reactions; 2nd. The Detection of the Poisonous Metals and Acid Radicals in the presence of Organic Matters; and 3rd. Additional Tests for the Detection of the Individual Alkaloids, and more complete systematic method for the detection of these Bodies. The new notation has been adopted, and the division of the book into three chief parts, and the arrangement of these parts, will, I hope, be found to be an improvement."

In the text, the author redeems his pledge to the fullest extent, but we cannot help thinking that it is a pity that so good and useful a book, as Mr. Galloway's, should be marred by the egotistic view of the preface, and the uncalled for attacks upon works of world-wide fame. Progressive catechetical questions do not constitute such a novelty in teaching to warrant the author in saying, "That his work is not constructed on the bad system of the 'Giessen Outlines,' and some other analytical works, or on the system of Fresenius, which is quite as faulty and still more *impracticable for the learner*."

Although Mr. Galloway's book might, with some degree of justice, be compared to the "Giessen Outlines," it has very little in common with Fresenius; and we think that for quick teaching (*which for the sake of passing examinations* is now unfortunately so much in vogue) the manual before us might be even a more desirable book than those mentioned. A student enters a Government school with the intention of passing an excellent examination after devoting a few sessions to the study of a gigantic science, and he is generally successful in it if he has any amount of ability. But is this all? Do these young men represent those that in their day are to bear the heat and burthen of their respective sciences? We opine not. As regards the workers in science, the crammed-examination system has been an utter failure. It may have its bright side, but it does not face that way. Besides, why do not authors leave the marked superiority of their works to be discovered by the public. A preface may be synoptical, apologetical, or explanatory—but it should not be an advertisement.

At the end of this same preface, the author gives some excellent advice taken from Carlyle's address to the students of the University of Edinburgh. It is too long or we should be tempted to transfer it hither. It is appropriate to all students but particularly to the analyst. The remarks are worthy of being indited in letters of gold, and hung up in every school of science. "Be honest in all your enquiries" is his text, and a noble one it is. "More and more endeavour to do, think, and keep an accurate separation in your own minds of what you have really come to know, and what is still unknown."

The analysis of proximate animal substances is treated much more fully and artistically than is usually done. They are arranged into groups, consisting of compounds having properties in common. Thus, there is—1. The *Albuminoid Group*, consisting of albumen, fibrin, casein, globulin, vitellin; 2. *Gelatinous Group*, consisting of gelatin and chondrin; 3. *Sugars;* 4. *Alkaloids*, urea, creatinine, creatin; 5. *Acids*, lactic, hippuric, glycocholic, hyocholic, and taurocholic acids; 6. *Cystine, Xanthine, and Cholestrin;* 7. *Colouring Matters.* Then follows a method for analyzing animal secretions, including urine.

The extra amount of care devoted to the flame reactions is a special feature of this book, and renders it more valuable; but why does the author of a "Manual of Qualitative Analysis" ignore spectrum analysis?

Mr. Galloway's works on educational chemistry have all been successful, and deservedly so. His "Second Steps," which, by the bye, we believe, has not appeared yet in the form of a second edition, was a particularly "happy thought," and was a well conceived adventure in scientific book writing. We wish the fifth edition of the "Manual" the success of its *confrères.*

* A Manual of Qualitative Analysis. By Robert Galloway, F.C.S. 5th edition. J. Churchill and Sons. 1870.

DICTIONNAIRE DE CHIMIE.*

This dictionary still progresses in its original high-class tone. We are afraid that it will be some time before we receive a further instalment. We have in the present division an interesting monograph on *Dissociation*, of which subject we have, perhaps, no better notice extant. The work done in connection with it is probably collated here for the first time. We may mention also in particular, the following aricles: — *Densité*, containing drawings of the apparatus used in determining specific gravity of liquids and vapour densities; *Dialyse, Diffusion, Eau*, considered from its chemical and physical point of view. *Ebullition* is a very interesting article upon boiling points, in which it goes extensively into the boiling points in connection with their chemical composition; *Electricité, Engrais* (Manures), *Etain, Ethers*, and *Fer*—the last being profusely illustrated, and treated from its scientific and technical point of view.

* Dictionnaire de Chimie. Par Ad. Wartz. 8 et 9 Fascicules Cyanures—Fermentations. Libraire, P Hachette et Cie, Paris.

Stercoraceous Emanations as a Cause of Disease.

The agency of effluvia and of subterranean percolations from human feces, in producing various forms of disease, is considered by many medical writers as a well established fact. The odour of feces is reported in some cases to have given rise to severe endemics. Cholera is said to have been propagated in this way, and also by percolation from privies into wells at some distance, though the water may appear to be quite pure when tried both by sensible and chemical tests. This fecal theory is the best theory extant for strategic purposes. Wherever man is, feces must be near at hand; and a lively imagination can always trace the subtle poison rising in the air and entering the lungs, or sinking into the earth and impregnating the water of springs and wells, and thus reaching the human stomach. Take the following illustration, from no less a personage than Dr. Anstie: "A country town, without deep drainage, disposes of its sewage in cess-pools; and the limited space in which the houses stand renders it inevitable that the drinking wells should be within a very short distance of the cess-pools. From the latter a continual oozing of decomposing organic matter takes place, and more or less of this finds its way into these wells. For years possibly no particular harm can result. But at length there comes a long, dry summer, which reduces the water to a low ebb, and concentrates its impurities, besides favouring decomposition. In such circumstances typhoid fever breaks out among the persons who drink the water."

Now it so happens that this description applies exactly to the city of Oakland, and has applied to it every year since its existence; and yet there has never been a typhoid endemic in the place, while several sparsely settled rural districts in Alameda County, where the water of springs is used, which could by no possibility be impregnated with such impurities, have been frequently visited by that disease. It is worthy of note that no account is taken by Dr. Anstie of the "long, dry summer which reduces the water to a low ebb," as a climatic cause of disease. There is overlooked in his etiology only as

it affects the water; whereas, every one knows that just such summers are favourable to ordinary autumnal fevers in all malarious regions of country. According to our observation, typhoid and typho-malarial fevers prevail quite as much in California, in rural districts where fecal impurities of the water can not exist, as in towns where wells and cess-pools are in proximity. The towns, indeed, are more exempt than the country.

We never have had any faith in the fecal theory. We regard it as one of the bubbles of the day, which will disappear before many years, and return by-and-by, like a comet from its wanderings, to amuse a future generation of medical philosophers.—*Pacific Medical and Surgical Journal.*

Registered for Transmission Abroad.

THE

MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6

,, If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of A. A. Tindall, 20, King William-street, Strand, London, W.C.

Moffat and Co., 6, D'Olier-street, Dublin.

Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—

New York—Turner and Mignard, Nassau-street.

Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 23, 1870.

ANOTHER MORAL PEST.

Work as christians and philanthropists may, in their endeavours to eradicate evil and raise the standard of morality, they seem on every hand, to be surrounded by unexpected enemies and forestalled by the agencies of wickedness. Sometimes we are protesting against the filth distributed in quack handbills; lately the advertisements of baby-farmers and similar monsters have excited public indignation; now we are desirous of directing attention to another evil, the extent of which can scarcely be measured, but the existence of which may transform the public schools of this country from blessings into curses.

We observed last week in the *Morning Post* and the *Times*, the following enigmatical advertisement which has since been repeated, and has also appeared in other journals:—

PRESENT and PAST PUBLIC SCHOOL BOYS are requested to DESIST from CORRESPONDING with FORMER SCHOOLFELLOWS, unless they will abstain from introducing into their letters topics which cannot be alluded to in the family circle.

What is the meaning of this singular appeal? We learn, upon inquiry, that some estimable people have discovered a practice that has, we fear, existed since the time of cheap postage, and they hope to curb it by an appeal of this kind—a hope we scarcely share, since the men who will thus endeavour to corrupt the minds of young persons can have little sense of honour to which to appeal.

There is, however, a more direct mode of putting a stop to the practice which, for the benefit of those who have just made this painful discovery, we will presently specify.

We are aware that immorality too often forms the staple of the correspondence between past schoolfellows, and, in this respect, is, alas, the sequel of the companionship that has preceded it. Lately, we have had cases brought to our notice in which "evil communications," in the shape of demoralising letters, have been addressed by persons—we cannot call them *gentlemen*—who have entered the army and other services, to their former schoolfellows, often very much their juniors.

This point of age is one of the most important; for we have found that men of twenty-four or twenty-five have been writing in the most abominable way to boys of fourteen or fifteen, and have even made appointments to meet them at immoral houses, and, of course, we may presume, they have introduced these mere lads to many forms of vice; in fact some of the correspondence seems to imply that the writers have sounded every depth of iniquity.

In presence of such immorality, we are not surprised at the action of those who have issued the advertisements we have quoted. Parents and relatives, especially mothers and sisters, must be inexpressibly shocked when such disclosures are first made, and ready to take any step to stop their loved ones being further corrupted. But, as we have said, this appeal is not likely to succeed, and we now beg to offer a suggestion which, if more severe would, perhaps, be more effective.

We would propose that parents, guardians, or heads of schools, into whose hands such filthy letters should fall, should publish the names, addresses, and occupations of the delinquents. Such an exposure would brand them with the infamy they deserve, and for ever shut the door of respectable Society in their faces. The fear of such a punishment would act as a most powerful deterrent, and we almost fancy that the publication of a determination so to act, would be so effective that we should hear no more of "officers and gentlemen" indulging in such "superfluity of naughtiness."

DEFECTS OF MEDICAL EDUCATION IN DUBLIN.

At the last meeting of the Medical Society of the College of Physicians of Ireland, Dr. Stokes read a remarkable communication "On some Requirements in Hospital Teaching in Dublin." Having reviewed the awakening of Medical Science in Ireland subsequently to the year 1820, he asked whether it could not be said that we are now drawing upon the prestige of former labours. He thought the Irish School had not kept pace with those modes of investigation which depended on physical science. He said it must be admitted that the English and Scotch Schools were in advance of Ireland in such a direction. In Ireland all educational facilities are dependent on charity, and teachers are dependent on private practice, while on the Continent such objects are amply subsidised by the State, and the teachers devoted solely to their didactic duties.

He considered that Ireland cannot yet compete in the domain of scientific medicine, although in the more superficial practical study it still maintains its position. It is

clear that the Irish School is deficient in the use of the best method of investigation. "The modern world," Dr. Stokes said, "is full of artillery, and yet we send forth our children to the battle with the shield and sword of the ancients."

He deplored the absence of systematic education of students in investigation in all Irish Schools, and compared the condition of Ireland, in this respect, with London, Oxford, Cambridge, and Edinboro'. He thought that to every hospital in Dublin should be attached a physical laboratory for the scientific investigation of diseases; and, in this respect, he considered their condition deplorable.

On the motion of the Reverend Dr. Haughton the debate on Dr. Stokes's paper was adjourned, and will occupy the attention of the Society at its next meeting.

SCOTLAND.

EDINBURGH.—Last Wednesday the managers of the Infirmary met to reconsider the subject of the admission of female students to clinical instruction. The seven female students, in a memorial of considerable length, claimed admission to the hospital—1. Because the University and the Colleges of Physicians and Surgeons have recognised their right to study medicine, with a view to graduation. 2. To this end two years' attendance at a general hospital is essential. 3. That the only hospital in Edinburgh supplying the necessary qualifications is the Infirmary. 4. That it is the invariable custom of the managers to grant admission to students, and no statute exists limiting admission to students of one sex only. 5. That as registered and matriculated students they are entitled to be admitted in terms of the manager's advertisement. Their pecuniary loss was also urged, if the tickets of their admission were refused, and an opinion expressed, that no objection could be raised to their attending clinical teaching even in the male wards, which does not apply with equal force to the instruction of male students in the female wards; and, finally, Miss Blake, in a separate note, asserted that no attempt would be made by any of the seven to enter the wards of those physicians and surgeons who object to their presence there. Against the first of the above reasons Dr. Gillespie, President of the Royal College of Surgeons, publicly protests as being calculated to convey the impression that sanction has been given by the Royal Colleges to female education in medicine, while it yet remains to be seen whether these corporations have, either the power or the inclination to legislate on the subject. In a short statement 504 students of medicine petitioned the managers of the Infirmary to refuse the application of the lady students in so far as it referred to the usual visiting hours, on the ground that if ladies were admitted at the usual hours many subjects would, probably, be imperfectly treated, or omitted altogether; or, in the event of such subjects being entered into, they should feel themselves compelled to abstain from being present. Had circumstances so distasteful to them been foreseen, they would have materially influenced them in their choice of a school of medicine. The managers have, by a majority of four, adhered to their resolution, and declined to issue tickets to any female student. It is stated that the female students, with singular pertinacity, intend taking legal advice on the subject.

The various medical societies have resumed their meetings. The Royal Medical, the most celebrated student society in Britain, was opened with an address by Dr. Haldam. This, its 133 session, promises to be prosperous from the number of applications for membership which have already been received.

We regret to say that the University students, those who have but begun their medical studies, are inclined to be somewhat lacking in courtesy to the females attending lectures in the College of Surgeons. We trust they will see the impropriety of this, and—let them alone!

ABERDEEN.—Additions are about to be made to the Lunatic Asylum, which will accommodate between sixty and seventy patients. The cost is estimated at £2,850.

According to the Registrar-General's monthly return the deaths of 1,942 persons were registered in the eight principal towns in Scotland during October. Allowing for increase of population, this number is 247 under the average of the month for the last ten years.

The managers of the Edinbugh Royal Infirmary have declined finally to grant tickets of admission to the female students.

Notes on Current Topics.

About the War and Wounded

IT appears likely that the English ambulance sent to Versailles will be of no service. The Germans assumed too much authority over the English Surgical staff. Half that staff have been sent to Orleans. We are not at all surprised at this matter, and would advise the Society to transfer its aid to the French, who seem to be in far greater need.

***

Frightful sufferings from disease around Paris, as we anticipated, is still the sad news. There is no doubt that the distress of the besiegers has been so great that the leaders are in dread. It is all very well to rely on the patience of the soldiery when the enemy is visible, but even veterans are afraid of the pestilence that walketh in noonday. We have been told of 2,000 burials a day. This is frighttul, and might account for the supposition of a willingness to treat.

***

The Belgian ambulance is a series of well-arranged huts, with a street between. Each hut is 40 feet long, by 25 wide, and contains 15 beds. A space of 30 feet is left between the huts. The ground under them is properly drained, and the floor is raised two feet above it. It costs about £9 to build each, exclusive of material. Common rough pine boards are used, and the roof is left open along the centre, some six inches, on each side the chief beam. Ventilation is further provided for by the upper part of the wiudows being made of wood, so as to open or shut, as required, and the planks of the floor are also half an inch apart. The mortality seems to have been unusually low in these huts.

***

A monthly contemporary lately made a virulent attack on our National Society, and it seems other papers have echoed some of its statements about partiality and mismanagement. It might well be that a little explanation would put a stop to these expressions of discontent. Did not the Society give its £20,000 to each side alike? Could there be partiality in that? Whatever our opinion as to the danger of subsidising Governments—if it is to be done, let it be done as it has been, in this equal mode.

Dr. Humphry Sandwith seems to think that there is not that urgent need for these Societies that has been supposed; and we confess that for sometime past our original doubts have been constantly growing upon us. We shall very soon hear on all sides what was said to us the other day—that we might as well have kept the money for our English sufferers. Money is flowing abroad, while hospitals at home have to retrench their expenses and curtail their efforts to alleviate sick sufferers. And then there is the great danger that seems to rise into such prominence, that our own soldiers may be called upon to do, dare, and suffer in Europe, and should we not be ready to help them first? In case, however, of this country being involved in war, we believe the whole exertions of the National Society would be directed to the care of our own troops.

***

Another question which seems as if it would come to the front is the condition of vast numbers of prisoners of war. Many of those in the rigorous climate of the North of Germany are insufficiently clothed, and inadequately fed. Yet, a considerable proportion of them came from the sunny South, and not a few have been habituated to Algeria. What must be their sufferings, and what may probably be the mortality among them this bitter season?

***

Then, there is still the possibility of Paris being starved, and all the agonies that involves. Verily, the cup of horrors prepared for Europe seems to be well-nigh full. And this is our boasted nineteenth century!—these horrors are brought about by the quarrels of the most civilized nations of the world.

The Dangers of Season-Ticket Holders.

Constant travellers on railways have often enough been warned of certain not well-defined dangers to which they are exposed, and many curious tales have lately been confided to us illustrative of these risks. We think, however, that some very easily avoidable perils should be pointed out, and foremost amongst these at this season of the year is that of cold. Several of our patients are now spending a season at Brighton, and we find that no effort is made by the Company to diminish the risk by warming the carriages. On the Continent, when the weather is in the least chilly, foot-warmers are always provided. A patient, who suffers much from cold, assures us that, even with the excellent express service between London and Brighton, none are provided, unless on special request, and that then they are charged for. We look upon this as meanness rather than economy. It is penny wise, but pound foolish. A delicate patient, or even a tolerably strong man, enters a cold railway carriage—perhaps after a walk to the station which has made him comfortably warm. For an hour and a quarter, or an hour and a half, he is sitting still in a cold atmosphere, which the necessity of ventilation constantly makes colder. The natural consequence is that, in spite of any number of rugs and wrappers, the circulation in the extremities becomes slower, the feet and hands get very cold, the blood is driven back upon the internal organs, and will inevitably find out any weak spot. Thus, the lungs may suffer considerably, and the heart, if at all weak, is likely to be seriously injured. When the circulation is in the least difficult, nothing is so important as to keep the extremities comfortably warm. So important is this that we are entitled to ask whether some of the deaths, attributed by writers on railway travelling to disease of the heart, might not have been hastened by the evil of which we are speaking?

In future, we intend to persuade any patient intending to take a season-ticket, to select a line of railway where the comfort of foot-warmers is provided by the company.

The Royal Institution Lectures.

The annual series of lectures delivered at the Royal Institution, London, are announced, and include the following:—

Christmas Lectures (adapted to a juvenile auditory): Professor Odling, F.R.S.—Six lectures on "Burning and Unburning," commencing on December 27th. Prof. Michael Foster, M.D., F.L.S.—Eleven lectures on "The Nutrition of Animals," on Tuesdays, January 17th, to March 28th. Prof. Odling, F.R.S.—Eleven lectures on "Davie's Discoveries in Chemistry," on Thursdays, Jan. 19th to March 30th. W. H. Channing, Esq.—Four lectures on "The Progress of Civilization," on Saturdays, January 21st to February 11th. The Friday evening discourses before Easter will probably be given by Professors Tyndall and Odling, the Dean of Westminster, Mr. E. J. Reed, Mr. James N. Douglass, Dr. Carpenter, Capt. Noble, Professor Clerk Maxwell, Mr. Norman Lockyer, Mr. W. Mattieu Williams, and Prof. Max Muller. *After Easter.*—Charles Brook, Esq., M.A., F.R.S.—Two lectures on "Force and Energy," on Tuesdays, May 9th and 16th. Prof. Tyndall, LL.D., F.R.S.—Eight lectures on Thursdays, April 20th to June 8th. Joseph Norman Lockyer Esq., F.R.S.—Eight lectures on "Astronomy," on Saturdays, April 22nd to June 10th.

Contagious Tall Talk.

At a public meeting at Rochdale, the Rev. H. Rothery moved: "That the Contagious Diseases Acts of 1866-9, which legalise *such outrages upon the persons of defenceless women as never disgraced the annals of negro slavery, with a view to securing safety in vice for profligate men*, are despotic, unjust, and immoral, and an insult to the whole manhood and womanhood of these realms." Has the Canterbury Hall no vacancy for *another* "stump orator."

The Relapsing Fever in Liverpool.

The Poor-law Board have received the following report from Mr. Cane, the Poor-law Inspector of the manufacturing districts:—

The number of cases admitted to this hospital first began to exceed those of the corresponding week of the previous year in the week ended the 28th of May last. From that period until very recently the numbers of cases of fever relieved in the hospitals have steadily and rapidly increased.

Date of Week, 1870.	No. of Cases.	Corresponding Week of 1869.
June 11	138	 95
July 16	233	 89
August 20	568	 79
September 24.....	1,116	 80
October 29	1,375	 94

It is thought that the epidemic of scarlatina in London is about to subside, as the deaths for the last four weeks have been 192, 167, 174, and 150 successively.

The Medical Club.

THE premises at present occupied by the Union Bank in Pall Mall East and Suffolk street, have been secured, for the purpose of converting them into a club-house, and the Medical Club will remove to them some time during the ensuing Summer. In the meanwhile it will continue to be conducted in the present house, No. 9 Spring gardens.

Cruveilhier's Atrophy.

THE Medical Society of the College of Physicians of Ireland held its first meeting on the 16th inst. The President, Dr. Banks, read a communication on "Cruveillhier's Atrophy." The first case he detailed was under his care since 1858, and he had published the facts in 1860. The subject was thirty-four years of age, came of a very healthy family. Having caught cold, he commenced to suffer from persistent pain in his right arm, which after some time resulted in weakness in his right thumb, extending afterwards to the right, and subsequently to the left. Examination of the muscles showed there was considerable atrophy of the muscles of the arm and hands. The treatment in hospital consisted in the application of electro-magnetism, and the internal administration of syrup of phosphate of iron, quinine, and strychnia, which was attended with considerable benefit, which remained established for some years, and until he suffered from a severe sickness, since when he has steadily got worse, his lower extremities became paralysed, and he is now in a moribund condition. The second case was that of a lady, whose father had been the subject of locomotor ataxy, and had died of apoplexy. The treatment was similar to that adopted in the previous case, but without the least effect, the disease commencing in the thumb, and in fifteen month involving the lower extremities. In the last stage of the malady there was a very marked difference in development between the face and other parts of the body. Hyperæsthesia is one of the prominent symptoms. In the third case complete recovery resulted, although the symptoms had reached so advanced a condition, that the patient was able neither to write, feed himself, or walk. Dr. Banks quoted three other cases, in one of which the symptoms has made no advance for six years, while in the others the progress was rapid, the disease commencing in the left leg in one, and in the left arm in the other. He remarked that up to a recent date this disease was considered absolutely incurable.

Sir Dominic Corrigan considered that it was not necessary to assume any lesion of the spinal cord as the cause of the local paralysis. He narrated the case of a gunner on board ship, who at the age of thirty-three became disabled, suffered from complete atrophy of the deltoid. In this case he had failed to discover the least central disease. Sir Dominic Corrigan had treated the case by stimulation of the capillary nervous system with perfect success.

The late Dr. J. Gedge.

WE have to announce the death of Mr, Joseph Gedge, M.B., of Caius College, Cambridge, son of Mr, Johnson Gedge, Bury St. Edmunds, Physician's Registrar at Addenbrooke's Hospital, and Demonstrator of Histology in the University medical schools, who went as medical officer with the expedition under the command of Sir Samuel Baker. The expedition had got over the passage of the Desert of Dongola, and had reached the station between Khartonn and Gondokoed. A telegram from the correspondent of the *Times* at Alexandria announced Dr. Gedge's death, and it has since been confirmed by intelligence received through the Khedive's Minister of the Interior.

The late William A. Hubert, M.R.C.S.

THIS gentlemen was lately found dead in his bed, at his residence, Markyate street, Dunstable, Beds. He was fifty years of age, and on the day prior to his death, seemed to be in good health, going about his business as usual.

Health of the Princess Louise.

WE have much pleasure in recording that Professor Lister, Surgeon in Ordinary to the Queen, on Friday last, went from Edinburgh to see Her Royal Highness Princess Louise, whom he found progressing very favourably, and there is every reason to believe that Her Majesty will be able to leave Balmoral in the course of the ensuing week.

This intimation will be read with greater satisfaction, as coming from official sources. We make no pretence of special favour, although our source of information is quite as "special and particular" as that which whispers the state of the "Sick Lion" in the ear of the *British Medical Journal*.

Alleged Yellow Fever in New York.

SEVERAL cases of death have occurred within the last week in New York City attributed to yellow fever. Dr. Moreau Morris, however, who is City Sanitary Inspector, denies that such is the character of the disease. He says, that *post-mortem* examinations upon their bodies gave satisfactory evidence that the disease was not "yellow fever." In order to ascertain all the facts connected with these cases, and, if possible, the source of the disease. minute inquiries were made. The general symptoms of the disease presented by those attacked were chill, fever, diarrhœa, vomiting, slight jaundice, brown coated tongue, urine of a dark colour, which, under the microscope, presented no casts, blood or albumen. The average duration of the disease in fatal cases was less than a week.

Lead Poisoning.

THE *Food Journal* has received very important communications on this subject from two contributors; Professor F. Crace Calvert, says :—"Great numbers of private houses have a leaden cistern heated by means of a continuous current of hot water, fed by a boiler placed behind the kitchen range on the ground floor. The cooled water from the cistern returning to the boiler is of course charged with all the lead dissolved from it; and as the occupiers of these houses are either not aware of the action of water on lead, or do not reflect that the water which they take from the kitchen range for domestic purposes has circulated through the cistern above, it is not surprising that many of them fall victims to lead poisoning." Professor Church, of the Royal Agricultural College at Cirencester, points to a similar danger, resulting from the use of gazogenes for preparing aërated waters. He says :—"I have examined a large number of different waters—English and foreign, old and new—and I find one defect universal. The upper part of the long glass tube (through which

the aërated liquor is forced from the lower vessel) is fitted into a tube of pewter. The aërated water standing in this dissolves some of its lead; and the first wine glassful of water drawn each time that the apparatus has been left to itself, turns brown when tested with hydro-sulphuric acid."

Failure in the Preserving of Australian Meat.

THE *United Service Gazette* notices that twenty-seventy thousand pounds of Australian preserved meat sent per P. & O. Company's vessels to Bombay for the use of the Indian troopships have lately been condemned at that port as wholly unfit for food, and it has been found that the meat prepared at the Royal Victoria Victualling Yard, Deptford, which was ordered to be opened by the surveying officers for purposes of comparison, was of very fine quality and in beautiful condition.

The Subject for the Hastings Medal.

THE subject selected for the Hastings Gold Medal, value twenty guineas, for 1872 is "On Investigations on the Germ Theory of Disease;" and the award will be at the Annual Meeting of the Association in that year.

Royal College of Physicians of London.

THE Primary Examination for the Licence of the Royal College of Physicians of London, will commence on Monday, December 5th, and the Pass Examination on Monday, December 12th.

Jervis-street Hospital, Dublin.

THE medical staff of this hospital inaugurated the session by a dinner at the Gresham Hotel on Thursday evening. The President of the Royal College of Surgeons, with Dr. Adams, and several of those gentlemen who, at one period of their career belonged to the hospital, were the guests. Dr. Stapleton, senior surgeon, occupied the chair, and Dr. M'Swiney the vice-chair. The usual loyal toasts having been duly proposed and honoured, the Chairman gave the toast of the evening, "Jervis-street Hospital, its Fame, and Memories." He alluded in eloquent terms to its usefulness as a charitable and educational institution and enumerated the many names connected with the hospital which have become illustrious. Sir Dominic Corrigan, and Dr. Robert Adams, the first Physician and first Surgeon of Ireland in the present time, with Kirby, Wallace, Neligan and O'Reilly of the past. In speaking of the harmony and good feeling which enabled the staff to cooperate for the good of the sick poor, he paid a deserved tribute to the excellent ladies, who so admirably assist the medical officers in their humane exertions.

Army Medical Department.

STAFF Assist-Surg. Bate has been granted leave of absence from Bantry until required to embark for India; Staff Assist-Surg. Stevenson has left Dunmore for Bantry, for duty; Staff Assist-Surg. Notter has been ordered to the Pigeon House Fort, Dublin, for duty; Staff Assist-Surg. Churchill has joined at Dublin for duty; Staff Assist-Surg. Smith has been ordered from Dublin to Tralee Staff Assist-Surg. Burnett has been transferred to Bandon from Navan, to replace Staff Assist-Surg. Ryan, ordered to Dublin.

The Society of Arts.

THE following communications are announced to be read at the Society of Arts, during the coming month:—

November 23.—"On South African Diamonds." By James Tennant, Esq., Professor of Mineralogy, King's College, London.

November 30.—"On Peat, and its Profitable Utilisation." By Robert M. Alloway, Esq., M.A.

December 7th.—"On the American System of Associated Dairies, and its Bearing on Co-operative Farming." By H. M. Jenkins, Esq., Secretary of the Royal Agricultural Society of England.

December 14.—"On the Study of Economic Botany." By James Collins, Esq., Curator of the Pharmaceutical Society, and Fellow of the Edinburgh Botanical Society.

December 21.—"On a Method of Lighting Towns, Factories, or Private Houses, by means of Vegetable or Mineral Oils." By Albert Sibler, Esq,

Fraternisation with Homœopaths in America.

AN American paper informs us of a strange proceeding which took place at the Albany Medical School, and which it considers is a subject for the gratulation of its readers:—

"The Hon. Ira Harris delivered the opening address at the College yesterday morning. The address was able and interesting, and we were pleased to see many homœopathic physicians in attendance. Mr. Harris is a firm believer in and patron of homœopathy, and fills a chair in the College. It is indeed gratifying to know that the barriers which have hitherto divided the two schools of medicine are being removed, and to see our College taking the initiatory step towards such a desirable achievement. We believe this is the only allopathic medical institution in this country that possesses views sufficiently liberal to allow any of the chairs to be filled by men who firmly and practically believe in the homœopathic doctrine. It is also pleasant to know that several of the trustees of the College are firm believers in homœopathy."

It seems to us an abuse of the quality of liberality to apply the term to fraternisation between scientific physicians—if the medical staff of the Albany School deserve that name—and homœopaths. It would be characterised as indecency, and not as liberality, if a judge were to hobnob with a convict, or a bishop with Mr. Bradlaugh, and, if medical men have any real belief in the theorems of their profession, there cannot be in their minds much greater consistency between themselves and homœopaths. Homœopathy is not a theory of medicine with which medical men can agree to differ. We may respect hydropaths, or eclectics, however mistaken and foolish we know them to be, because it is possible to believe that they hav real confidence in their systems, but it is too hard for us to suppose that homœopaths believe in their billionths, and their snuffs of starch. They drive us to the conclusion that homœopathy is a false pretence, and, therefore, that their practice of such means to obtain money disentitles them to be our associates. Possibly the Albany Medical School may afford a genial companionship to such persons—"Birds of a feather," &c.

"HOSPITAL SUNDAY" in Birmingham produced this year the sum of £3,947 10s. 7¾d.

The Prevalence of Scarlet Fever in England.

In the 17 large towns of England making weekly returns to the Registrar-General the deaths from scarlet fever in the week ending on Saturday, the 5th of November, were as many as 330. In London they were 174, besides 45 deaths from other fevers; in Liverpool they were 38, besides 37 deaths from other fevers; in Bristol the deaths from scarlet fever were 31; in Leicester, 22; in Birmingham, 15; in Norwich, 10; in Sheffield and in Hull, 8; in Manchester, 6; and in Salford, 2; in Leeds, 5, besides 11 deaths from other fevers; in Newcastle-upon-Tyne, 3; in Nottingham, in Bradford, and in Sunderland, 2; in Portsmouth and in Wolverhampton, 1. Not one of the 17 towns was without a death from scarlet fever in the week. The number of such deaths in Liverpool shows a decrease of 12 compared with the previous week, Bristol an increase of 5, Leicester of 6, Birmingham of 10. The deaths from scarlet fever in the 17 towns were 332 in the week ending the 8th of October, 325 in the next week, 352 in the next, 319 in the next, and, as already stated, 330 in the week ending the 5th of November. The aggregate population of the 17 towns is about 6¼ millions.

Royal College of Surgeons of England.

The Council of this institution have elected as a Fellow Murdoch Kelburne King, M.D. and F.R.C.S. Edinb., Hull. This gentleman was elected an *ad eundem* Fellow, which, it is stated, is the first occasion in which this honour has been so bestowed since the charter for conferring the Fellowship was granted to the College of Surgeons.

Prevention of Baby Farming.

A number of well-meaning and zealous people seem anxious to import a deal of the bureaucratic customs of the Continental nations into this country. A few days ago some of such gentlemen had an interview with that wonderful Home Secretary, Mr. Bruce, who recently compared the French nation to burglars, and has done so many other statesmanlike strokes during his brief period of authority. The deputation asked from Government that every woman who suckled a baby not her own, should be obliged to go and notify that fact at some office. This idea resembles the Habitual Criminals Act a good deal, and the famous Contagious Diseases Acts. Why not go further and get every unmarried man and woman to register themselves, in case they should bring into the world an illegitimate child. This would please the Puritans enormously, and those persons who wish to reduce human society to the Chinese type. But what about individual liberty, if Government spies are to be so prevalent in future?

Absorption of Mercury through Skin and Mucous Membranes.

Dr. Rindfleisch, of Bonn, has been making some experiments on rabbits with mercurial ointment, which are worth relating. In order to prevent the animals licking the parts, the ointment was rubbed into the inner aspect of the ears. After rubbing the ear of a rabbit for some time with blue ointment, and washing the part with soap and water, the ear was snipped off, and laid under the microscope. After making these preparations, Dr. Rindfleisch became convinced that not one particle of quicksilver passed through the epidermis. The malphigian net was quite free from any particle. He then put some blue ointment into a rabbit's eye, closing up the eyelids by sutures. The result again was negative; no particle of mercury passed through the conjunctiva. Convinced that the result would be different in the bowels, he fed rabbits with potatoes in which blue ointment was mixed. They died pretty quickly. The mucous membranes of the bowels were found hyperæmic, and some small ulcers covered the membrane in many parts. There were quicksilver particles found in the intestinal glands, absorbed by the open mouths of the absorbents from the ulcers. The blood did not contain a single particle; nor did the liver, spleen, lungs, brain, kidneys, or bones. Next, small pieces of blue ointment were placed in the peritoneal cavity of rabbits; and the result was again negative. There were particles found in the lymphatic of the diaphragm; but only there. Dr. Rindfleisch, therefore, concludes—1. That quicksilver contained in mercurial ointment passes neither through the outer skin, nor the mucous membrane, nor the serous membrane, so long as these are inviolate; 2. That it, on the other hand, passes along the open parenchymata of the body, through open lymphatic vessels and the base of phagedænic ulcers.

The Royal Society of Medicine.

So little cohesion exists in our *fraternity* in London, that the proposed Amalgamation of the Societies has fallen to the ground. The cause for this effect is alleged to have been the hostile attitude of the Obstetrical Society. If this be the case, we may look forward to the day when the Obstetrical Society shall be old enough and dignified enough not to fear that it will be slighted if it unites its fate with the other branches of the medical art. But, why is there not an Andrological Society also?

Climate of Algeria.

Dr. Henry Bennett says, that Algeria comprehends a country of 400 miles long from east to west, and some 120 miles from north to south, where Sahara commences. None of the mountains are more than 7,000 feet high. There seems to be only thirty days of wind blowing from the desert annually; during the rest of the days of the year, a moist sea-breeze blows. Six-sevenths of the rain falls in the winter season, and as much as forty cubic inches fall in the year. Thus, Algeria is a very moist climate in winter. The valleys and mountains have a very luxuriant vegetation. The climate is rigorous in winter in many parts, but Algiers town seems of mild climate. Algeria is, thus, on the whole, a mild and moist climate, not suitable for patients with tendency to phthisis pulmonalis; the east coast of Spain is dry and warm; only fourteen inches of rain-fall in that district, and it is better suited for such invalids. Idiopathic asthma and neuralgic cases, he thinks, might be benefited by living in Algeria.

Psychological Journals.

In our younger days psychology was defined as the science of the laws of the mind. Now-a-days, psychological journals are written chiefly by physicians of lunatic asylums, and a good deal of sociology is debated in their columns. In Dr. Hammond's *Psychological Journal* for October, there are pictures of the degeneration of the human race given, which might appal all who were not,

like ourselves, practical medical men. In England the race is said to be deteriorating, owing to late marriage, excessive breeding of children, and want of facility of divorce, to which is added tobacco smoking. In France the race is said to be degenerating from paucity of births, luxury, and all sorts of vice. In America, too, it is degenerating from artificial limitation of babies and smoking. Doubtless, the main fact will be found to be that poverty and ill-assorted unions are the chief causes of bad breeds. Tobacco smoking and alcohol drinking, of course, must be added as causes; we presume that the writers in Dr. Hammond's journal consider that marriage without divorce is injurious, because it keeps together people who ought not to reproduce themselves together, such as persons of consumptive or insane families. Certainly, a great deal might be done by careful selection of breeders to improve the race.

New Books in Medicine, Surgery, and Science.

The following books referring to Medicine, Surgery, and the Collateral Sciences, will appear within the forthcoming Session:—

A Handbook of Stomach and Liver Diseases: With Especial Reference to Tropical Climates. By James C. Dickinson.

Diseases of the Heart and Great Vessels; Their Pathology, Diagnosis, Symptoms, and Treatment. By H. W. Fuller, M.D. Cantab, F.R.C.P.

A Practical Treatise on the Diseases of Women. By Robert Barnes, M.D., F.R.C.P. 8vo.

Contributions to the Science and Practice of Surgery. By T. Spencer Wells, F.R.C.S.

Ovariotomy. Illustrated by 12 Plates and numerous woodcuts.

The Practice of Surgery. A Manual. With Numerous Engravings on wood. By Thomas Bryant, F.R.C.S.

The Science and Practice of Surgery. By Frederick J. Gant, F.R.C.S. 8vo.

On Rheumatic and Strumous Diseases of the Joints; Including Hip-Joint Disease, and the Treatment for the Restoration of Motion in cases of Stiff-joint or Partial Anchylosis. The Lettsomian Lectures for 1869. By William Adams, F.R.C.S. 8vo.

On Deformities. A System of Orthopædic Surgery. By Bernard E. Brodhurst, F.R.C.S.

A Laboratory Text Book of Practical Chemistry; or, Introduction to Qualitative Analysis. By Wm. G. Valentine, F.C.S.

A System of Surgery. Edited by T. Holmes, M.A., St. George's Hospital. Second Edition, in Five Volumes. [The Fourth and Fifth Volumes, completing the New Edition of this work, will appear successively in the course of the present autumn.]

Select Methods in Chemical Analysis and Laboratory Manipulation. By William Crookes, F.R.S., &c.

Principles and Practice of Physic. By Sir Thomas Watson, Bart., M.D., D.C.L., F.R.S., &c. New Edition.

Dr. Scoresby Jackson's Note Book of Materia Medica, Pharmacology, and Therapeutics. Second Edition. Edited by Dr. Angus Macdonald.

Thoughts on Health and Some of its Conditions.

Dr. Roberts on Urinary and Renal Diseases. Second Edition.

Hand Book of the Principles and Practice of Medicine. By James Andrew, M.D., Physician to St. Bartholomew's Hospital.

Dr. Garrod's Materia Medica and Therapeutics. Fourth Impression of the Third Edition.

A Manual of Zoology, for the Use of Students. By H. Alleyne Nicholson.

A History of Animal Plagues. By S. Fleming, R.E.

The Intelligence and Perfectibility of Animals. Taken from the French of Charles George Leroy.

Thesaurus Entomologicus: or, A Description, with Plates, of the Rarest Insects in the Collection given to the University by the Rev. William Hope. By J. O. Westwood, M.A., Hope Professor of Zoology.

Macmillan's Manuals for Students. An Introduction to the Osteology of the Mammalia. Lectures delivered at the Royal College of Surgeons. By W. H. Flower, F.R.S., F.R.C.S.

Proceedings of the Birmingham Natural History and Microscopical Society during the year 1869.

The Mollusca of the European Seas. By Mr. Gwyn Jeffreys, F.R.S., in continuation of his Work on "British Conchology."

The Natural History of the British Diatomaceæ. By Arthur Scott Donkin, M.D.

A Fourth Edition of Professor Rymer Jones's Organisation of the Animal Kingdom. The Natural History of the Azores. By F. Du Cane-Godman, F.L.S.

(To be continued.)

At the taking of the last census in the United States there were 55,000 physicians, 11,000 druggists; at present there are 74,000 physicians.

Mr. Lawson Tait, surgeon, of Birmingham, has been entrusted with the task of editing the posthumous works of the late Sir James Simpson, of Edinburgh.

According to Dr. Boyd Mushet, cod-liver oil was first used by Dr. Perceval, of Manchester, in chronic rheumatism at the end of last century.

The usual February Examination for the Indian Medical Service will not take place next year in consequence of information received from the Government of India.

Small-pox still increases in London. A chapel at Hoxton has been purchased by the Shoreditch Board of Guardians, to fit up as a temporary hospital for small-pox.

The Council of the Apothecaries' Hall of Ireland has selected "The British Pharmacopœia" as a subject for the annual prize of five guineas, to be competed for by apprentices, upon the first Monday and Tuesday in May, 1871.

Mr. Christopher Heath and his colleagues in the Hospital for Women, Soho square, are about to deliver evening lectures in the Hospital during the months of January, February, and March. The great abilities of Mr. Heath are sure to gain him a numerous auditory.

A PARAGRAPH appeared in our last issue relative to Dr. William Mac Cormac, of Belfast. The statement which found its way into our columns was, at least, unauthorised by him, and premature; and we much regret that it proved a source of annoyance to one who is valued both as a friend and as a contributor to this journal.

LORD HENRY LENNOX, in his address to the Society of Arts, notices that Parliament has at length voted a sum of money for the construction of a suitable building for the accommodation of the collections of natural history possessed by the Society. This museum will be placed on part of the ground which formed the site of the International Exhibition of 1862.

A NOVEL (and in our opinion peculiarly objectionable) mode of electing a hospital officer took place at the Queen's Hospital, Birmingham, on the 7th inst. One hundred governors selected by ballot from the whole number formed a committee for the election of an obstetric surgeon to the institution. Thus, the old system of canvassing was done away with. Mr. John Clay was elected by a majority of 25.

DR. ALRIK LJUNGGREN, of Stockholm, has shown in some clinical observations on visceral syphilis, translated into German by Dr. Diemer, for the *Archiv für Dermatologie und Syphilis*, 1870, that syphilis causes insanity and many forms of fatal nervous disease. His cases merit perusal by all who read German. Every day we become convinced how much it would add to the happiness of this race if such preventible diseases, as syphilis, could only be prevented. We suspect that some fundamental changes in marriage are required to bring about this effect.

Correspondence.

CHLOROFORM IN THE REDUCTION OF DISLOCATIONS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

DEAR SIR,—Will you kindly have inserted the following case of hip-joint dislocation if, on reading you deem it of any value for your practical journal.

I was asked by my colleague, Dr. George Walker, of Bonanahon, to see with him on the 8th inst., a poor man, aged about sixty-eight years, who had sustained a dislocation of hip-joint into the foramen ovale, the diagnostic symptoms of which were well marked by the usual separation of the injured thigh from the other, with a slight lengthening, and the patient keeping his body flexed forwards to relieve the tension of the psoas, iliacus, and other capsular muscles; the man was strong and apparently healthy for his age, but had weak sounds of heart without any valvular disease. Dr. Walker and I first endeavoured to reduce the dislocation by manipulation without chloroform, but had to desist, owing to the struggles of the patient, and great muscular resistance. We then resolved to use chloroform, and before its use, gave a glass of whiskey in water to the man, as a necessary precaution against any danger that might arise from the chloroform, owing to its action over a weak heart. Dr. Walker most efficiently administered the chloroform, and in about ten minutes, the patient was fully under its influence, the quantity used, being two drachms. I then flexed the leg on thigh, and the latter on the abdomen, at the same time lifting up the extremity, and very forcibly rotating inwards; the head of the bone slipped into its place *in situ* with a loud noise, the patien t being perfectly passive and insensible to any pain during the manipulation of less than ten minutes, before reduction was effected. I deem this case of interest to practitioners in dispensary or country practice, where many such cases may occur in localities not having hospital or other resources; but, nevertheless, with the all-powerful aid of chloroform, together with the simple and ready mode of manipulations, a surgeon may be filled with confidence as being enabled to meet the difficulties of many dislocations successfully and promptly, in the poor man's cabin, as well as in the surgical wards of an hospital. In this reported case, Dr. Walker and I effected the reduction of the dislocation, the patient being in his own cabin, as we could not, prevail on him to be removed from home into the union workhouse hospital under my care.

I remain, dear Sir, yours faithfully,

Kilmacthomas, Nov. 11, 1870. HUGH GREEN, M.D.

ACONITE: ITS USE IN AFFECTIONS OF THE RESPIRATORY TRACT.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—How astounded must the Father of Homœopathy have felt could he only have heard Cabarus exclaim "I give aconite by the teaspoonful, while the allopaths give it in drop doses." Surely, the above-mentioned disciple of Hahnemann had but little faith in infinitesimal doses, or the solution of aconite he used must have been wofully weak; the latter, perhaps, is nearer the mark, though extraordinary luck does sometimes attend the heroic administration of certain remedies in solitary cases. Aconite has generally been known to exercise a decidedly beneficial therapeutic action in the congested mucous membrane of the nose, pharynx, larynx, and bronchi. If Dr. Luther will read Dr. Prosser James's work on "Sore Throat and the Laryngoscope," he will there find that aconite has been used by that author both frequently and largely, but in rational doses, with great benefit and success in affections of the throat. Following his practice, I have known it do much good in febrile and catarrhal affections myself.

Apropos of its being advertised as a specific for broken-winded horses, I was told some time ago that aconite given in drop doses every hour for sixteen out of the twenty-four until its physiological action became apparent, was a certain cure (if I may be allowed the homely expression) for gonorrhœa.

I am, Sir, yours, &c.,

HENRY W. WILLIAMS, M.D.

168 Fulham road, S.W., Nov. 18, 1870.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I had intended making some comments on Dr. Curran's note in your issue of November 2nd, but I am happy to see two rational and practical letters on the subject in the PRESS of last Wednesday.

The question is an important one in a social point of view, specially when we consider the disgusting and childish freaks of the supporters of the Anti-Contagious Diseases Acts movement. If it is to be considered practically and truthfully, we must put aside gallantry or allusion to any theory that is not founded on facts impartially collected.

In the quotation from Dr. Tait's work (which I had never heard of before), Dr. Smith mentions that about 18 per cent. would represent "the consequences of seduction." In this view I entirely agree; but I think that the percentage is too high. Melancholy and overwhelming to our notions as this may appear, there is no doubt but that the stern reality of facts will prove it. The instances are, I think, rare where seduction, in the ordinary sense of the word, has been the true means of turning from virtue's path; and as to the results of the arts of "Seducer, Esq., boasting over his exploits;" so ranted about in Dr. Curran's communication, they are inappreciable here, at all events, whatever they may be in the favoured spots of Dr. Curran's acquaintance, where "no country village or town is without him."

Why is it that where girls are most congregated together, in factories and such like, that they fall, and fall early? "Seducer, Esq.," with all his supposed insidious arts,—"unmarried, well-looking, ever on the *qui vive* to betray and to destroy"—would with greater success turn his attention to

some solitary innocent, whose guilelessness would offer him every facility for the exercise of his cruel and insinuating art. It is evident that the systematic seducer has nothing to say to their frequent fall, just as in the case of widows and married women, who err with a full knowledge of the results.

There is no escaping the conviction that a certain want exists in some female minds which, either with or without the stimulus of evil communications by fallen and, perhaps, undiscovered associates, leads them to destruction; and notwithstanding every care on the part of parents, the downward tendency will develop itself, and that persistently. It is very remarkable that the tendency is a persistent one, thorough and heartfelt reformation being almost problematical. There are some rare exceptions I will admit. I do not allude to such cases as when, having smarted from the consequences of her evil life either by disease, accident, or hardship, one will enter a reformatory, which affords a more or less permanent asylum. I call reformation where such a change takes place as that the once erring can be trusted to herself, and who has determined to abstain from a life of degradation, be it secret or open. Were we prepared to go into the discussion in all its bearings, I could multiply instances not only by the dozen, but by the hundred, to show that the subtle and insidious advance of the "Seducer, Esq.," in the stage shape represented by your theoretical correspondent was not an element of destruction. Let us take a few stubborn facts. Some time since, in order to substantiate the evidences forced upon me, that the much-talked-of and elaborate process of seduction was, to a great extent, a myth, I inquired of the nurses attached to an institution which admits something like 800 annually of these so-called victims of seduction. One nurse, twenty-seven years attached to the institution, stated, "I am ashamed to say it of my sex, but it is women and not men that do the mischief and lead each other to destruction, and as to reformation, during my long experience, and on considering the many thousands I have seen, I think I might say I only know of about six cases of real reformation,—that is, women who subsequently lived correctly, and earned their subsistence honestly."

"I have known women who have been fifteen years in reformatories, and yet at the end give way, and become worse, if possible, than ever."

Another nurse, of nearly twenty years' experience, stated, "The great evils are company keeping, bad female influence, and drink; as to reformation, I would be almost afraid to say I know of any cases really reformed, but perhaps half-a-dozen. I know of women who still come to this institution whom I remember when I first came here, as young girls, almost children."

The porter, of ten years' experience, stated, "He does not know of any really authentic and permanent cases of reformation of women who once came to the institution that have not come from time to time during these ten years."

I place infinitely more reliance on statements derived from these sources, because the real state of facts would be known to them, than on the sanguine reports of clergy or of good-natured patrons of reformatory and other institutions. I by no means undervalue these asylums as of a certain use; but that they are not as successful as might be supposed arises from the same moral defect, or want of regulating power, which impelled the first essay in vice, and which continues to exist *en permanence*.

The great cause of the fall of young girls, I still assert, is female influence. Not long since a young girl of sixteen stated that she was a servant in a respectable family, and made acquaintance with the neighbouring servant girl, who was depraved; the latter persuaded the younger girl to stay out one evening, and brought her to a preconcerted arranged place of meeting, where, when the victim begged to be let away, her female seducer absolutely put herself against the door to prevent her escape; she never went home afterwards, but entered on an evil life.

Another girl, of seventeen, stated that she casually made acquaintance with a girl already fallen, but not known to her; she enticed her to a place of meeting, plied her with drink, and the victim remembered nothing further till awaking in the morning; her female seducer dividing the price of her ruin.

Such instances could be endlessly multiplied. Female influence—sometimes for the sake of gain, sometimes for the sake of companionship, sometimes from recklessness—is the really most efficient cause of fall; the barrier is gradually and insidiously broken down by an unsuspected source. The moral want exists which renders resistance but feeble; or, it may be so far deficient as to make the tendency irresistible, and one bad woman is more dangerous to her sex than 100, aye, 500, men.

The intoxicating influence of the love of dress is almost irresistible. All, except the very lowest, are equally subject to its spell; if the virtuous, the educated, and the intellectual are so influenced by it—as we know they are—surely it may reasonably be allowed a place as a most destructive element with the weaker and the more imperfectly trained.

There are bad women, just as there are bad boys and bad men; at the school and at the college; in business and at professions, are there not bad men? To put it in plain language, are there not occasional, though exceptional, liars, dishonest persons, slanderers, &c.? Is not the boy that is a peculator at school generally so, in a modified degree, when a man? Is not the boy, remarkable at school for untruthfulness, the same often in manhood? The absurd rhapsodies of theorists such as your correspondent are calculated to do much harm in reference to a subject, ethically and morally, so difficult.

Dr. Curran, in remarking on my letter, asks me what will I say to a heartrending account quoted by him from the *Times*? I answer, it looks very well on paper, but neither he nor I have had an opportunity of ascertaining the real truth of the facts stated. It seems introduced as an excuse that the girl "was seduced under promise of marriage." Not the slightest excuse, say I; should the thief found stealing your purse be the least excused if he had been told that, if found out, he would be let off? She parted with her modesty voluntarily, and under promise, if you please. *Why should she?* Once so, she starts on the wild tempestuous ocean of vice, and must risk the dangers. As to Earls, Chancery barristers, &c., I take it, they are no better or worse than other men, in proportion to their position and affluence, they are capital scapegoats for man and woman kind in general.

I fear, indeed, Dr. Curran, in writing about what he knows little or nothing about, has ventured—

> "Like little wanton boys that swim on bladders,"
> "Far beyond his depth."

As to statistics, if Dr. Curran will kindly give his, as to the "heroes"—"that we all know," he says, "who glory in their exploits," and who "are ever on the *qui vive* to betray and destroy,"—and as to their victims also, I will be happy to give mine based on facts, startling no doubt, but not so contrary to our accepted ideas as some of Dr. Curran's remarkable experiences, of which I have seen one very instructive instance recorded—MEDICAL PRESS, April 7, 1869, page 286—where the Doctor, when called to a case of puerperal convulsions, finding "*a rigid and unyielding* os uteri," at once applied the forceps, and delivered the woman.

Alas, poor Irish obstetricians, here is a lesson for you from the sister kingdom—you will be instructed.

Alas! fathers, mothers, clergy, practitioners, one and all, the man-eater lurks about your villages; the "Seducer, Esq.," "the unmarried well-looking Esquire is on the *qui vive* to betray and destroy," the writer from England says, "we all know him"—*fenum in cornu*—take care of him. I am satisfied, nevertheless, that the *truly modest* may still fearlessly repeat—

> Sir Knight, I feel not the least alarm,
> No son of Erin will offer me harm;
> For, though they love woman and golden store,
> Sir Knight, they love honour and virtue more.

Yours,

VERITAS.

University College Students' Christian Association.—The annual meeting of this Association was held on Thursday evening, Nov. 3rd. About forty students were present. The chair was taken by Dr. F. T. Roberts, assistant-physician to the hospital, who gave an interesting and earnest address to the students. The president, Mr. H. J. Benham, who we may say, has just taken the first place in honours in anatomy, both at the College and the University, then briefly explained the objects of the Association, after which the Rev. Dr. Stebbing, Dr. Gowers, and Messrs. Smith, Read, Barlow, and Maxwell addressed the meeting.

EARTH CURRENTS.

Mr. W. H. Preece contributes an interesting article to *Nature* on the connection that exists between the Aurora Borealis and that great apparent rush of electricity through the crust of the earth which eagerly seizes upon the easy paths offered to the passage by the wires of the telegraph, and by filling them with electricity, produces what are called "earth currents," or "deflections." The aurora is always accompanied by such displays, but it is rarely in England that they are of such strength as to absolutely break down telegraphic communication. The earth currents of October 24th and 25th have only been equalled by those which occurred in 1859. The following extracts from the diary of one of the largest telegraph stations in the South of England will be found interesting:—

Oct.	24, 5.0 p.m.	Slight deflections on all long circuits.
„	5.30	Gradually increasing.
„	6.0	Very strong; circuits suspended for ten minutes.
„	7.0	Gradually increasing.
„	8.15	All circuits right.
Oct.	25, 3.0	Deflections, which have been intermittent all day, or very strong.
„	3.30	Circuits nearly all stopped.
„	4.0	Working through on some circuits, but slow.
„	5.0	Deflections increasing.
„	5.45	On again; all circuits suspended.
„	6.15	Deflections decreasing again.
„	7.0	Circuits clear.

This is only a sample of what occurred simultaneously all over England, and probably the globe. The currents were very irregular in their direction and very variable in their strength. Circuits running S.W. to N.E. are usually most powerfully affected, but on this occasion all directions seemed equally affected. Where two or more wires run between two stations, the effect of these currents upon the working is easily remedied by substituting the second wire for the earth to complete the circuit. This practice was largely adopted on Monday and Tuesday last. The most striking fact observed was that on each occasion the currents *ceased* when the auroral display *commenced*. I have not noticed this before, probably because the cessation of the one phenomenon and the first appearance of the other have scarcely ever before been so strongly indicated.

ST. PANCRAS BOARD OF GUARDIANS.

A public inquiry instituted by the St. Pancras board of guardians was held at the vestry hall recently for the purpose of investigating charges which had been preferred by Mr. James Watkins, a member of the board of guardians, against Dr. Hill, medical officer of the workhouse, of vaccinating children in bad health, and charging fees for them as successful examinations. A report was read which Dr. Hill had made to the Poor-law Board in reply to the allegations that numerous complaints had been made of the indiscriminate manner in which children had been vaccinated. No such complaints, Dr. Hill said, had been made to him; he had always used the greatest care in examining the children before vaccination; and, when re-vaccination was found necessary, care was always taken that the children were in a proper state of health. A man named M'Donald who had stated that his six children had been vaccinated without his consent, although four of them had been previously vaccinated, refused to attend and give evidence, stating that he should only be satisfied with a Poor-law inquiry. A statement of the facts having been made by Dr. Hill, a resolution was pased to the effect that the board were satisfied that Dr. Hill has performed his duty, and acquitted him of all blame in the case of M'Donald. Other cases were subsequently investigated with similar results.

A MONSTER INFANT.

Professor Little and Williams, of the Ohio Wesleyan University, gives the following authentic account of a monster now living in the United States, and subjected to careful examination by them.

"Two perfectly formed heads, one on either end of the spinal column. To give a clear idea of it, just suppose that you sever the bodies of two men at the lower part of the abdomen and then put the upper parts together, and you have the trunk of this child. From the occiput of one child to the occiput of the other, there is a continuous spine, in a direct line. Upon one side, and directly in the centre of the trunk, were perfectly developed hips, thighs, legs and feet. They are in nice proportion to the body of either child. On the opposite side there is one large, imperfectly formed leg, presenting the appearance of the consolidation of two legs. There are eight toes on this limb, two of which have the appearance of great toes, being much larger than the others. Each has a well-formed head, good features, good chest, good arms and hands, lung, heart, liver, and stomach. Between the perfectly formed limbs, and properly situated are the anus and sexual organ in common. The lower portion of the bowels, the bladder, and, perhaps, the kidneys, are in common. All the other organs are separate. There was but one umbilical cord and one placenta. The length of the body is twenty inches, and the umbilicus is central in the abdomen, and equi-distant from each head. It nurses well at both ends, and, when first exhibited to the party, one child was asleep and the other was crying. While the physicians were making their examinations, both cried, but a few minutes after the one which was crying first went to sleep, while the other remained awake. When either head would cry, the perfect leg which was nearer to that head kicked and drew up, while the leg nearest the other head remained quiet. When either cried, the toes on the imperfect foot would move, but the limb remained stationary. Both heads nurse well, and the child, or rather children, are in excellent health. The physicians could see no reason why it, or they, should not live. The mother is doing well. There was no physician present at the birth, and the labour pains lasted only 15 minutes.

Gleanings.

Discovery of Anæsthetics.

The greatest delusion of modern times is the belief that Wells, and Morton, and Simpson, were the discoverers of anæsthesia. Proofs are produced almost every day that anæsthetic agents were known years and centuries before. Even Origen is quoted as having written, fifteen hundred years ago: "When the doctors wish to kill or burn people, they give a certain drink, which makes them sleep profoundly, so that they become senseless and thus feel nothing." * Perhaps we had as well end all vexatious controversy by putting a serious face on Professor Simpson's facetia, and dating the discovery in Eden, when Adam endured exsection of a rib while under anæsthetic influence.

Jesting aside, we see no use in exhuming every old *savan* who made a hap-hazard or enigmatical suggestion on this subject, and crowning him with the glory of a grand discovery. The application to human purposes is the point of value. What honour is there in proposing without attempting action? To conceive a grand idea and suffer it to die in the womb of the brain without practical application, is a very doubtful honour. How many thousands of persons suggested and believed that the earth was a sphere, before Columbus proved it? And how many conjectured and proposed that lightning was electricity before Franklin brought the spark from the cloud to his knuckle? The true heroes of science are those who do the work. Wells, Morton, Jackson, Simpson—let them all be immortalized; and let us not endeavour to tarnish their laurels by giving to the musty and misty.—*Pacific Medical and Surgical Journal.*

* "Quandovolunt medici incidere aliquos, vel urere, dan eis bibere aliquem potum, qui facit eos profunde dormire, ita quod amentes fiant, et sic non sentiant."

Cure for Sleep-Walking.

A LEARNED Professor of Florence has discovered that a copper wire, wrapped around the leg of a sleep-walker on going to bed, and left to extend to the floor, will prevent him from indulging in his ordinary pastime. He explains the result on electrical principles. We can readily imagine that a sensitive person, such as sleep-walkers are, would be kept from passing into the somnambulic condition by a *divcrticulum* of that kind. Many persons, not sleep-walkers, would not sleep at all with a wire coiled about their legs. The hint, however, is a good one. It is probable that sleep-walking occurs only in very sound sleep. Anything, therefore, which tends to prevent sound sleep, militates against the somnambulic manifestations. Unusual mental or physical impressions, made on going to rest, are calculated to have that effect. A person anxious to rise early, and fearful of over-sleeping himself, will lie awake half the night. There is some relation between sleep-walking and nightmare, both as to causation and prevention. Error of digestion may produce them, as a hard bed may cure. We have no doubt the wire would be as good against one as against the other. Perhaps a tarred rope would answer the purpose. Or what if the patient were to go to bed with his boots on?—*Pacific Medical and Surgical Journal.*

Renal Abscess, discharging externally for six years.

THE following case is reported by J. Stockton Hough, M.D., late Resident Physician to Philadelphia Hospital, in the *American Journal of the Medical Sciences.*

C. B., æt. forty-seven, was admitted into the Surgical Ward of the Philadelphia Hospital, March 17, 1869, at which time she suffered from a discharge of pus from an opening in the right lumbar region, just above the crest of the ilium, supposed to be due to the necrosis of the last-named bone. No other diagnosis had been made until the *post-mortem* examination revealed the nature of the affection.

She had been blind for eight years. At the time of admission she had also an ulcer on her leg, which was healed in five days. After this the quantity discharged from the abscess increased six ounces per day. She had not been confined to her bed until she came into the hospital. No difficulty in passing her water until the last two days.

This discharge of pus had been constant, though variable in quantity for a period of six weeks, increasing the last month. She died from pure exhaustion, four months after her admission.

The *post-mortem* examination revealed no other lesion than that of the kidney on the right side, which was enlarged, and contained numerous abscesses, in one of which was found a triangular calculus, about the size of a walnut. The fistulous opening was not direct, but quite oblique, admitting a fine probe, which probably struck the calculus and gave the impression that the bone was exposed, which led to the error in diagnosis. It is exceedingly rare to find abscess of the kidney discharging externally for so protracted a period.

Case of Congenital Absence of Uterus and Ovaries.

DR. S. HERTZ, reports this case in the *American Journal of the Medical Sciences.*

Miss E., æt, forty, unmarried, had always enjoyed good health till within the last year of her life. A few months previous to her death she came under my care for a slight dyspeptic disorder, which, on close examination, proved to be due to compression of the stomach consequent upon an enormously enlarged cancerous liver. There was nothing in the patient's general appearance indicative of serious trouble, and had not physical signs revealed the condition of the liver, it would not have been suspected. From the time she first sought medical aid up to the time of her death, three months afterwards, there was little in the patient's general aspect to occasion alarm, except the dyspnœa occasioned by the enlarged liver.

The *post-mortem* examination made by my friends, Drs. Barker, Darby, and myself, showed the liver to be greatly enlarged by cancerous deposit; stomach and intestines free from any deposit; kidneys somewhat enlarged and indurated. The chief point of interest, however, was a complete absence of the uterus and ovaries. The vagina was normal, both as regards length and capacity, terminating above in a cul-de-sac. The clitoris was well developed, together with the labia and mons veneris. The breasts were large and plump, the whole external aspect attested the attributes of a well-formed woman.

Fibro-Cystic Disease of the Ovary, with post-mortem Examination. By S. L. Blatchly, M. D.

IN the early part of April, 1866, I was called to see Mrs. M., in consultation with my friend, Dr. Strause. She reported some enlargement in the left iliac region, which had existed for about two years.

On examination we decided the case to be one of ovarian enlargement, from three to four inches in diameter. Nothing special occurred in the case, except a gradual enlargement, for some three years, when I was hastily summoned to the patient again, and found her in the most extreme agony. She said the tumour had broken, and she could feel the water moving in her bowels whenever she turned, and could not feel the tumour any more. Very great pain, tenderness, tension, and distension now existed, which precluded deep pressure on digital examination. Treated the case, for the time, as one of peritoneal inflammation. In five or six days the patient had much improved, and now with some difficulty I could discover the tumour, much smaller than before, and somewhat flaccid. Soon the tumour began to enlarge, and nineteen days after the first rupture a second took place, with a recurrence of all the unpleasant symptoms as detailed before. I again treated her as before, with like good effects.

She now had a short respite from her extreme suffering, of three to four weeks, after which the cyst again gradually filled, insomuch as to require paracentesis that some relief might be obtained, which was performed in the line of the linea alba, and six quarts of fluid removed, giving temporary ease. The cyst rapidly filled again, and the trocar introduced at the same point as before, but this time failed to enter the cyst, and the instrument giving the impression of passing into a fibrous body. Still hoping to relieve her sufferings, I again inserted my trocar into the left iliac region and drew off five quarts of fluid. The right side not lessening in proportion, after a few days I introduced the trocar into the right iliac region and removed about eight quarts more of fluid. During all this time there was evidence of more or less irritation and probable inflammation.

She gradually sank, and died in a few days.

Post-mortem nine hours after death.—In presence of Dr. Strause, Cary, and Sharp. The tumour was of fibrous character with numerous cysts of various sizes, containing dark bloody serum. On breaking up the adhesions between the tumour and the peritoneum, the tumour, intestines, spleen, pancreas, portion of liver, and stomach, were found agglutinated in one general mass.

On removing the tumour as best I could, and tracing it to its origin, it was found to have originated in the left ovary and Fallopian tube. The ovary was broken down in its central portion, and contained bloody pus. The fundus of the uterus was somewhat enlarged, and contained in its structure two fibrous tumours, 1¼ and ½ inch in diameter.

At the entrance of the left Fallopian tube there was a small sac of black grumous matter, and midway in the uterine canal there was complete stricture; right ovary somewhat diseased, omentum almost entirely absorbed, and the vessels of the abdominal viscera completely obliterated; liver studded over with small hard bodies of bony consistence; gall bladder largely distended; spleen and pancreas healthy, but completely adherent to the diseased structure; kidneys normal; bladder somewhat constricted; small and large intestines so completely imbedded in the tumour I could not separate them; lungs sound. The extensive adhesions in the case were, no doubt, the result of the spontaneous rupturing of the cyst, thereby causing more or less inflammation, which resulted in the remarkable and extensive adhesions. The *post-mortem* developments in this case, together with the phenomena following the spontaneous rupturing of the cyst, would seem to contraindicate any operation for the successful removal of the tumour, after such rupturing had taken place, inasmuch as the inflammation consequent on the operation, as also on the rupturing of the cyst, would compromise the life of the subject.—*American Journal of the Medical Sciences.*

Medical News.

Royal College of Surgeons of England.—The following gentlemen, having passed the required examinations for the diploma, were duly admitted Members of the College at meetings of the Court of Examiners on the 15th and 16th inst.:—William Allnutt, L.S.A., Portsea; George P. Applin, Addiscombe; George Ernest Archer, Feltwell, Norfolk; James B. Ball, Dublin; William Beatson, Camberwell; * J. Edwin Brooks, L.R.C.P. Edin., Silverdale; W. F. R. Burgess, L.S.A; John E. B. Burroughs, Lee, Kent; John S. Clarke, Liverpool; William E. Crowther, Hobart Town; William T. P. Douglas, M.B. Cantab, Banbury, Oxon; Francis H. Drake, Pontrefact; Edward B. Evans, Swansea; Hugh C. Fox, L.S.A., Stoke Newington; George C. Franklin, Leicester; William Garratt, Madras; Charles Gosse, Adelaide, South Australia; George J. Gray, Stonehouse; William Hammond, Howden, Yorkshire; Michael Harris, Hackney; Richard Harrison, St. Lawrence road; T. Scoresby Jackson, M.B. Edin., Whitby, Yorkshire; William J. Johnson, Worksop, Notts; Robert Jolly, M.D. and F.R.C.S. Edin., Birmingham; Frederick G. Larkin, Hoath, near Canterbury; * A. E. B. Love, L.S.A., Vauxhall bridge road; Henry C. Martin, M.B. Edin., Reigate, Surrey; Henry Morris, Queen's terrace; Malcolm A. Morris, Twickenham; John H. Mummery, Cavendish place; William M. Noott, L.S.A., Cardigan; * Edward W. Orton, L.R.C.P. Edin., Coleshill, Warwickshire; Henry D. Palmer, Olney, Bucks; William Ritchie, M.D., Dublin; Eleazar B. Roche, Norwich; Charles Lyon Vasey, L.R.C.P., Cavendish place; George E. Walker, Quorndon, Leicestershire; Henry Wotton, Plymouth. Seven other candidates were examined on the above-named days, but failed to satisfy the Court, and were referred for a period of six months' further professional study.—[* Passed in Surgery at previous meetings of the Court, and, having subsequently obtained medical qualifications recognised by the College, were admitted Members.]

University of London.—Pass List.— Second M.B. Examination.—*First Division:* Messrs. Edgar G. Barnes, St. George's Hospital; John Mitchell Bruce, M.A., University of Aberdeen; William Frederick Richardson, John De Liefde, Arthur William Smith, Guy's Hospital: Charles Henry Carter, B.A. James Pearson Irvine, B.A., B.Sc., Richard Lawton Roberts, University College; John Curnow, King's College; Charles Henry Joubert, St. Mary's Hospital; Frederick Pollard, St. Thomas's Hospital.—*Second Division:* Charles Taylor Aveling, St Thomas's Hospital; Ashley William Barrett, London Hospital; Alfred Cotterill, Alfred Thomas Gibbings, Charles Tanfield Vachell, William Beach Whitmore, King's College; James Alfred Harris, Edinb. Univ. and R. Coll. of Surg.; Walter George Lowe, St. Bartholomew's Hospital; Rushton Parker, William Price, Alfred Shewen, University College.

The late Miss Eleanora Atherton, of Quay street, Manchester and of Great James street, Middlesex, has left the following charitable bequests to medical institutions:—£1,000 to St. Mary's Hospital, Quay street, Manchester; £1,000 to the Manchester Royal Infirmary and Dispensary; and £500 each to the Eye Infirmary, Manchester; Asylum for Idiots, Earlswood; Royal Hospital for Incurables, Putney; and the British Home for Incurables, Clapham rise.

A Course of Lectures will be delivered at the Hospital for Women, Soho square, on successive Thursday evenings during the months of January, February, and March to practitioners and students. Dr. Protheroe Smith will lecture on "Flexions, Tortions, and Displacements of the Uterus," Dr. Alfred Meadows on "Uterine Hyperæmia," and Mr. Christopher Heath on "Diseases of the Breast." Students may obtain cards of admission on application to the Secretary at the Hospital. Medical Practitioners will be admitted on presenting their card.

East London Hospital for Children.—This institution has received most timely help by a donation of £1,000 from G. H. Had it not been for this liberal gift the committee would have been compelled to sell stock to meet current exqenses, and so encroach upon a sum of £1,500 set aside as the commencement of a fund for erecting a new hospital.

NOTICES TO CORRESPONDENTS.

☞ Correspondents requiring a reply in this column, are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Out of thousands of such persons it may cause enquiries so signed, on very various subjects much confusion.

*** We must also request our Correspondents to write only on one side of the paper and in *legible* characters. We are often compelled to consign MSS. to the waste-paper-basket merely because it is illegible.

Correspondents not answered in the current Number are requested to look to the Notices the following week.

To Subscribers.—The publisher has received a Post-office Order for £2 5s., without the name or address of the sender, who would oblige by forwarding it to the London office, that credit for the amount may be given, and a receipt sent.

Dr. Bolton.—Enclosure received. The gentleman named is duly qualified and registered. This answer has been forwarded to the address whence the enquiry emanated.

Newspaper Decisions in America.—1. Any person who takes a paper regularly from the post-office—whether directed to his name or another's, or whether he has subscribed or not—is responsible for the payment. 2. If a person orders his paper discontinued, he must pay all arrearages, or the publisher may continue to send it until payment is made, and collect the whole amount, whether the paper is taken from the office or not. 3. The courts have decided that refusing to take newspapers and periodicals from the post-office, or removing and leaving them uncalled for, is *prima facie* evidence of intentional fraud.

MEETINGS OF THE LONDON SOCIETIES.

Friday, the 25th.

Clinical Society.—3½ P.M. Mr. Brudenell Carter: "Case of presumed Injury to the Ciliary Nerves from a Blow." Mr. Durham: "Remarkable Case of Spontaneous Fracture of Femur." Dr. Wiltshire: "On Paroxysmal Hæmaturia." Dr. Handfield Jones: "A Query as to the Safety of Subcutaneous Injections." Dr. Silver: "On the Use of Veratrum Viride in Acute Rheumatism."

Quekett Microscopical Club.—8 P.M. Mr. Wm. Ackland: "Notes on a New Selenite Polarising Film." A Practical Demonstration in Microscopical Injection.

Monday, the 28th.

Medical Society.—8 P.M. Ordinary Meeting.

VACANCIES.

Cork North Charitable Infirmary.—House-Surgeon, and Resident Apothecary. Salary £100, with apartments, &c. (See advertisement).

Lincoln County Hospital.—Assistant Medical Officer. Salary £120, with board and residence.

St. Marylebone, London.—District Medical Officer. Salary £120.

West Derby Union.—Assistant Medical Officer. Salary £80 first year, £100 the second, with board and residence.

Evesham Union.—Two Medical Officers. For the Muker district, at £48 per annum, with extra fees, and for the Pebworth district. Salary £12, with fees extra.

Gnilsborough Union.—Medical Officer. Salary £35, with extra fees.

Stockport Infirmary.—Assistant House-Surgeon. Salary £50, with board.

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

Dr. Syson's Pamphlet on the Contagious Diseases Act.

Irregularität und Krankheitender Zaine. By Henry Sewill, M.R.C.S.

Odd Showers. By Carriblier. London: Kerby and Son.

The Physiological and Medical Aspect of Sewage Irrigation. By Alfred Carpenter, M.D. London; Robert Hardwicke.

Una Visita Agli Ospedali di Londra. By Dr. C. Mazzoni.

Experiments on some Infusions of the Pharmacopœia. By J. B. Barnes.

American Journal of the Medical Sciences; Woodhull's Weekly New York; New York Medical Journal; Glasgow Med. Journ.; The Chemist; New York Med. Gaz.; and Boston Med. Journ.

Marked Newspapers.—The Observer; Exeter Gazette; Coventry Herald; Scarborough Gazette; Mansfield Times; Lincoln Journal; Cardiff Times.

APPOINTMENTS.

Ashe, Isaac, A.B., M.B., Ch.M.T.C.D., Visiting and Consulting Physician to the County Donegal Lunatic Asylum; Surgeon to the Prince of Wales's Donegal Artillery Militia; Physician to the Letterkenny District Fever Hospital, and to the Letterkenny Dispensary and Constabulary.

Baumgaertner, J. R., Resident Accoucheur to King's College Hospital.

Campbell, A. C., M.B., L.R.C.S.Ed., Surgeon for the West District of the Dundee Royal Infirmary and Dispensary.

Chittenden, C. P. D., L.R.C.P., Resident Obstetrical Officer at Charing Cross Hospital.

Crean, Richard, L.K.P.C.P.I., L.R.C.S.I., House-Surgeon at the Clayton Hospital and Wakefield General Dispensary.

Curran, J. Waring, L.K.Q.C.P., L.M., &c., Poor-law Medical Officer for the Mansfield Woodhouse District of the Mansfield Union.

Greene, W., L.R.C.P.L., M.R.C.S., House-Surgeon to the Queen Adelaide's Dispensary, Bethnal green road, London.

Hayes, T. C., L.S.A., House-Physician to King's College Hospital.

Holmes, Dr. H., Medical Officer for the Dunamanagh Dispensary District of the Strabane Union, Co. Tyrone.

Hughes, W. R., L.R.C.S.I., Assistant House-Surgeon at the Birkenhead Borough Hospital.

Lett, F., L.R.C.P.Ed., M.R.C.S.E., Junior House-Surgeon to the Royal Free Hospital, Gray's-inn road.

LITTLE, W., LRCP, M.R.C.S., Senior House-Surgeon to the Liverpool Southern Hospital.
NOAKES, S. S., Resident Medical Officer at Charing-cross Hospital.
ROBINSON, J. D., Resident Surgical Officer at Charing-cross Hospital.
ROPE, H. J., M.R.C.S., House-Surgeon to King's College Hospital.
WESTMORELAND, J., Medical Officer No. 4 District of the Manchester Union.

Marriages.

ALLFREY—SMITH.—On the 10th inst., at the Parish Church, Maidstone, Charles Henry Allfrey, M.D., F.R.C.S.E., of St. Mary's Cray, to Emily Malden, daughter of Thomas Heckstall Smith, F.R.C.S.E.
SINCLAIR—WALTON.—On the 15th inst., at Dalton-in-Furness, William Sinclair, M.D., of Barrow-in-Furness, to Mary, only daughter of the late Rev. Henry N. Walton, of Ireleth, Lancashire.

Deaths.

FRANKS.—On the 15th inst., in London, Moses Franks, M.R.C.S., aged 68.
ROBERTS.—On the 9th inst., Dr. Wm. Lloyd Roberts, of the Hospital, Festiniog, aged 26.
TUBBS.—On the 11th inst., in London, William John Tubbs, Surgeon, of Upwell, Cambridgeshire, aged 59.

Advertisements.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 30, 1870.

CONTENTS.

Original Communications.

ON SOME CHRONIC VARIETIES OF SYPHILITIC ULCERATIONS.

By Mr. Morgan, F.R.C.S.I,

Surgeon to Mercer's and to the Westmoreland Lock Hospitals; Professor of Surgical and Descriptive Anatomy, R.C.S.I.

A Peculiar Form of Venereal Ulceration.

The resemblance between some forms of chronic ulceration of a venereal origin, and that of an epitheliomatous nature is very remarkable, and may be the source of deep anxiety both to the surgeon and the patient; the persistence of the ulcerations, their appearance, and character, at times, almost completely simulates a malignant character, especially that form of ulceration, seen for instance on the face, as "Jacob's ulcer," where the progress is slow, the margin cuticular, and peculiar; and where the absence of pain and of glandular enlargements lull the patient's anxieties. Some cases both of pseudo-malignant ulcerations and growths have lately come under my notice, which I can best illustrate by detailing a few of the instances which have been noted with as great accuracy as could be obtained.

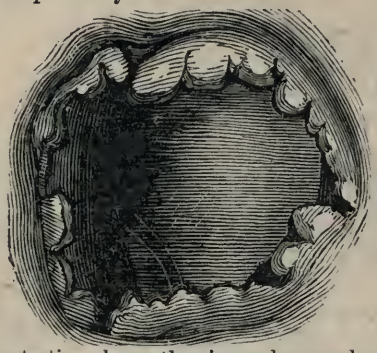
A patient, aged thirty seven (No. 824), was admitted to the Westmoreland Hospital, January 4th, 1870. She still has the appearance of being strong and in tolerable condition, and gives the following history which has been confirmed by reference to the hospital books. She has no recollection of any primary sore, but had gonorrhœa —*i.e.*, discharge several times; about six years ago an ulceration, manifestly of a secondary character, attacked the mouth, ending in a cicatrisation which closed the aperture to about one-half. This I repaired by operation, excising the cicatrised portion, and detaching and draining out the mucous membrane around the margin of the incisions. She had no further symptom, but suffered from pains rather severely. About five years ago a small sore formed at the nympha which has never healed since, but has gradually extended in a serpiginous course around the vulva. For the first two and a-half or three years, she continued an irregular life, but has since been obliged to desist, owing to the irritation. The sore has a superficial, very faintly granular appearance, with hardened edges, creeping irregularly around—the nympha, clitoris, and inner side of labia have been occupied by it. There is a little ichorous thin discharge from it—microscopically containing a few pus cells and copious epithelium. The margins are in places as if gouged out sharply and superficially; and there is no uterine or intra-vaginal ulceration whatever. The inguinal glands are healthy, and the condition of the patient almost in robust health. There is no sign whatever of any other constitutional evidences of infection.

Auto-inoculation of the sore, repeatedly tried, failed. The patient never had taken mercury in any shape. It is known from reference to the hospital books that the sore has existed now nearly five years.

A drawing taken bears the strongest resemblance to a malignant erosive ulceration.

The treatment consisted in the free application of escharotics, the local use of an arsenical lotion, and the administration of Fowler's solution, perseveringly—the ulceration healed in parts and cicatrised over. The patient left hospital before its being entirely healed, and has returned on several occasions since, suffering from the same form of ulceration but in a minor degree, the appearance and condition being still entirely free from any malignant cachexia. Whether this sore was capable of propagation as a venereal affection there is no evidence to show; it was certainly not auto-inoculable on several occasions; if communicable, it would easily explain how

venereal disease may be propagated extensively, and for a continued period by one individual.



The illustration shows the size and general outline.

Chronic Ulcer of Another Form.

Another variety of chronic sores is not at all unusual, but they differ from that which forms the subject of the foregoing remarks. They are surrounded with a dense cuticular and callous edge, and secrete a little, thin ichorous discharge; they appear to be very insensible, and are totally devoid of granulations. Their existence dates from one to three years. They resist *auto*-inoculation, but being usually associated with well marked constitutional signs, there is little doubt of their possessing viridity of a dangerous form to the system; they sometimes co-exist with other more recent sores, as in one of the following instances :—

No. 963. Admitted March 16th, 1870. Aged 30. W. 6.	Large chronic sore at the vaginal orifice, of 18 months' duration; five smaller pus secreting sores on the labium and nympha; papular rash.	Had pains, mucous patches, and discharge.
No. 768. Admitted December 7th, 1869. Aged 30. W. 12.	Chronic sore for two years at vagina; scattered papular rash; cachexia.	Had a sore and rash three years before. Died of phthisis and cachexia.
No. 733. Admitted November 17th, 1869. Aged. 30. W. 14	Large chronic sore of nympha; two years' duration.	Never had rash but severe pains.
No. 735. Admitted November 17th, 1869. Aged 25. W. 14.	Large chronic sore of two years' duration at vaginal orifice.	Had discharge, pains, papular rash, and lost one eye by untreated iritis.
No. 1,018. Admitted March 29th. Aged 20. W. 6.	Had for the last 18 months a huge chronic sore of the nympha; now has a large non-indurated sore at fourchette, almost phagedenic in character.	Has the cicatrix of a healed chronic sore; has pains only.
No. 749. Admitted Nov. 25th, 1869. Aged 22.	Has a large chronic sore on the nympha, which is unusually hypertrophoid.	Four and a half years ago had a sore and patches; never had rash, pains, or bubo.
No. 1,016. Admitted March 29th, 1870. Aged 28. W. 6.	Extensive ulcerations of the nympha and hypertrophy; cachexia extreme.	Two and a half years ago had a suppurating bubo, and in one year got the present sore.

We find, thus, the chronic sore in these instances associated with various evidences of constitutional infection. In one case, 740, there has been, however, no constitutional evidence.

That they are capable of communicating true syphilis, I have been able, from circumstances, to be fully well satisfied of, as I have had lately an instance proving the sad effects of contact with this form of sore, which has come under my notice, and which strongly proves the incalculable mischief which the sufferers from such chronic sores can inflict.

A married woman applied at the hospital, and gave the following evidence. She had been married some three years; her husband, who had been industrious and well behaved, admitted that he had diseased her. She was suffering from a copious roseolar rash, severe pains, and profound cachexia, and had a ragged soft sore, and some mucous patches at the vulva. She finally became so prostrated as not to be able to stand, and suffered from most severe cachexia and nocturnal pains.

The husband submitted himself to examination. He had a sore equalling sixpence in size, non-indurated at the base, but with a red and non-secreting surface of ulceration; he was covered with roseola, and suffered from pains, and had no inguinal enlargements whatever; he admitted that he had connection with No. 735, mentioned in the foregoing list of cases (who has had a sore upwards of two years), and was infected by her, the sore appearing within one week, and he, in turn, infected his wife.

Thus, a chronic sore with smooth surface and indurated and welty edge, is capable of producing a non-secreting sore on the male, which, in turn, produces a non-indurated one in the female; but all three have copious evidences of syphilitic infection.

In some rare instances of the formation of this chronic sore, as No. 794, doubtless the evidences of constitutional taint are by no means marked, but usually they are distinguishable.

If any proof based on practical observation were wanting, as to the non-existence of the fine-drawn distinctions so written about, between soft secreting but non-infecting sores and the hard non-secreting and infecting, such instances as this are tolerably conclusive.

Here the sore in the male on the prepuce was totally devoid of induration, but was red and non-secreting—without the slightest enlargement of the inguinal glands, while in the wife, the sore was soft, ragged, and pus secreting, and associated with mucous patches, and there was slight enlargements of the inguinal glands. Both husband and wife were thoroughly infected, while the origin of both was a sore of two years' duration, of an indolent non-secreting character, were constitutional signs were evident.

Another instructive instance lately occurred in a man and wife. The man had an indurated sore on the dorsum of the penis of three months' duration, yet he was inoculated from it on the abdomen, and had papular squamous rash and pains; he infected his wife, but she got a large ragged sore at the fourchette, with tender almost suppurating inguinal glands, iritis alopecia, papular rash, and became profoundly cachetic. Over and over I have tested soft secreting sores by inoculation, yet they were followed by intense constitutional signs, on the other hand, the few instances of indurated sores that occur from time to time, have been characterised by the mildness of the succeding signs..

IN-GROWTH OF THE TOE-NAIL.

By J. Waring-Curran, L.R.C.S.I., L.K. Q.C.P.I., &c.

The general treatment of ingrowing toe-nail which is always tedious and frequently troublesome, it is not my intention to review, but as briefly as possible to explain a form of treatment which I have practised for the last

three years with uniform success, or, to be accurate, with that amount of success which may be expected resulting where evulsion of the toe-nail is not resorted to, and where, I think, I shall presently show the necessity of performing that simple, though painful, and disagreeable operation, was in several instances overcome. The first four of my patients were cases wherein I had exhausted my experience and book-learning, in order to prevent, if possible, evulsion; but there was little improvement; the cases did not progress as would have been desired; accordingly, I took advantage of a fortunate incident in trying a new method of treatment. At the house of a literary friend, I met an Italian lady, whose high attainments and publications are well known in literary circles. After discussing various topics, in conversation, we entered upon the very remarkable one of "filbert nails," which she told us were cultivated by the ladies of her native town to such a degree that they ignored the wearing of gloves, in order to exhibit the neatness and symmetry of the finger nails. She told me, in order that they may be properly grown, chiropodists, practising the art of nail cultivation, were in the habit of putting their consultees under the following plan of treatment. Out of the centre of the nail they cut a triangular portion—the base at the free extremity of the nail, and the apex at the matrix—so as to encourage the nail to contract from the edges towards the centre; or, in other words, to make the central part of nail grow with greatest prominence. Having three chronic cases of in-growing toe-nails in the district, I bethought me to try the plan of cutting out a triangular central portion, with a very wide base, shaving the edges of the in-growth as thin as expedient with a piece of glass, and tying the separated nail together loosely with a piece of dentist's silk from beneath, and placing between the nail and contiguous soft parts, into which the nail intruded, a piece of thick worsted, coated with mercurial ointment. Where those exquisitively-sensitive granulations existed, I applied some extract of belladonna and resin ointment rubbed together, and adopted the same method in remedying the shape and growth of the nail.

In the course of time the affected nail assumed a better shape, grew out more prominently, and away from the sides, whilst the pain and irritation was overcome by the belladonna application, and eventually cured by the mercurial ointment, and pressure taken off by the better shape assumed by the nail.

As against every method of treatment, which has for its object the cure of in-growing toe-nail without evulsion, it may be said, my plan needs much patience, and requires time and perseverance. The patients were only too glad to have something to do, and to practice it, for there is a great antipathy among them to tearing out the nail by the forceps, even under chloroform. I ignore the ether spray, for I have used it in removing a toe-nail, and should be sorry to depend on its pain-destroying virtues in future.

Nails, thus operated on, acquired a normal shape in six months; whilst in from six weeks to three months, according to the existing severity of mischief in the soft parts surrounding the nail, the toe became healthy. I insisted on the wearing of broad toed shoes with low heels, that the foot should not be thrown too prominently forward, or the toes be unduly compressed together.

In two of my patients the outer side of toe-nail had overhanging soft parts which appeared healthy on the surface, but into which the nail was growing; these I shaved off with a bistoury, lifted the nail, took out the triangular portion and, by stimulating applications, got a flat, healthy surface, which soon skinned over.

It may be readily gathered what I mean to show is that a central portion cut out of the nail will alter the shape of that nail, and, if the disease in the soft parts be attended to, will be found of great practical utility in treating, and altering the shape of, an in-growth of the toe-nail.

CLINICAL MEMORANDA.

SOME AFFECTIONS OF THE NERVOUS SYSTEM ASSOCIATED WITH PREGNANCY.—CHOREA, ATTENDING PREGNANCY. — HEMIPLEGIA, FOLLOWING DELIVERY.

By Thomas M. Dolan, L.R.C.P.E., L.R.C.S.E.,
Medical Officer of the Halifax Union Infirmary.

Chorea, attending pregnancy, may be looked upon as a comparatively rare affection, though we find it mentioned by various writers on nervous diseases, and cases of the kind have been recorded by obstetricians.

The distinguished Berlin Professor, Romberg, in his work "On Nervous Diseases" (Sydenham Society Edition. Vol. 2. Page 60 to 63), gives the record of three cases observed by himself, and an analysis of five recorded by Dr. Lever in the *Guy's Hospital Reports*. The following well-marked case seems worthy of publication, as it illustrates the influence of the sexual organs in causing what has been called "insanity of the muscles," as the choreic symptoms began with the suppression of the catamenia, continued whilst pregnancy was advancing, were aggravated during labour, and then gradually disappeared. It also shows the value of chloral hydrate in producing sleep, for the want of it is oftentimes one of the most distressing symptoms of this complaint, and the physician's best efforts are generally taxed to procure a remedy to induce it.

Sarah Ann Whitely, twenty-one, married, mill-hand, was admitted into Halifax Union Infirmary, May 9, 1870, suffering from chorea. She was about seven months advanced in pregnancy; the choreic movements beginning upon suppression of the menses. She believed she had a like attack when five years old. The motions were incessant and general. There was great contortion and twisting of the features; articulation was impeded; she was very much debilitated and weakened, as for several weeks she had very little sleep, and her appetite was very bad; her pulse was weak; tongue flabby and swollen, and marked with numerous indentations; her bowels very much confined. She was ordered into the long sick room, and an aperient dose given, and she was placed upon No. 6 diet, which consists as follows:—

Breakfast.—Five ounces of bread and pint of milk. *Dinner.*—Five ounces of bread and pint of beef tea. *Supper.*—Five ounces of bread, pint of milk; a liberal allowance of wine was also given. The first essential point was to procure sleep, and thus to enable her to make up for the increased waste of tissue going on. Our usual sheet-anchor could not be resorted to, for, according to one of our best medical authorities (Tanner), "In chorea, opium is useless; it may be given until the pupils are contracted, without lessening the irregular movements."

Chloral hydrate seemed likely to be the therapeutic agent to be relied on, and I decided on trying it. The first night she had fifteen grains, to be repeated in four hours if necessary. Both doses were given, but the effect was very transitory. I increased the dose to twenty grains with better effect. She slept for some hours, though the nurse informed me that the movements continued whilst she slept. During the day she took a mixture, containing half-drachm doses of bromide of potassium. A medical friend, who saw her with me, suggested that chloral hydrate might have some injurious effect on the fœtus—I, therefore, listened each day for the sound of the fœtal heart, and found it unimpaired. Each night, for a fortnight, she took twenty grains, when I tried her without it, and found she slept very well; her appetite was now improved, and I placed her on No. 2 diet, as follows:—

Breakfast.—Five ounces of bread and pint of milk. *Dinner.*—Eight ounces of potatoes, five ounces of bread, six ounces of meat. *Supper.*—Five ounces of bread and

6

pint of milk, and as some of my other patients were beginning to imitate her, she was removed to the Lying-in ward. On making several examinations of the urine, I found the specific gravity always high, and it was abundantly loaded with urates. There was no history of rheumatism, and her heart sounds were normal. Her health continued to improve, the movements to be confined chiefly to her hands, and she was able to go out and take some exercise. On June 27th, she complained of some pains in her back and loins; when the choreic symptoms were aggravated, she tossed about the bed incessantly, and her articulation was very much impaired. On vaginal examination, I found that labour was setting in. Pains came on very rapidly; the os dilated easily; the liquor-amnii did not escape until a few minutes before the birth of the child, and after a labour of about four hours' duration, she was delivered of an apparently healthy boy. She gradually improved each day; the movements diminished. She was put on sulphate of zinc mixture, cold shower bath, and was discharged quite well on the 3rd of August.

Hemiplegia following delivery.—The occurrence of paralysis before, during, or after labour, in many of our midwifery works is passed over, or but slightly mentioned; though in the work of Churchill considerable attention is given to the subject, and it is there treated with that painstaking research which distinguishes all the writings of the Dublin Professor. He has collected together a mass of valuable material, illustrated by cases which cannot fail to assist those who may meet with such in their practice. Romberg also, in his monograph, has given attention to the subject.

The following case presents some features of interest, as the attack was sudden and unexpected, and uncomplicated by any impairment of the mental faculties.

Mrs. S., Fleet street, Halifax, was attended by me for her first confinement in July, 1870. She was about twenty-one years of age, strong, healthy, but of very full habit. There was nothing particular about the labour. The pains were very strong and continuous, and after being with her only about two hours, she was delivered of a fine boy. Once or twice she complained of feeling very chilled, although she was perspiring very freely, on the side now affected. I saw her twelve hours afterwards. I noticed that her mouth was slightly twisted to the right side. In reply to my questions, her speech was thick and inarticulate; her tongue was turned to the same side; her right arm and leg were deprived of power and motion, but sensibility was undiminished. She said she felt very well, but was quite aware that such was the case. She complained of no pain anywhere; had no confusion of thought, and the pupils were unaffected. She had fallen asleep, and woke up in the condition I found her in. I ordered her to be kept very quiet; had her bowels well opened, and stimulating liniments applied to arm and leg; and in order to assist the action of the skin and kidneys, I ordered her a saline mixture. The milk came freely on the third day; tongue continued clean and moist; pulse very fair; she made water freely; and the discharge was very free. She very soon complained of not getting enough to eat, and wanted to get up on the sixth day. The child was weaned, and on the eighth day I placed her on strychnia, and on the ninth day when I called to see her, I found her sitting down stairs, but she could not walk or move the right arm. Her general health continued good; she ate and slept well, and seemed in very good spirits. I still continued the same treatment for some time, when she told me that she would not take any more medicine, and though far from being well, I was compelled to cease my attendance upon her. On making examination of her urine I found it albuminous.

The above case opens out to us a wide field of speculation as to its cause. Had there been any serious cerebral mischief, we should naturally expect some impairment of the mental faculties, and confusion of thought, or loss of memory; and we can hardly suppose that the hemiplegia depended upon spinal causes. The hypothesis of Churchhill and many other very eminent obstetricians, that albuminuria has some part in producing these important lesions, affords us some solution of the difficulty of assigning a cause.

On the day of her confinement, the air was close and hot — she perspired very freely, and, as before mentioned, she complained of feeling very chill and cold; and the checked skin action may have produced some congestion of the kidneys, ultimately terminating in paralysis.

Transactions of Societies.

THE MEDICAL SOCIETY OF LONDON

MONDAY, NOV. 21ST, 1870.

JOHN GAY, Esq., President.

Mr. CLEMENT GODSON brought forward

PART OF A FIBROUS POLYPUS REMOVED FROM THE ANTERIOR WALL OF THE VAGINA OF A WOMAN, AGED THIRTY-TWO YEARS.

The polypus was removed by the wire écraseur ten days ago, no pains or hæmorrhage took place, and the patient made an excellent recovery.

Mr. DAVY showed a plan he had devised for the more easy and speedy removal of the skull cap at *post-mortem* examinations. A screw fitted to a T shaped handle was introduced into the vertex, then a grasp of the handle enabled the operator to keep the head steady while he screwed through the skull. Mr. Davy's plan was to use a saw with a moveable back, with which he sawed through skull and brain at once. After washing with water, a good section of the brain was then obtained.

Mr. STREETER thought this much too coarse a procedure where the brain had to be minutely examined.

Dr. SUTTON sometimes sawed through brain and skull together, but not when a careful dissection of the brain was required.

Dr. BLOXAM approved of Mr. Davy's method of fixing the skull, he considered it very desirable to open the skull by sawing, and not by hammer and chisel, more especially, in cases of suspected fractures at base of skull.

Dr. JOHN MACPHERSON then read the paper of the evening,

ON THE ANALOGIES OF CHOLERA NOSTRAS, AND CHOLERA INDICA.

After pointing out the diseases with which Cholera has been confounded, it was shown by a historical sketch, that Cholera Nostras had often been epidemic in Europe, and some of the opinions respecting it were mentioned. It was shown that the symptoms of two diseases during life resemble each other closely, and as yet no difference has been found between them. *Post-mortem.*—The indications for treatment are the same in both. The two affections have been ascribed to the same predisposing and existing causes. It was shown that they have the same character of reason and prevalence, and that they both exercise a distinct action on other diseases. Contagiousness has been attributed to both, neither gives immunities against future attacks. A relapse or a repetition of the disease may occur in either, from imprudence, both have been compared to acid poisoning. The existence of a poison in both has been suspected, supposing the poison of Cholera Indica to have been discovered, then might remain one to be discovered for Cholera Nostras. For the present, their leading differences are of degree. Cholera Indica has increased intensity of symptoms, and increased power of spreading. A few points of analogy with other diseases were also pointed out.

Dr. SUTTON endorsed all that had been said as to the symptoms. At one time Dr. Sutton thought he could distinguish between English and Indian cholera. Sudden violent invasion, rice-water stools, and a temperature rising above 100°, he at one time thought to be characteristics of Cholera Indica, but in the years 1868-69-70, he had met with three cases of English cholera that disproved the hypothesis. Some thought cramp in the calves of the legs as well as in the belly to be characteristic of Indian cholera, but cases of English cholera had disproved this. One case of English cholera was seen by Dr. Sutton last summer that had all the character of epidemic Indian cholera. The

patient had come from Italy, and was taken suddenly in London with vomiting, rice-water stools, temperature over 100° collapse and death. English cholera generally ended in recovery, and death from uncomplicated diarrhœa, Dr. Sutton thought to be rare.

Mr. RADCLIFFE said that had the case quoted by Dr. Sutton come from St. Petersburgh last summer, it might have been imported Indian cholera.

Mr. BARNES had seen cases of cholera in 1849 and in 1854, he asked Dr. Macpherson if he had seen trismus and tetanus accompany cholera, for he had observed trismus in some cases.

Dr. MACPHERSON had not seen this complication in cholera, but was familiar with it as not being rare.

Dr. WALLER LEWIS never knew a case of cholera that was not preceded by premonitory diarrhœa, and it was in detecting and checking this symptom, that a system of house to house visitation had proved so eminently successful.

Dr. BLOXAM believed it to be very rarely that cholera was preceded by diarrhœa; in 1849 one of the first cases that occurred, was that of a man found dead in the park, there was no evidence of diarrhœa, but his intestines were full of rice-water fluid.

Dr. MCOSCAR saw much of cholera in 1854: one case was that of a man seized suddenly with violent vomiting, he died in an hour without any diarrhœa.

Dr. SEMPLE agreed with Dr. Sutton, that cases did occur where English cholera presented all the characters of the Asiatic disease. He, however, believed the two diseases to be distinct. English cholera was an undue flux from the mucous membrane. Asiatic cholera was due to a poison acting on the nervous centres, and causing decomposition of the blood, the serous part of which was evacuated as rice-water stools by the bowels. Cases of English cholera were always met with sporadically in the summer months.

Dr. SIMMS suggested, that whether was it possible that Cholera Indica might have developed from Cholera Nostras originally.

Inspector-General LAURENCE had seen many epidemics of cholera. In 1836 there was a severe epidemic of cholera in Sicily, he was at that time at Malta, and they had many cases of Sporadic Cholera Nostras.

Dr. MACPHERSON briefly replied, and the meeting adjourned.

CLINICAL SOCIETY OF LONDON.

THIRD MEETING, NOV. 11th.

Mr. PAGET, President, in the Chair.

SKIN GRAFTING, AND SKIN TRANSPLANTATION.

MR. POLLOCK read particulars and exhibited several cases of Skin-grafting and Skin-transplantation. In relating the particulars of the first case in which skin-grafting had been attempted in this country, he stated that in 1869 M. Reverdin originated in Paris this method of treating large ulcerated surfaces. In May, 1870, the author first heard of M. Reverdin's experiments, and at once decided to test the treatment. A girl, eight years of age, had been in St. George's Hospital for some three months and a-half, with an extensive open burn of the right thigh, of more than two years' duration. The ulcerated surface extended from the buttock to the knee—broad above, and ending almost in a point below. Mr. Pollock at first transplanted two small pieces of skin about the size of millet seeds, taken from the lower part of the abdomen. Subsequently three, and again other pieces, were transplanted at various periods—in all, about fourteen pieces had been transplanted. The child was exhibited to the members of the Society, and it was seen that this extensive burn was nearly healed, in a period little over five months, without any perceptible contraction of the cicatricial tissue originated by the transplanted skin. The child had greatly improved in health as the progress of cicatrisation had advanced. In this case two pieces of black skin had been on one occasion transplanted to the ulcerated surface, and became attached; when increased in size, the area of the pigment deposit had considerably increased in one of them, although the whole of the cicatricial tissue due to the transplantation of this portion of skin was not generally dark coloured. The sore was attacked some time after by sloughing, which was chiefly confined to the portion in which the black skin had been engrafted, and unfortunately destroyed the whole of the cicatrix due to this transplantation. Mr. Pollock made some general remarks with respect to the mode of transplantation, and the conditions requisite to the success of the operation. He usually transplanted very small pieces, similar to the plan pursued by M. Reverdin, and considered it essential to the success of the operation that the surface of the granulations should be in a healthy state. In some cases the operation had entirely failed, in consequence of the state of the sore. In other cases, though the piece transplanted had become attached and vitalised, yet, owing to the state of the patient's health, it had remained stationary, and gave no sign of increase. Mr. Pollock in conclusion, thought a tribute of admiration and gratitude was due to M. Reverdin from the profession for the boon he had conferred upon surgery by the introduction of this original method of dealing with large and obstinate ulcers.

Mr. LAWSON read a paper "On the Successful Transplantation of Portions of Skin for the Closure of large Granulating Surfaces." He exhibited two patients in whom this mode of treatment had been attended with satisfactory results, and related the history of a third who had been equally benefited by the method of transplantation. In one patient a large ulcer of the leg, which had resisted all treatment for over four years, was completely closed in a few weeks after a piece of skin the size of a fourpenny-piece had been planted on it. As soon as the new skin had established its vitality, granulations sprang from the circumference, and rapidly closed-in the wound. In another patient the results were equally satisfactory. In a third case Mr. Lawson formed a new eyelid for a patient who had a complete ectropion of the upper lid. He dissected the lid from its attachments, pared at two points the corresponding tarsal margins, and united them by two fine sutures, and thus obtained a fixed level surface upon which to transplant a portion of skin. The parts were then left, and on the fourth day, when the wound was covered with healthy granulations, he transplanted a piece of skin of the size of a threepenny-piece, and two days later another portion, of the size of a silver fourpenny. Both pieces rapidly united to the granulating surface, and the space between them was speedily filled up with new cicatricial tissue. A new lid was thus formed, which was sufficient to protect the eye from exposure; but the presence of two pieces of skin, different in appearance to the ordinary eyelid integument, gave to the patient a peculiar and rather unsightly look. In each of these patients the skin which was engrafted not only soon became vascular, but acquired sensibility, and after ten or twelve days could appreciate the slightest touch with a blunt instrument. The conditions which Mr. Lawson found essential for the operation were:—1. That the new skin should be applied to a healthy granulating surface. 2. That skin *only* should be transplanted, special care being taken that no fat adhered to it. 3. That the portion of skin should be accurately applied to the granulating surface. 4. That the new skin should be kept in position without interruption, and that it should be lightly covered with a layer of lint, and over that a small compress of cotton wool, and a bandage, for the purpose of maintaining its warmth, and thus to assist in retaining its vitality until it had established its new life.

Mr. CROFT mentioned a case in which he had transplanted a piece of skin a quarter of an inch square on to a large granulating sore of the leg. Eleven days afterwards it had doubled in size, and was now progressing very quickly towards recovery.

Mr. FRANCIS MASON remarked that the size of the pieces which were transplanted was worthy of special consideration; that, according to his own experience, pressure was important, and he regarded several failures that had occurred as due to the difficulty of obtaining this condition satisfactorily, on account of the situation of the parts treated.

Mr. CARTER asked Mr. Lawson if a better result might not have been obtained by transplanting a small piece from the other eyelid, so as to preserve the natural delicacy of the skin of the parts.

Mr GANT agreed that the similarity of texture on both sides of the body was worth recollecting in these cases.

Mr. SPENCER WATSON gave brief particulars of cases that had come under his notice at the Great Northern Hospital, and considered that the success of the operation depended very much in keeping the transplanted pieces in position.

Mr. HENRY ARNOTT spoke of a case in which two ulcers existed, one having been treated by transplantation and the

other left alone; both closed pretty much at the same time; and, in reply to Mr. Heath, said that the case was one of keloid, following a burn.

Mr. Reeves thought that large pieces of skin should be transplanted.

Mr. Arthur Durham eulogised Mr. Pollock and the operation, and said that in a case of pigmentary nævus that had come under his care it was positively beautiful to see the islands of skin joining the mainland and the processes of repair proceeding so rapidly.

Mr. Callender quoted cases under the care of Mr. Pick and Mr. Willett, all of which had done well; and in reply to a question from Mr. Heath, said in all the cases cited, the ulcer was, as far as he knew, of the usual tertiary syphilitic form.

Mr. Pollock closed a long discussion by briefly explaining his own views as to the physiological aspect of the question, and as to the success of the operation in syphilis, and regretted that the state of Paris had prevented any recent intercommunication with Dr. Reverdin, the talented author of the operation. According to his own experience, and particularly with rupial sores, small pieces of skin answered as well as large; and, in this matter, some consideration should be shown to the patient.

DIALECTICAL SOCIETY.

Wednesday, Nov. 2.

Mr. F. Bourne in the Chair.

Dr. C. R. Drysdale read the following paper:—

ON THE MORTALITY OF NEWLY-BORN CHILDREN—AND BABY-FARMING IN FRANCE.

It has been remarked that France doubles its population very slowly, and that during the time that the British Islands doubled their population in fifty-two years, and Prussia in fifty-four, it would, at the present rate of increase, require 198 years for France to do this. Is this fact owing, in any great measure, to the death of infants? It would appear not. Of sixty-four children under one year of age, there died in France nineteen per cent. in 1865. In England about fourteen per cent. are *said* thus to die; but, then, all deaths under the age of five days are counted as still-born, and the registration in England is rather slovenly performed. Of 100 children born alive there die before one year, fifteen in Belgium, nineteen in Holland, twenty in Prussia, twenty-five in Austria, thirty in Bavaria. The cause of much of the mortality in France is traceable to faults in nursing. In Belgium and England suckling is held in legitimate honour. France has then not a high death-rate of its young infants, and hence we must look to other causes for the slow increase of its population. The main cause will be found to reside in the *small family system* prevalent in that country. "In many districts," says M. Maurice Block, "the peasants habitually limit their families to two children." There is, however, a great amount of mortality among the children of the Parisian population, and this is in a great measure to be accounted for by the extent of illegitimacy which prevails in Paris. The maiden mother has not the sanction of society; she, therefore, is liable to be in difficulties at the very time when she requires the assistance of all her friends to maintain her own existence, and that of her child. Thus, it has been found that still-births are much more common among the infants of unmarried mothers, than among those of married ones. In Austria, in 100 legitimate births there was, in 1865, one still-birth; in Sweden, Bavaria, and Norway, there were three; in Denmark, Prussia, France, and Belgium, four; in Holland, five; whilst, during the same period of 100 illegitimate births, there was three still-births in Austria and Bavaria; in Sweden, four; Denmark, five; in Prussia, Norway, and Belgium, six; in France, eight; in Holland, nine.

Bavaria alone of all these cited has an equality in the still-births of legitimate and illegitimate children, which is accounted for by the fact that marriage in Bavaria is made so difficult to contract that one-fourth of the births are illegitimate, and partners not married live with almost as much of the sanction of society as the rest who have passed through the state-marriage.

In France, against 928,934 legitimate children born in one year, 76,090 were illegitimate; in Bavaria, 134,289 were legitimate, and 39,389 illegitimate.

After the child of the unmarried woman is born, it stands at present, in most countries, a far worse chance of living than when the parents have the sanction of society granted to their paternity. The work-girl who desires to bring up her own child, may become nearly starved by so doing, and is apt to ruin herself irretrievably if she is known to nurse her own child. She thus often gives her child over to some baby-farmer, and in such a case it generally perishes.

According to French statistics, of 100 legitimate children, aged less than one year, sixteen died, and thirty-two per cent. of illegitimates; and generally, we may say, that wherever illegitimates most prevail, early infantile mortality is most common.

Many children in France are abandoned to the Foundling Hospitals, and these foundlings die in great numbers. Thus, from 1839-58, fifty-eight per cent. of these children in the Department of the Seine died. Even in 1864, thirty-nine per cent. of them died, although all were sent out of Paris to be nursed in the country. In the French provinces the mortality of foundling hospitals was very great. Thus, in Indre et Loire it was sixty-two; in Cote d'Oor, sixty-six; in Seine et Oise, sixty-nine; in Aubs, seventy; in Calvados, seventy-eight; in Loire Inferieure, ninety per cent. It surely was not much of an exaggeration to write above the door of one of these hospitals, "Here children are killed at the expense of the State." In the rural population of France there is one illegitimate to twenty-one legitimate births; in Paris, one illegitimate to hardly three legitimate births. In some parts of France the mortality of newly-born children is only from eleven to thirteen per cent. under one year, but in the departments about Paris it runs as high as from twenty-six to thirty-seven per cent. Paris loses no less than thirty-nine per cent. of all the children nursed in that city itself, chiefly owing to the large number of newly-born children, mostly illegitimate, who die in the lying-in hospitals.

A wet-nurse's nurture does not give a much greater mortality than if the child were suckled by the mother, on condition that the nurse live in the mother's house; but the sending of the infant into the country to nurse, as is done in Paris to such an extent, occasions very great mortality among infants. A kind of custom, however, has grown up in Paris, of thus exiling the infant from the maternal home until it is eighteen months old, and this custom seems to have existed for some centuries. In 1769 an office for wet-nurses was established in Paris under municipal supervision. Now-a-days the same office still exists, and is under the surveillance of what is called the Assistance Publique, a great agglomeration of all the charities of Paris under municipal government. The office is called the Bureau Saint Apolline, or Grand Bureau. It employs a certain staff of inspectors, directors, &c., to look after the nurses to whom the Parisian mothers confide their babies, and guarantees to the nurses a minimum of twelve francs a month, in case the mothers forget to pay the twenty-five francs a month they agree to do. Parisians seem, in many instances, to let the State pay for their babies, since, in 1864, of 1,416 parents who were debtors to this institution, only 618 paid what they owed, and 735 paid nothing, or only part of their debt.

This State office is by no means popular, either with nurses or Parisian parents, and only sends out about 2,000 babies a year. Parents think, justly enough, that it is an indignity to let the State manage their babies for them. The mortality of the children farmed out by this Grand Bureau is high, about twenty-eight per cent. for the legitimate infants, and thirty-three for the illegitimate. [From 1863 to 1866, 13,133 foundlings were also sent out, with somewhere about thirty-three per cent. mortality.] In 1821 some new offices called *petits bureaux*, were opened for nursing-out Parisian infants. The medical men attached to these are paid out of the income of the office, and hence are not so exacting on the nurses; hence nurses flock to these offices. No less than 9,136 babies were annually put out to nurse in the country by means of these little offices in 1864, and 2,500 Parisian nurses found places by means of the same offices. Besides these office-nurses, there are others with whom mothers in Paris treat directly, and these correspond with baby-farmers. The friends, relations, or compatriots of the servants at Paris, are often chosen as nurses by their mistresses. About three thousand infants are annually confided to these wet nurses. About 14,000 little Parisians are put out every year to nurse in the country districts by the great and little offices. The mortality among the children put out by the little bureaus is thought to be greater than that of the great office, and it is estimated that forty-eight per cent. of those nursed out without the interven-

tion of any office die, but there is nothing definite known as to this fact.

The evident chief cause of all this mortality is the custom of Parisian women of not suckling their own little ones. J. J. Rousseau inveighed bitterly against this absurd fashion, and, as it is *but a fashion*, we may hope that public opinion in Paris may soon put an end to it when this evil is once recognised. Very few women are incapacitated from fulfilling their maternal duties in this respect, far fewer than is supposed. On this side of the Channel we can hardly understand how such a fashion could have come into existence, but have only to remember the small feet of Chinese women, and small waists of a generation ago, and to understand.

Feeding-bottles, even, when rightly managed, are far less deadly than baby-farming, as practised in Paris, on the condition that good cow's milk alone be used, and maternal love exist, to stimulate to cleanliness of the utensils used.

Do what we will, I fear that a certain number of women will for many a year be forced to send their children out to nurse. Should the State or the municipality have the surveillance over such children? I fear that this would lead us into many evils. In Paris, the intervention of the State seems to suggest to Parisian parents a ready method of getting rid of the burden of parental duties, by merely *promising* to pay a monthly sum, about £1, to an office. This is most dangerous to infantile health, and productive of great mortality. Maternity societies, somewhat like the Society for the Prevention of Cruelty to Animals, are what is wanted, not any more bureaucracy. Such societies might aid poor mothers in quest of nurses, and prosecute any wicked baby-farmers. They might have correspondents in all our cities and villages; and thus, if no more children were born than would be a blessing to society, and to their poor mothers, we might only lose 12 per cent. of all infants, instead of 20·30 as now. One of the great causes of infantile mortality in France, England, and elsewhere is illegitimacy. In Paris, we have seen that more than one-fourth of the births are illegitimate; in Munich it seems that one-half are so; and the same occurs in Vienna. In Paris, and in Bavaria, there is an immense amount of unnecessary illegitimacy, and this is caused by the stringent regulations of the marriage laws of these countries. In France the consent of the relations is required to admit of marriage, and the law gives, I believe, no divorce in *any* Catholic country. Hence, marriages have much fallen off in many parts of the Continent, and notably in Paris, Stockholm, and Bavaria. It would seem to be an inference from this that we should expect to hear less of infantile mortality if marriage were rendered a less formidable contract than it now is in most countries. W. Von Humbolt thinks that the State should withdraw its care from contracts between the sexes, and leave these to individual choice. Mr. Mill says that no *legal* obstacle should exist to divorce, although moral ones may exist in insuperable degree. John Milton favoured easy divorce. In a conversation I had, in the spring of this year, 1870, with Dr. Lefort when in London, I stated what I believe, that in France, a country so prudent in the matter of offspring, the chief thing that is wanted is facility of divorce. This, I believe, would, in that country at any rate, lessen the death-rate arising from the shame produced by the loss of the sanction of society; and would also incidentally tend to do away with prostitution and its numerous concomitant evils. In England very much smaller families and more facile divorce are both needed.

Miss WALLINGTON felt compelled to declare in favour of State control of baby-farmers. In nine cases out of ten women were the sufferers by the thoughtlessness of men, and the emancipation of women was needed, in order to allow them to be able to make a living when they required this to nourish themselves and their infants. The education of women and their enfranchisement were much wanted.

Dr. EDMUNDS said that the idea of State surveillance of baby-farmers was a dangerous one. It was always the interest of a certain number of persons to cry out loudly for State interference; but the surveillance of nurses would increase, instead of diminishing, the amount of baby-farming in large cities. The registration of all women who took a baby to nurse might, however, be made compulsory without much difficulty. In workhouses, the chief cases of women who came to be confined in the wards were domestic servants. These girls were confined in large wards in company with some most abandoned women, and when they left they were obliged to take their children with them. Being very poor, the children died in great numbers. Nurse children are also sent to the workhouse; and a large number of children, whose mothers die of consumption, are brought up in wards, where they pine away and suffer greatly from the want of breast-milk. The guardians always refused to let a woman leave her infant in the house, or to take in a nurse-baby if they could help it.

Mr. NUNN said that one cause of the mortality of children was that more were born than need be, and it was a flagrant injustice that a married woman had not, like a single one, the right to her own person, by the law of England. It was also a shame that single women should be so severely treated when they obeyed the imperious command of nature in reproducing themselves.

Mr. R. J. DRYSDALE said that he was, in the present state of society, greatly in favour of State aid and foundling hospitals. Some few years ago he had visited Moscow, and seen a splendid Foundling Hospital, where 600 children were farmed out, and where the children looked well and hearty. State supervision was wanted, and, doubtless, the French State supervision was bad, or the statistics given by Dr. Drysdale would not be so bad.

Dr. C. DRYSDALE asked whether Mr. Drysdale knew what the statistics of the Moscow Hospital were. He believed they were bad, and the mortality very high.

Dr. EDMUNDS said that Mr. Malthus had visited the hospital in 1798, and remarked, that with all the care, the mortality was very high, and, doubtless, the present condition was no better. Children did not get on without breast milk and a mother's care.

Colonel CLINTON thought that some sort of inspection of baby-farmers should exist.

Mr. WILSON said that the inhabitants of this country, in their hearts, were at a loss what to do with the number of children born, and would, he believed, be glad enough if the children in the workhouse would not live. The fact was, the country was over-peopled. The French peasants were anxious to restrain their families in order to secure to them the same amount of land as they themselves found. It was a cruel thing to bring so many infants into life to suffer and die.

Mr. RUSSELL said that in England and Russia the population had doubled in fifty-two years. In the United States of America it had doubled, quite independent of any immigration, in twenty-five years, on several occasions. Our mortality was decreasing in this country, so that our power of doubling was becoming greater, and we should have to suffer much from poverty if we yielded to it. There was chronic over-population in this country, and it was better to look it fair in the face and resolve not to breed so fast. In this case, we should not require laws against baby-farmers. This was the root of the question.

Mr. RIGBY SMITH said the enormous difference in the death-rates of the countries, such as England and Italy, &c., showed the danger of rapid multiplication of families, which always caused great infantile mortality and preventible disease.

Dr. WYLD was of opinion that the views of Malthus were easily shown to be historically fallacious. Moreover, he held that the collapse of France could be shown to be owing to the domestic habits of having only one or two children.

Dr. DRYSDALE asked Dr. Wyld how he was sure of this, as several causes had been assigned for the unfortunate position of the French?

Dr. WYLD said the habits of the French led them into all kinds of deceit, and ruined the character of the nation, whose word could no longer be depended on.

Dr. THOMPSON DICKSON, in reply, said that, although Dr. Drysdale said that State supervision had failed in France, it did not follow that it would fail here. Lunatics were now under State supervision, and infants, being helpless, should also be watched over by the State. A perfect registration would do good. He had just come from a trip to Scotland, and whilst there had applied to the Registrar-General for facts. Dr. Stark had informed him that infanticide and baby-farming were almost unknown in Scotland. Illegitimacy is very prevalent in Scotland—9·7 per cent. of births are illegitimate. Thus, Scotland was one of the most unchaste countries in Europe; but all children of a woman are made legitimate when she marries in Scotland, and marriage is an exceedingly simple affair in Scotland. Consent between the parties is sufficient. Divorce, however, is difficult. At a pic-nic, two young people, friends of his, at Gretna Green, proposed to get married in a frolic by the blacksmith, who performed the ceremony for sixpence. It took them four years to get a divorce. Dr. Dickson, in conclusion, said he had not given attention to the ques-

tion of over-population; but he held that there was not much to be apprehended on that score. Divorce should be made much more facile than at present; and he held that partners who hated each other should be allowed to get free.

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the MEDICAL PRESS.)

No. XIV.

PRECIPITATION OF SEWAGE WITH CAUSTIC LIME.

AT Hertford the sewage works are managed by the New River Company, who are compelled by their Act of Parliament to deodorise and purify the sewage of the town before it is discharged into the River Lea, and this they accomplish by means of lime. The town has a population of about 7,000 persons, and being well sewered, the whole of the sewage, together with a large volume of subsoil water, is subjected to treatment at the works. The flow of sewage amounts to about 1,640,000 gallons a day, which is as much as 234 gallons per head of the population, or nearly ten times as much as the water supply. The distribution of the flow during the twenty-four hours is at the rate of 70,000 gallons per hour in the day time, and 66,000 gallons in the night. It runs by gravitation to the works, which are a little beyond the town, and is delivered into a subsiding tank 140 feet long and 20 feet wide, where it receives a dose of lime in a creamy condition, the lime being delivered by means of little buckets attached to a water-wheel which is turned by the effluent sewage, and in this way the quantity of lime is exactly apportioned to the rate of the flow of sewage. The subsiding tank is divided by two cross walls a little under the water line, and thus the sediment is kept back, while the supernatant water passes on to be discharged over a weir into a filter bed about twenty feet square, composed of six or seven inches of coarse gravel at the bottom, and three inches of fine sand above, and thence it passes into the effluent channel which is about a mile long, and so onwards into the River Lea at Ware Mill. The quantity of lime which was used at the time of our visit to the works in October, 1866, was about eight and a-quarter bushels per day, and to this were added 150 lbs. of chloride of lime, making a proportion of nearly two grains of lime and 0·64 of a grain of chloride of lime per gallon of sewage. The time or duration of the flow of sewage through the subsiding tank was about forty minutes, which is much too short for complete subsidence. The tanks and filters are in duplicate, and the former are worked for three days, when the precipitate is removed, and the latter are cleaned out daily. The sludge or precipitate is placed upon a covered platform between the tanks, where it drains and consolidates; and after a period of three or four months it is sold to farmers at the price of 2s. 6d. per load. In this manner about 12 cwt. of solid matters are removed from the sewage daily. The effluent water is a little turbid when it leaves the filters, but it soon becomes clear, so that after flowing along the out-fall channel for about a quarter of a mile, it becomes quite clear, and fish and aquatic plants are found in it in abundance. The composition of the sewage and the effluent water on three occasions in 1866 were as follows:—

Constituents per gallon.	December 13. Raw sewage.	December 13. Effluent water.	August 31. Raw sewage.	August 31. Effluent water.	August 26. Raw sewage.	August 26. Effluent water.
	Grains.	Grains.	Grains.	Grains.	Grains.	Grains.
Soluble matters	30·33	27·00	29·30	27·25	26·95	26·00
Organic	5·35	2·51	1·95	1·20	1·70	1·00
Mineral	24·98	24·49	27·35	26·05	25·25	25·00
Suspended matters	5·39	0·74	6·30	1·30	2·05	0·85
Organic	0·71	0·24	3·25	0·60	1·05	0·35
Mineral	4·68	0·50	3·10	0·70	1·00	0·50
Total	35·72	27·74	35·60	28·55	29·00	26·85

When we visited the works in November, 1867, the quantity of lime was fourteen bushels a day, with one bushel of chloride of lime. This was in the proportion of 3·43 grains of lime and 0·33 of a grain of chloride of lime per gallon of sewage; and the composition of the sewage and effluent water were as follows:—

Constituents per gallon.	Raw sewage.	Effluent water.
	Grains.	Grains.
Matters in solution	25·00	28·33
Organic matter	2·50	1·25
Ammonia	0·343	0·457
Ditto organic	0·480	0·560
Nitrogen as nitrate	0·026	0·091
Oxygen required to oxydise	0·296	0·281
Matters in suspension	1·42	0·43
Organic matter	0·72	0·17
Mineral ditto	0·70	0·26

From which it was evident that nearly all the suspended matter, and about half of the dissolved organic matter, had been removed from the raw sewage by about three

and a half grains of lime; and the chloride of lime, although amounting to only one third of a grain per gallon, had completely disinfected the sewage, and had also prevented the growth of the sewer fungus in the effluent channel, so that the water when it reached the river Lea was sufficiently pure to be admitted into it. In fact, the results of these and the Leicester works were so satisfactory in 1867 to Dr. Frankland, Dr. Letheby, and Dr. Odling, who visited them at the time in question, for the purpose of advising the conservators of the river Thames on the subject of the defæcation of sewage in the Thames Valley, that they reported of the process as follows:—"By this process the sewage was deprived of its suspended, and of a considerable portion of its dissolved, matter. But, as in the last case (irrigation), it was necessary that the defæcated sewage should be received into a considerable volume of running water to prevent secondary putrefactive change. At Hertford, the defæcated sewage water is filtered through coarse sand, and runs a distance of nearly a mile before it enters the river Lea. We remarked that, although it left the filter a little turbid from suspended lime, yet it became clear after it had run about a quarter of a mile in the conduit. In the performance of this process of defæcation, we are of opinion, from the results obtained at Leicester and Hertford, that—1st. The proportion of lime should not be less than one ton, and that there should also be used fifty-six pounds of chloride of lime per 1,000,000 gallons of sewage; 2nd. That the mixture of the sewage with the lime and chloride of lime should be very complete, and that the mixture should be agitated so as to aggregate the suspended matters, and thus assist in the subsequent precipitation of suspended matters; 3rd. That the sewage when thus treated with lime should flow along two subsidiary tanks in series—the first should be capable of holding at least an hour's flow of sewage, and the second of holding not less than four hours' flow. The tanks should be four feet in depth, and the overflow of the defæcated sewage should be by a weir only half an inch below the surface; 4th. That there should be a double set of tanks for alternate working; 5th. That the defæcated water should flow through a shallow, open conduit if not less than a quarter of a mile in length, before being received into a stream of freely running water, if not less than eight or ten times the volnme of the defæcated sewage."

The conditions recommended by Dr. Letheby to the referees appointed by the Metropolitan Board of Works in the year 1857 to enquire into the subject of the main drainage of the Metropolis were as follows:—

1. The lime should be used in a perfectly caustic state, and in the proportion if not less than twelve grains per gallon of sewage.
2. It should be well slaked with water, and got into a finely-divided or creamy state.
3. It should be thoroughly mixed with the sewage, and well agitated before it is set aside to deposit.
4. The precipitate should be allowed to settle with the liquid quiet for at least one hour.
5. The deposit should be consolidated and deprived of its water as speedily as possible.

And he further advised that, in summer time, the subsiding tanks should not be worked for more than two days without removing the deposit, as in warm weather this was apt to putrefy, and rise in large flakes, thereby promoting the decomposition of the supernatant water, and rendering it turbid.

Wherever these conditions have been observed, and the process has been carefully conducted, the results have been satisfactory, and no nuisance has been created; but, on the contrary, when the working of the process has been neglected, as at Tottenham since Mr. Higgs's time; at Leicester on many occasions, and notably of late; at Cheltenham; at Blackburn; and at Leamington before the A. B. C. process was adopted, the defæcation of the sewage has been very imperfect, and complaints have been justly raised against the nuisance occasioned by the neglect of those who have had the care of the work.

In concluding this part of the subject we may refer to the observations of Dr. Hoffmann and Mr. Witt in their "report of chemical investigations relating to the Metropolitan Main Drainage Question," wherein they state that "the treatment of sewage with lime appears to be one of the most promising of the many processes for obtaining from sewage a deposit which, when dry, may be employed as manure;" and they give the following as the result of their experiment on 40 gallons of London sewage with 800 grains of lime (that is, with 20 grains of lime per gallon of sewage):—

Constituents per gallon.	Raw Sewage.	Effluent water.
	Grains.	Grains.
Matters in solution . . .	107·60	96·02
Organic matter . . .	52·36	40·34
Mineral ditto . . .	55·24	55·68
Matters in suspension . .	52·49	
Organic matter . . .	36·40	Traces.
Mineral ditto . . .	16·09	

So that, with 20 grains of lime, the whole of the suspended matters were removed from the sewage, and rather more than a fourth part of the dissolved organic matter; in fact, the total quantity of organic matter removed amounted to 54·55 per cent. of all that was present in the original sewage. With 12 grains of lime at Tottenham, we found the proportion to be 35 per cent., and at Leicester, 58 per cent.; whereas, according to Mr. Versmann, the average amount of organic matter removed from the sewage at Leicester, in the ordinary way of working is 38 per cent.

Constituents per cent.	Tottenham. (Higgs.)	Leicester. (Voelcker.)	Leicester. (Versmann.)	London. (Hofmann and Witt.)	Clifton Union. (Hofmann.)
Moisture . . .	5·25	10·52	4·06	0·00	0·00
Organic Matter . . .	31·60	12·46	26·32	43·95	20·12
Phosphate of lime . .	8·64	2·27	2·32	6·35	3·08
Mineral matter . . .	54·51	74·75	67·30	49·70	76·80
Total	100·00	100 00	100·00	100·00	100 00
Nitrogen	—	0·60	0·56	1·55	0·62
= Ammonia . . .	—	0·72	0·68	1·88	0·75
Money value per ton of dry substance . . .	s. d. 29 6	s. d. 15 5	s. d. 17 0	s. d. 38 9	s. d. 16 9

The composition and money value of the dry deposit from the sewage of different places, as determined by different investigators, will be found in the preceding table.

These values are calculated at the rate of £56 per ton for ammonia, £7 a ton for insoluble phosphate of lime, and £1 a ton for organic matter; and it is assumed that the Tottenham deposit contained 0·82 per cent. nitrogen, which is equal to 1 per cent. ammonia.

Registered for Transmission Abroad.

THE

MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6

„ If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of A. A. Tindall, 20, King William-street, Strand, London, W.C.

Moffat and Co., 6, D'Olier-street, Dublin.

Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—

New York—Turner and Mignard, Nassau-street.

Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 30, 1870.

ANOTHER MEDICAL BILL.

We mentioned some time ago that the *Lancet* had promised to produce a Medical Bill. We have now to report that our contemporary has, at length, published its proposal and invites criticism upon it. Our own interest in the subject of Medical Reform has been proved by the many articles devoted to it of late years, and we shall, naturally, be expected to say something of our contemporary's measure. We appeal confidently to our past to prove that we approach the subject with every desire to do justice to all. As our contemporary observes, by way of prefix to a summary of the Bill, "It is an easy thing to complain of the work of others; It is a much more difficult thing to do better." This we freely grant, and are prepared to make every allowance for. Still, a measure put forward in the complete form of a Bill, announced weeks before hand, and explained in a leading article of nearly two pages, which closes with a cordial invitation to all interested to offer their criticisms, does, undoubtedly, challenge the fullest discussion, and we have, accordingly, most carefully perused every clause before sitting down to write about it as a whole. What we are about to say we may indeed hereafter modify or supplement, but we are sure that the proposers of the scheme will not deny that we have endeavoured to do it justice.

The first point is, that a radical reform is to be effected in the constitution of the General Medical Council. This, of course, was a foregone conclusion. In common with every medical reformer, the *Lancet* has over and over again expressed dissatisfaction with the composition of that body. What is proposed then? A new Council of twelve persons, of whom four are to be nominated by the Crown, four by the medical authorities, and four are to be elected by the registered practitioners.

The primary defence of this scheme is the assertion that the existing council is too large. This is a statement that has been constantly repeated in various quarters, and is accordingly put forward as if it were axiomatic. Our readers, however, are well aware that we have not committed ourselves to this view, nor do we even now feel convinced. The only plausible objection to a large council is the expense of it, and Dr. Andrew Wood has more than once shown how that can be obviated. It is undeniable that the various opinions of so large a body as the Medical Profession could not find expression in so small a number of individuals as twelve, and we, therefore, hesitate to demand a smaller Council than we have. This hesitation becomes more decided when we turn to the proposed composition of the new Council. Two members are to be elected by the registered practitioners of England, and one by those of Ireland and Scotland respectively. The four nominees of the Crown are to be divided between the three Kingdoms in the same proportions. Lastly, the Corporations and the Universities located in the three Kingdoms are respectfully to combine or amalgamate, to elect in England two representatives, and in Scotland and Ireland one each. Now, on the face of it, this is a sort of hotch-potch after all. The new Council is constructed on no principle. It evidently aims only at adding the representation of the registered practitioners to the existing elements. We should have preferred a bolder course. It may easily be argued that the Council should represent either the Profession or the public. The medical authorities were given representation because it was thought they represented the former, and also, to some extent, the latter. Their intense sense of corporate existence has frustrated the intentions of the Legislature, and rendered a change necessary. But medical men totally unassociated with any University or Corporation do not at present exist in this country. A proposal by *Mr. Charles Hawkins*, a member of the Council, for a Council of twelve, from which the representatives of the medical authorities are excluded, seems to us at least more logical. A controlling body, it may fairly be urged, should be independent of those whom it is to control.

There is another point that is sure to be raised, and which, therefore, we may as well allude to—the proportions of representatives assigned to the three kingdoms. The numbers of the practitioners resident in England are not exactly as two to one of those in Ireland or Scotland. Let that pass, however. Why should the Crown Nominees be nominated for the separate nationalities. We are assured that these Crown Nominees will represent the public, but the public interests in England, Ireland, and Scotland, are precisely the same. What should be the qualification of each? Would an Englishman resident in Dublin be a fit nominee for Ireland? Or, would an Irishman resident in London with English diplomas be eligible? Again, the corporations will not, we may be sure, be ready to admit that their claims could be amalgamated in such a way. The Irish authorities are as numerous as the English, and in every way their equals, but are only to have half the representation, and the Scotch, we may be sure, will cry out passionately against being thus eclipsed.

There is one point, too, we should have expected to be more fully elucidated. By whom are the representatives of the several bodies to be elected? The *Lancet* has stated

several times that the College of Surgeons consists of the Fellows *and* Members. Would it not be well to have this expressed in the Bill, and the same rule applied to other bodies ?

The next feature of the Bill is the election by the reformed Council of a National Examining Board for each of the three Kingdoms. So far as letting the Board be elected by the Council, we have always advocated this. But why three Boards ? It is hardly worthy of our contemporary's position to bid for popularity by this yielding to the prejudices of a few. One Board would be enough, and we yet hope the cry for a single one will set aside this territorial distinction between the three divisions of the United Kingdom. The *Lancet's* support of the one portal system seems to falter when it proposes three. The very terms in which this is conveyed show this. We are told, "The one portal entrance to the Profession will be through one of these boards," which, to say the least, sounds funny.

That the Board may be effective, it is ordered that "the Council shall appoint only such persons as Examiners as are of approved skill in the several subjects on which they have to examine." The Council would scarcely do otherwise, although *legally* the qualification is not well defined. It might almost, we should think, be left entirely to the discretion of the Council. A further guarantee is, however, proposed,—viz., the appointment of Inspectors of Examinations ; whether such *paid* officials should be necessary is a question on which differences of opinion are likely to arise, but the proposal is worth considering, and shows earnestness in the attempt to devise a scheme of thorough reform.

Last year, it will be remembered, some bodies demanded the right to give their diplomas to those who had not passed the National Boards. It is a pleasure to observe that our contemporary has gradually been coming to the conclusion that we have always maintained—that no other diploma should be given until after the State Licence had been obtained. A little concession that we may freely grant if it assist in disarming opposition is offered in the scheme before us. Permission is to be given to candidates to be examined by any of the medical authorities, but the degrees or diplomas are not to be actually conferred until the National Licence has been obtained. This is certainly an advance, and we hope no further concession will be expected.

Another good point in the Bill is, the attempt to neutralise the evil of three Boards by giving the licence in the name of the General Council. Still, there would be the old territorial bugbear, "I passed in England—he passed in Scotland," &c. One Board would prevent all this as well as other inconveniences.

There are many other less important points which may be passed over at this stage of the discussion. We freely admit there is value in the Bill, although we have not hesitated to respond to our contemporary's "challenge," by freely criticising its leading provisions. This, we trust, we have done in a spirit to which no one can take exception. We have only one remark to make in conclusion ; the *Lancet* is assuming more than is due in claiming the Bill as its own creation. Our contemporary should, at least, be prepared to do justice to other reformers—not to one or two, but to all. In the leading article explaining the Bill—almost every feature of which, to our readers, must be old—not new—we read these words, "We have not hesitated to appropriate all that was good in the Bill of the Government, and for one important clause, we are indebted to the Bill of the British Medical Association. With these qualifications the Bill is essentially our own." Now, here in the name of common honesty, we are bound to protest. Few of the provisions are really new. Most of them have been discussed in our columns by various persons, and some have been advocated by various able and energetic reformers for several years. That the Council should appoint and control the National Examining Board was proposed by Dr. Prosser James before the Act of 1858 was passed. The same reformer has from that time to this, strongly maintained that no other diplomas should be granted until the State Licence has been obtained, and the *Lancet*, we are happy to say, virtually at last endorses this view. Even paid Inspectors have often before been talked about, and are, in fact, but a substitute for the system of visitation that has been organised by the existing Council. A small Council is no new idea. Only lately the magic number of twelve has been once more advocated by an experienced member of the Council, Mr. Charles Hawkins. What then remains ? In truth, very little. That a journal may fairly claim credit for marshalling the ideas of others, we are ready to admit ; but to confess obligations on the one hand and repudiate heavier ones on the other, is a course we are compelled to condemn. No doubt, reformers of all parties may be glad to have their views supported by the *Lancet*, but to appropriate ideas and coolly say the scheme including them "*is essentially our own*," is so contrary to all notions of respectable journalism, that we can only suppose that, by some fatal blunder, the printer must have omitted a phrase from the sentence, *Palmam qui meruit ferat*. Our contemporary must really expect no credit for originality in the framing of this Bill, for every feature seems to have been suggested by other reformers.

Notes on Current Topics.

Prevention of Scarlet Fever.

A GREAT deal of talk is going on just now about the prevention of scarlatina. Dr. George Johnson is one of the most zealous in this good cause. A sufferer from scarlet fever, he says, is for about a month throwing off poison, chiefly contained in the discharges from the throat and nostrils, and in the flakes of epidermis. Therefore, the patient should be isolated, in a top room of the house if possible, and should spit into a basin containing Condy's fluid. Also any rags with which the mouth and nostrils are wiped should be burnt. The urine and fæces should be passed into utensils containing Condy's fluid. The patient's bed and body-linen should be immersed in boiling water on removal, and then in carbolic acid ; and not washed in company with any other linen. A warm bath should be given to the patient occasionally. When the slops are put into closets carbolic acid should be poured down immediately afterwards. Papers, in rooms where scarlet fever has been, should be removed, and the room whitewashed, &c. Mortuary houses should be provided for the poor. Well ! all of this is quite clear and easily understood, and yet we don't think that scarlatina can ever be much prevented. The disease is so contagious,

that, except in the case of rich people, it cannot be kept from spreading wherever children are crowded together in houses, schools, or hospitals. N.B. Children's hospitals are on this very account a mistake. In short, much as we approve of Dr. Johnson's views, we can't help believing that, until some Jenner appear to give us a milder disease instead of it, scarlatina will have its victims in about an equal quantity yearly in spite of such precautions, or, at any rate, some other contagion will carry off poor people so long as poverty is common.

Medicine and War.

What do Medical men in general think of war? It would be presumptuous, of course, to decide as to what the opinion of each individual of such a large body of men might be on such an important question; but our own experience has led us to think that there is no class in the whole of modern society who so much and so justly detest everything connected with war as the Medical Profession in all countries. In the first place, everyone knows that Medical men are not so much accustomed to receive empty honours as the members of other professions. Scarcely any among us have ever even dared to aspire to becoming Members of Parliament; and the number of us who have been raised to the doubtful dignity of titles is but small indeed, in comparison with the hosts of knights, baronets, and peers that have been created from the legal profession. Not being much accustomed, then, to hope for public recognition of our important functions, we have resigned ourselves patiently to our fate, and been accustomed to work for the sake of being simply useful to our fellow-citizens, and for the sake of the real advancement of human happiness. Such being the case, it cannot be expected that Medical men can do otherwise than sternly condemn war in the abstract. Although the commonplace citizen, whose experience never leads him among scenes of human agony and disease, may be able to think complacently about the glory his country is to achieve from making war upon some powerful nation, and although the aristocratic portion of our society may eagerly long to exchange the vacuous existence of modern fine gentlemen for the more stirring and active life of the army, the members of the Medical Profession are not likely to be led astray by any such drivelling about "honour" as will easily mislead the vulgar herd, remembering, as we are bound to do, the host of pale-faced martyrs which Bellona ever drags in her train.

These ideas have been brought to our mind by the suggestion that we, the peaceful inhabitants of these islands, are not at all unlikely to be dragged into these throat-cutting occupations. Having a vivid recollection of the horrors of the siege of Sebastopol, and the cholera and typhus fever and frost-bites in the trenches, we cannot but pray that our beloved country may be spared another such trial.

Medical Men in Public Positions.

It has often struck us, that civilisation will never advance much until the ideas suggested by the study of medicine become more extensively represented in European National Councils. The majority of lawyers, traders, and clergymen are utterly unfit to give an opinion on numberless questions, which are clear enough to the averagely-educated practitioner of the healing-art. Both the Church and the Bar are far too ideal in their philosophy in general, and not nearly enough accustomed to consider man as an animal, subject to the same wants as the rest of the fauna of the globe. The consequence of which is that, in our periodical literature and in our daily papers, so much contributed to by barristers, there is an amount of sentimentalism and want of appreciation of the sorrows of human life which is quite heart-rending, and which leads to the most disastrous results. Much as we respect the modesty of the members of the noble profession of medicine, we are disposed, then, to urge upon them the necessity of taking a greater part in public affairs than has hitherto been their wont, convinced as we are that, by so doing, society at large has everything to gain. Those among us who are rich enough ought to endeavour to become Members of Parliament; others, whose time permits, should strive to become members of Town Councils or School Boards; and those who cannot give time for such engrossing employments ought occasionally to deliver popular lectures on science, in order, if possible, to remove a little of the crass ignorance which leaves the public in general so easy a prey to unscrupulous politicians and anonymous journalists. There are many of the latter whose interests in such a matter are what Bentham well designated, sinister; and there are no persons so able to expose such artifices as are wont to be made use of by these dangerous classes as the enlightened members of the Medical Profession, whose whole lives are spent in a warfare against disease, poverty, and misery.

Medical Candidates for School Boards in London.

Professor Huxley, in speaking lately on the subject of school boards, said, "he believed that those gentlemen who were endeavouring to get on the board for the purpose of promulgating sectarian principles would, if elected, find themselves bitterly disappointed, because Mr. Forster had reserved to himself a despotic power to clip their wings.' There are many well known to be thoroughly enlightened friends of non-sectarian education. Let us hope that all such may be returned for the Board, and that our Profession will have some representation in public affairs. Education, physiology and hygiene want representatives more than any other body of doctrines.

Baby Farming.

The St. Pancras Guardians have had an important case to investigate. A woman, who was nursing a child, and who no longer received sufficient funds from the parents, attempted to hand over the child to the care of the workhouse, as it is related that the unfortunate woman, Mrs. Waters, did. It appeared that the parents had absconded. The Board of Guardians resolved to refuse to take the child, and determined to refer the case to a police magistrate. We don't understand the grounds of their refusal; it tends towards causing infanticide.

Dr. Lankester on Vaccination.

This able coroner, in a recent inquest made at Islington, on the body of an infant of five months, who had died of small-pox, being unvaccinated, remarked that the vestries have the power to send people neglecting vaccination laws before a magistrate, who had the power to fine them. The great mass of the people were on the side of vaccination

In Ireland, where vaccination is still carried on, the disease is almost unknown; and this might take place in England. The jury returned a verdict of death from small-pox, and censured the mother for her culpable neglect in not having the child vaccinated. Anti-vaccination is an ugly superstition.

Skin-Grafting.

Mr. Dobson, at a recent Medical meeting, mentioned cases in which he had treated ulcers by transplantation of skin. He takes small pieces of skin from the upper arm not larger than split peas, divides them on his thumb nail into five, seven, or twelve pieces, and grafts them into the granulation, in incisions made by a sharp lancet by means of the point of a sewing needle. In a granulating surface, after loss of the entire integument of the leg from phlegmonous erysipelas, he had made twelve transplantations of skin not larger than a pin's head, eleven of which were growing vigorously. The average growth of the cicatrix was about the size of a sixpence from each point. Mr. Pollock exhibited to the Clinical Society several cases of the operation devised by M. Riverdin, of Paris, in 1869. A girl, aged eight, had been in St. George's Hospital with an ulcerated surface from buttock to knee, which had existed for two years. Mr. Pollock first transplanted two small pieces of skin, about the size of millet seeds, taken from the lower part of the abdomen. Fourteen pieces in all were transplanted at various periods. The burn was nearly healed in five months, without any perceptible contraction of the cicatrix. Mr. Pollock transplanted usually very small pieces, and takes care that the granulations are healthy where he inserts them. Mr. Lawson showed a patient in whom a large ulcer in the leg had resisted all treatment for four years, and was completely cured in four weeks after a piece of skin, the size of a fourpenny-piece, had been planted on it. As soon as the new skin had established its vitality, granulations sprang from the circumference, and rapidly closed in the wound. The granulations should be healthy, no fat transplanted, but only skin, which must be accurately applied to the granulating surface. The new skin is kept in position without interruption and lightly covered with a layer of lint, over which is a small compress of cotton wool and a bandage, for the purpose of keeping it warm until it grows on to the part.

The Working of the Contagious Diseases Act.

The *Saturday Review* replies to the arguments and statistics put forward by Mr. Duncan M'Laren, M.P., in favour of the repeal of the Contagious Diseases Act in the following terms:—

We will now state his arguments, and the answer to them, as shortly as possible. First, as to the amount of prostitution. Mr. M'Laren is extremely indignant with the assertion that, whereas in the five years during which the Acts have been in operation 7,766 women were placed upon the register at the various stations affected, there are now only 3,016. The bearing of this fact, which he does not deny, has, he says, been grossly misrepresented. People have assumed that 7,766 women were on the register at one time; whereas that number represented only the total of those who have been placed upon it during five years. If anybody ever assumed that there were 7,766 women on the register at once he was undoubtedly wrong. But it is not stated in the Parliamentary returns; nor was it stated in Dr. Lyon Playfair's speech in the recent debates; nor have we ever seen the statement officially put forward. The number presents all the women who were at any time on the register; and the important fact which the figures were adduced to show is, that of that number twenty-seven per cent. have been restored to respectable life, either by marriage, by entering homes, or by returning to their friends. The facts, he says, "are these: In place of 1,770" (we will explain this number directly) "there were only 203 of these women at Devonport when the Act came into operation in 1865; and in place of the steady and increasing diminution alleged to have taken place, the number has largely increased"; and Mr. M'Laren goes on to say that it is now 645. Now the simple fact is, that owing to the deficiency of hospital accommodation and other circumstances, the police began by placing only a small fraction of the whole number of women upon the register. Therefore the whole number on the register gives no sort of information as to the whole number in the town, and Mr. M'Laren has—unintentionally, of course—entirely misinterpreted the figures. But if he had wished to know what the numbers really were, he need only have looked at the returns presented to the House of Commons on the 8th of last August, and he would have discovered on page eight that the whole number of women in Devonport was, 1,770 on December 31, 1865, and on the same day in the four following years was 1,238, 1,010, 820, and 662 respectively.

We now take his statement as to the amount of disease. He takes the case of Chatham, and says that, whereas the number of residents in the district was about constant, the number of women sent to hospital had increased in four years from 277 to 697. This is quite true, but he quietly omits to state that, whereas in 1866 the number of medical examinations was 439, the number of examinations in 1869 was 4,414. If we argued from these facts alone, it would appear that the proportion of disease found in the first year was sixty-three and in the last fourteen per cent. This, however, would be unfair, because in the earlier years, when accommodation was defective and the Acts not brought fully into operation, the officials employed selected those cases only in which there was the greatest probability of disease. The returns do not justify us therefore in speaking positively upon this point. We will consequently take the case of Devonport, of which Mr. M'Laren has made so much; and we take the figures given by Mr. Bulteel, the surgeon to the Royal Albert Hospital, to which all the cases are sent. Now we find that, whereas in the quarter ending March 31, 1868, eighty-eight per cent. of the women examined were infected, the numbers diminished steadily and rapidly in every subsequent quarter, the percentages for the last six quarters, down to June 30, 1870, being twenty-two, twenty-one, fifteen, eleven, twelve, seven. It is impossible to imagine more conclusive testimony; and we will add that the number of prostitutes in the district diminished in the same period from 1,020 to 620, the number of brothels from 224 to 120, and the number of men infected which had previously been much greater from twenty-one to thirteen per thousand.

Demonstration against Female Medical Students in Edinboro'.

We record with a feeling of deep humiliation the occurrence of a very disgraceful riot, in the form of a demonstration on the part of the male against the female students, in Edinboro'. Shortly before the afternoon class, at the Royal College of Surgeons, for the demonstration of anatomy assembled, about 200 young men, congregated within the College railings, and commenced to shout, hoot, and yell in the most unseemly manner. When the lady students appeared at the College, the gates were shut in their faces by the rioters within, and it was some time

before they could gain admittance to the demonstration hall. Dr. Handyside's mixed class having at length assembled, the male students immediately took steps to prevent the lecturer from being heard by singing songs, beating all the while a deafening accompaniment with their feet. In the meantime, the students outside continued their uproarious proceedings. Having procured a sheep, they perpetrated a weak practical joke by thrusting the animal into the room where the anatomical class had met. After the breaking-up of the class, the lady students delayed for a time their departure from the hall. Their appearance was the signal for a renewed outbreak of hooting, hissing, and yelling, which was continued in the most outrageous manner as the rioters accompanied the ladies along the street. The police at last interfered, and apprehended four of the ringleaders.

We cannot expect much calm reason or cool judgment from obstreporus medical students; but they ought, nevertheless, to see that, as actors in such a scene, they are guilty of the very same fault for which they hoot and insult their female co-students. They take this way of punishing women for forgetting the characteristic modesty of *their* sex, while they themselves forget the manhood and respect for weakness which ought to be the boast of theirs. No course which the most ardent disciple of woman-doctoring could pursue would be half so powerful in overcoming objections as the most injudicious and ungentlemanly course adopted by the students.

If they make martyrs of the female students, we shall ourselves almost be driven to argue in their favour. The proper method of manifesting their disgust of unwomanly and immodest tendencies would be to shun contact or speech with female students as unworthy to be treated with the consideration and gallantry due to modest ladies.

Boards of Guardians.

THERE are certain so-called "Guardians of the Poor," whose education and pursuits give them an indisputable claim to the free exercise of their bigoted and narrow-minded views; and whose souls are scarcely able to soar above the counter, or beyond the limited acreage of the field of which they may boast possession—and we feel a tinge of shame mount to our cheeks to write it—these are the men, before whom some of the less favoured of our profession are compelled to bow; and what is worse to find themselves suddenly hauled up before an august assemblage of mercenary beings, and subjected to the cumulative process of insult and abuse over some imaginary grievance, or for the over-scrupulous discharge of his duties to the poor; and an unimpeachable reputation sullied, perhaps, for life. The Worcester Board of Guardians has lately made a public bid for this distinction. The victim, in this instance was Dr. Woodward, one of the Poor-law Medical Officers, whose salary we find on reference to the *Directory*, is £100 per annum for a very large district, or the magnificent sum of *one shilling and a half-penny for each case*, this sum, including, besides medicines as a rule, an average attendance of six weeks. The offence he was charged with, was the recommending two union (out of some two thousand) cases to the Dispensary, and this *crime* was actually six hours—six minutes would have been more than enough—under investigation. Happily, however, the mass of intelligence understood by the word "board" to which we refer, and we have pleasure in chronicling the fact, was not entirely homogeneous, for amongst them were found men who did not shrink from their duty, but manfully defended and vindicated the character aspersed.

Space forbids us going fully into this investigation, but the voting showed plainly the estimation in which Dr. Woodward is held by the intelligent portion of the guardians; and the verdict agrees with our views upon the subject, as from the evidence before us we fail to see the slightest fault on Dr. Woodward's part. It transpired that both cases brought forward were seen the same day the orders were given (which was also the case in another totally unfounded charge reported in the following week). Neither of the patients themselves appear to have had the slightest complaint to make, and as an earnest of Dr. Woodward's attendance on his other patients, we see that he was up two successive nights, and engaged nearly the whole of the intervening day with two Union cases only a few days before.

One thing is certain, that, however much hot water Mr. Williamson may have swallowed (according to a retort of Mr. Bozward), some of the guardians are not wanting in the quantity of cold water they are ready to throw upon their doctor. We think Dr. Woodward has been unjustly and undeservedly attacked.

Cork District Lunatic Asylum.

Mr. DUNSCOMBE commented on the new rules for the government of Lunatic Asylums, and stating, that they had almost removed the last semblance of authority from the governors. Everything was now centralised at head quarters, the local administrative body—or what was supposed to be such, of each asylum, being obliged to do things on the mere order of the Government. The rules took from them all proper title to the names of governors, and made them merely a society for registering the edicts of their masters, leaving in their hands only an unlimited power of taxation (hear, hear).

Mr. Clery, moved that advertisements be issued for the election of an Assistant Resident Medical Superintendent in the Asylum.

Mr. Perrier said he believed such an officer was not at all necessary. Nevertheless he should second the motion for the simple reason, that the Government would send down some person whom they would find objectionable.

Mr. Dunscombe was sorry that the matter had not been referred to the committee for the purpose of ascertaining from the practice elsewhere whether such an officer was necessary. In case the proposed appointment was made, they would have Dr. Power and his new assistant taking care of these thirty patients.

Dr. Power reminded Mr. Dunscombe that he and his assistants had to attend not merely to thirty patients in hospital, but to 600 or 800 healthy lunatics, a far more dangerous and troublesome class.

An application was read from Dr. Ryan, asking remuneration for his services while acting as *locum tenens* for Dr. Power.

Mr. Dunscombe moved that the claim be disallowed on the ground that Dr. Power had gone on a tour of pleasure and was not emancipated from duty.

Sir D. Norreyes seconded the motion of Mr. Dunscombe which was passed.

[The readers of the MEDICAL PRESS of the dates when these Privy Council rules were first promulgated, will be aware that we opposed them in every one of their details and in the despotic manner in which they were conceived, and have since been carried out. They were constructed at the time when the Maryboro' Board of Governors had evinced a disposition to support their visiting-physician in his complaint against a thoroughly objectionable Resident Superintendent, who was sheltered under the wing of Dublin Castle, and who was subsequently dismissed from the service. Mr. Dunscombe says no more than the truth, when he declares that they have taken "the least semblance of authority from the governors." We understand that the despotic pressure of these regulations has organised a strong movement for their repeal, and that they may probably be brought under the notice of the House of Commons next session.—Ed. M. P. and C.]

The Relative Mortality in Small and Large Lying-in Hospitals.

THE Annual Report of the Waterford Lying-in Hospital, conducted by Dr. Elliott, shows a mortality of only fifteen in 3,742 cases, and of the fifteen, only five were cases of puerperal fever.

The Postal Restrictions on Newspapers.

IT will be a satisfaction to us and to our readers to know that the powerful influence of the Society of Arts will be actively exerted during the coming session of Parliament, in obtaining a relaxation of the vexatious restrictions placed on newspapers by the Post-office.

Lord Henry Lennox in his recent address to the Society said :—

"The refusal to recognise as a newspaper anything which is not published at least every seven days, or which, for the convenience of its readers, is stitched together, seems most arbitrary and unintelligible.

"What the Society of Arts intends to agitate for, is the removal of these distinctions, and the establishment of a parcels post, by which a uniform rate of ½d. would be charged for every 4oz. and under, or 2d. a pound for everything up to a specified limit, say, that which prevails in North Germany."

That the Post-office should refuse to permit us to stitch the MEDICAL PRESS AND CIRCULAR, is quite intelligible to us. Their mandate is deliberately designed to hinder us, and all other weekly class periodicals, from availing ourselves of the advantages accorded to the daily paper. Truly, it is a liberal and large-minded policy, which enacts such restrictions for the purpose of restraining the public in their use of a great public department, professedly maintained for their convenience.

Medicine Contracts for Irish Poor-law Unions.

THE *Journal of the Irish Medical Association* in a recent issue, gives insertion to a letter in which very extraordinary statements are categorically put forward in reference to the Medicine Contracts of the Irish Poor-law Service. The correspondent says : "The idea of tendering for medicine for the sick as you would for oats and beans for your horses, is so preposterous as to require no comment, as the discriminating tact of the person tendering is well evinced by the careful manipulation displayed in arranging the prices to be attached to the 713 articles set forth in the official tender. For instance, powdered hellibore, an article in little use, is supplied to the guardians of a certain union at one farthing the pound, while bromide of ammonia, an article in frequent use, costs the same board of guardians forty-eight shillings the pound—the commercial value of the first medicine being one shilling the pound, while that of the latter is eight shillings and sixpence. That there are other equally singular anomalies in the system of tendering for the supply of medicine is apparent from the following extracts taken from the 'Tenders for Medicine' to be supplied to the North and South Dublin Unions respectively :—The contract price for tartar emetic at the North Dublin Union is five and fourpence a pound ; at the South Dublin Union one and twopence a pound, the commercial price of same being one shilling and sevenpence ; Spanish flies, North Dublin Union, sixpence per pound ; South Dublin Union, sixpence, commercial value being five shillings and fourpence ; bromide of potassium is six shillings and sixpence a pound in the North Dublin Union ; twenty shillings a pound in the South Dublin ; its commercial price being five shillings and fourpence ; powdered scammony, a very important article in the materia medica, is twenty-eight shillings a pound in the North Dublin Union, only ten shillings a pound in the South Dublin Union, whilst its real commercial price is twenty-one shillings."

The Editor in a leading article devoted to the subject gives an explanation of these anomalous charges which is very disgraceful to the contractors and the service which has permitted such gross abuses to arise. He says : "Our readers may be puzzled to comprehend the reason for these extraordinary differences in contract prices between one union and another, but if they were aware of the method pursued for selecting the tender they would easily understand the scheming encouraged by the system. When a contractor tenders for the supply he attaches to each medicine in the list the price at which he can supply it. If there were any person competent to judge of the fairness of these prices the *ruse* would be detected at once ; but as there is no person who knows anything about the price of medicines, and seldom anyone who cares to look to the effect of money-saving on the poor, the decision is arrived at by a summary manner. The cost at which the contractor offers to supply the entire list is totted up, and the contract given to the person whose figure is lowest. The contractor simply enters in the column a nominal price against those articles which he knows will never be asked for, and an exorbitant overcharge against those preparations which are most commonly used, and thus he makes allowance in the unusual medicines for the disgraceful charges in the common drugs, and, as a rule, the lower the sum total of the contract, the greater the expense to the Union when the supply comes to be paid for."

Retirement of Mr. Donovan, of Dublin.

A RETIREMENT from professional practice is not usually made a text for public notice or comment, yet we feel that there are considerations in the r emoval of Mr. Donovan from connexion with the profession which makes it right for us so to act.

In Mr. Donovan, the profession loses the last and only

apothecary in Dublin, and with his retirement expires the *régime* under which pharmaceutists devoted themselves to pharmacy, and took pride in knowing their business and sticking to it. Mr. Donovan's name was familiar to the readers and scientific men of the last half century as the associate and colleague of the first Irish physicians of his day. Pursuing his well considered course, he persistently refused either to lay claim to medical experience, though immeasurably in advance of most general apothecary practitioners in this respect, or move one step to either side of the path of science to which he had devoted himself. Farseeing, and believing in the greatness of his art, he foretold the virtual extinction of the Irish Apothecaries' Company which has arisen from their abandonment of their proper functions, and, alone, he maintained a silent and life-long protest against the theory and the policy which regards pharmaceutical chemistry as nothing better than drug-selling.

We rejoice to learn that Mr. Donovan retires from the practice of his profession in independent circumstances, and we assure him that his disinterested professional life has purchased for him the entire respect of those who can value modest self-sacrificing principle.

Closure of the India Medical Service.

Notice has been given that, consequent on information received from the Government of India, it has been determined not to hold an examination in February, 1871 for admission to the Indian Medical Service.

The Liverpool Epidemic.

Relapsing fever and small-pox have still a firm hold of the town, the latter epidemic being, in fact, on the increase, and special efforts are being made by the parochial authorities to provide plenty of proper accommodation. During the week ending Tuesday, it seems there were 311 cases of fever and small-pox admitted into the hospitals, and 369 discharged, being 1,263 inmates, against 1,321 on the previous Thursday. *The Liverpool Courier* reports that one of the medical officers has recovered from an attack of fever, but another is now laid up, as were also ten paid nurses—one of whom died on Wednesday. These facts were reported at the Workhouse Committee meeting yesterday, when it was mentioned that provision would have to be made for the growing population of the workhouse. At Toxteth park the out-door cases of relapsing fever have increased from 502 last week to 564, while the patients in the sheds had decreased from 260 to 252.

The Draft Bill for the Regulation of Pharmacy in Ireland.

We learn that the Association of Chemists and Druggists of Ireland have declared themselves positively against the Bill submitted for their approval by the Irish Apothecaries' Company. At a recent meeting of the Association it was resolved, on the motion of Mr. Erson, seconded by Mr. Hayes—

"That the Association of the Chemists and Druggists of Ireland, whilst admitting the necessity of a Pharmaceutical Society for Ireland, decline to place themselves under the control of the Apothecaries' Hall of Ireland. And that a copy of this resolution be forwarded by our Secretary to the Apothecaries' Company in answer to their circular."

Purity of Citrate of Iron and Quinine.

In the *Practitioner* the following table is given, showing the results of analyses of six specimens of citrate of iron and quinine purchased in London. According to the British Pharmacopœia, this preparation should contain 20 per cent. of ferric oxide and 16 per cent. of quinine.

No. I. . .	19·3 per cent.	17·5 per cent.
No. II. . .	20·2 „	16·2 „
No. III. . .	21·4 „	15·4 „
No. IV. . .	21·3 „	7·1 „
No. V. . .	20·9 „	4·2 „
No. VI. . .	20·4 „	4·1 „

The East London Children's Hospital has received a donation of £100 from G. E.

The Committee of the Medical Club have invited medical gentlemen who were practising in France befor the war broke out, and are now staying in England, to become honorary members of the club *pro tem*, of which privilege no doubt many will avail themselves.

Dr. Oliver, of Redcar, says the unanimous opinion of the Profession has asserted that scrofula, above all other disorders, is benefited by sea-air and sea-bathing. He has seen excellent results from the treatment of struma at Redcar. At the Convalescent Home, it would appear that these cases do best during the winter months.

The *Boston Medical Journal* protests in the following terms against the ridiculous and illiberal disability imposed on medical journals by the postal regulations:—"The British Postal Department has issued a preposterous decree that no periodical whereof the sheets are stitched together shall come under the mail-rates provided for newspapers; and material packthread being thus supplanted by metaphorical red tape, our English weekly contemporaries come to us in a disjointed form, ready to fall to pieces the moment their leaves are cut. The outrage is one demanding prompt redress, and we call on the Administration to give positive and inflexible instructions on the subject, if it ever be possible to find anyone who will accept the vacant mission to St. James."

The friends of the late Professor Graham have decided on erecting a statue of him in his native town, Glasgow. The Town Council have appointed the south-east corner of George square as the site of the proposed statue, which will be from the chisel of the eminent sculptor, William Brodie, of Edinburgh, and is to correspond with the statue of Watt, at the south-west corner of the square.

One of the London magistrates lately gave a good but a little too severe lesson on the theory of contagion to a prisoner brought before him. The prisoner had acted as a nurse in Great Titchfield street, Marylebone, to a child who died of small-pox. The parents gave the nurse the pillows on which the child slept, supposing she would destroy them, but the woman sold them to a marine-store keeper. She was fined £5, with the alternative of a month's imprisonment. Prisoner said she was destitute. The sentence was evidently far too severe; but Mr. Knox is rather given to harshness.

The President of the Dublin Obstetrical Society, Dr. George Johnson, celebrated the conclusion of his term of office on the 17th inst. by a conversazione, given at his residence at the Rotundo Hospital. The rooms were crowded with the most eminent members of the Profession in Dublin, including the residents of the Colleges of Physicians and Surgeons, and the Surgeon to the Queen in Ireland. A number of objects of Art were exhibited, and the company was entertained at supper in the course of the evening.

In a letter to Dr. Thompson Dickson from the Registrar-General of Scotland, that gentleman says that the registers of England are most imperfect, and do not contain one half the cases of illegitimacy occurring among the population. There is no obligation on anyone to register a birth, and no penalty for refusing. He believes that there are quite as many illegitimate children in England as in Scotland. More than half of the illegitimates in Scotland are subsequently legitimised by marriage of the parents. There is very little infanticide in Scotland. There is a certain amount of baby-farming, chiefly confined to girls who go out as wet nurses and give their own child to the care of a relative. We shrewdly suspect that the new Society for the Protection of Infant Life intends to make the life of maiden mothers still more wretched than it is at present in England and Ireland. The principle of "hit him hard, he has no friends," is well carried out by many social reformers.

At a meeting of the Pathological Society on November 1, Mr. Nunn showed a case of "Atrophy of the Uterine Wall, with an Intra-uterine Fibroid Growth." The cervix was quite normal, but the body was nearly absorbed. Dr. Hilton Fagge exhibited the "Liver of a Patient, aged sixty-seven, who died of sclerosis." The disease, in eighteen months, spread over the lower limbs, hands, face, and eyelids. She died of starvation, being unable to move the jaws. The skin was as hard as a board, but not glued to the muscles, and was much thickened. The internal organs were healthy, but the connective tissue of the liver, &c., was harder than normal. Mr. H. Arnott showed a case of "Cancer which had attacked an Imperfectly Descended Testicle in a Man, aged fifty." The disease was medullary. Dr. Whipham showed a case of "Rupture of the Transverse Ligament, with sudden death." The patient had always supported her head when she moved. There was caries of the cervical vertebræ. Dr. Green showed a specimen of "Pulmonary Aneurism from a Girl, aged eighteen, who died of sudden hæmoptysis." In the apex of the left lung there was a very large and rugged cavity, and below a smaller one containing an aneurism the size and appearance of a morella cherry. Dr. Tilbury Fox showed two specimens of "Madura Foot."

SCOTLAND.

Edinburgh.—The unmanly way in which a few of the junior students chose to show their dislike to mixed classes by getting up a "row," has been summarily dealt with in the police courts, and their demonstration impetuosity has, for the present, evaporated with the costs it entailed. The folly of their proceedings is equalled only by that of the friends of the lady students, who for some days past have assembled at Surgeon's Hall, to protect the ladies on leaving the anatomical rooms, a very unnecessary proceeding, and conducted with an amount of ostentation calculated to damage rather than advance the course of the female students.

Of the extra-mural teachers of midwifery, Dr. Matthews Duncan alone continues to lecture during the winter session. Dr. Duncan has for some years been in the habit of delivering a course of lectures to women during the winter months, a duty which could be undertaken this year only by combining this class with that newly formed by him for gentlemen. This arrangement has unfortunately proved distasteful to many of the students, nearly one-half of Dr. Duncan's class having withdrawn on learning that it was to be continued during this session. Dr. Duncan has a class of twenty-eight pupils, five of whom are females. Professor Simpson has enrolled sixty-seven students.

Literature.

FERGUSSON'S SYSTEM OF SURGERY.*

The fifth edition of a work on surgery by the Sergeant-Surgeon to the Queen, and President of the Royal College of Surgeons, is what any reviewer might hesitate to speak about. No writer could take up the book without feeling that he was going to learn. The idea of criticising the work of the most popular of teachers and practical surgeons, involves more than is to be expected, except at the hands of a very select few. Our readers may, however, be glad to have a few notes respecting the new edition. We therefore beg to apprise them that the work is now a goodly 8vo vol. of 750 pages, printed in clear type, and that the publishers have been good enough to have the edges cut—an improvement we wish were generally adopted. The book has not lost its *practical* character; "Each subject," we are told, "has been treated according to the author's estimate of its utility and importance," as he has every right to do, after occupying the Chair of Surgery at King's College for thirty years. Sir William Fergusson illustrates most subjects by his own practice. It is this which gives much of the real life to the work. It may be, and it will be, consulted by thousands of practitioners who are desirous of knowing the general views of the author, and a large proportion, too, of his own pupils will keep it as a handy-work of reference to the body of teaching by which they have profited. Some new matter and new illustrations have been added, to find space for which many passages of the last edition have been omitted. The author's late experience has furnished the new material. The subject of Diseases of the Jaw has been thoroughly exemplified by both drawings and cases. That of the Urinary Organs has been very carefully revised. Excision of the Scapula is illustrated by new engravings, and both pen and pencil combine to show the reader the practice of the author in the removal of enormous tumours, in which, as our readers are well aware, his skill has been associated with great success. Bearing in mind the title—"A System of Practical Surgery"—not a System of Surgery—we are convinced that this Fifth Edition will be appreciated by the Profession.

A BOOK ABOUT SHAMS.†

We congratulate the author of "A Book about Shams" on the historic and biographic information about "peculiar people" and a peculiar time, with which his book abounds. The eloquence of his pen, and the really "Greek-fire" mode in which shams—regal, legal, religious, medical, and general—are exhibited for public

* A System of Practical Surgery. By Sir William Fergusson, Bart., F.R.S. Fifth edition. London: J. Churchill and Sons. 1870.

† A Book about Shams, Relating to the Great French Revolution. By Lory Marsh, M.D. London: Ward Lock, and Tyler.

execration deserve praise, whilst for the sympathetic gaze afforded to that homogeneous tribe—shams general—should they condescend to read the volume, as pourtraying true types of their brotherhood, acknowledgement is due by them.

Were it possible for the ghost of Cagliostro, Hahnemann, or Mesmer to revisit the green plains of their former exploits, we would not be in Dr. Lory Marsh's shoes for—well, shall we say that luckless necklace, the misadventures of which he discursively treats about in so bewitching a manner as to render his book a jewel indeed.

"A Book about Shams" is prettily illustrated, printed on toned paper, handsomely bound in cloth; and we predict for it a genuine welcome—we were going to say—everywhere.

The following quotation may interest the admirers of "Petty Pills and Powders Small" :—

The Founder of Homœopathy.—Hahnemann, the founder of Homœopathy, was born in 1755, just in time to take the field with his theory of globules, and to occupy the pinnacle of fame from which Cagliostro and Mesmer were shortly to be ignominiously hurled. After a life of varied fortune, and expulsion from Leipsic as a Quack, Hahnemann settled in Paris, where he divided his labours with his wife, and lived in a state of ostentatious splendour, only equalled by Cagliostro himself. Helen Berkeley, describing her visit to the establishment of Dr. and Mrs. Hahnemann, at Paris, speaks in glowing terms of the palatial style of their residence. The liveried footmen at the door, the gorgeous furniture of saloon after saloon through which she was conducted by relays of men in plush and powder, caused her to exclaim: "I already knew something of Hahnemann's celebrity, but my opinion of his skill was marvellously fortified by the magnificent splendour of the apartments through which I was conducted." Of course, the display was made in order to dazzle the eyes and flatter the vanity of those who were seeking the great man's presence. Just as in the present day, on visiting the establishment of one of the fashionable West-End quacks, the patient is conducted upstairs and downstairs, through gorgeously furnished drawing, dining, and billiard rooms, and finally ushered into the penetralia of the owner, where he is left to wonder, like Helen Berkeley, at all the wealth displayed before him. The effect of all this show, so unlike the modest apartments of the honest practitioner, is to make the patient feel he is about to be ushered into the presence of some great Hakim, and to reconcile him to the fee that is about to be demanded of him.

CLINICAL LECTURES ON PULMONARY CONSUMPTION.*

Before we had seen these lectures we had heard much about them, and read them accordingly with the more interest. That they open up some new views, or at least enlarge upon some which had not been fully recognised, may be admitted, But we are not at all certain they will be accepted as readily as the author seems to think. For he speaks as if his views were absolutely proved, and so must be received. It may be observed too, in passing that the translator draws attention to the fact, that the late Dr. Addison held similar opinions, which, however, though published, had not received any marked notice from the profession. We may observe here, that the main point in the views of our author, consists in the idea that inflammation or inflammatory action is the basis of all phthisical disease. This idea, as has already been stated, is not original; nor indeed, we are bound to say, does the author claim it as such; for he refers to several of his own countrymen * as holding and teaching a similar doctrine; and more especially to Virchow and Buhl. But the idea leads to the use of many expressions, scattered through these lectures, which must certainly seem very strange to most physicians in these countries. The following may be quoted as examples of what we mean: "In the present stage of science there is but one kind of tubercle—miliary tubercle; and but one form of tuberculosis, and all those changes which, since Laennec, have been designated. 'Infiltrated pulmonary tubercle' are the product of chronic, especially of catarrhal, pneumonia" (page 2). Again: "In very many cases there is not a single tubercle found in phthisical lungs" (page 3). Again: "The tubercles in the majority of cases are clearly of recent origin, and have complicated the pulmonary phthisis, when it was already in an advanced stage" (page 4) and one more, he speaks of patients who, after having suffered from phthisis for years had at last become affected with tubercules. Though more might be quoted these are quite sufficient to show the way in which the author views the subject. Opining that inflammatory action is the basis of phthisical disease, and declares itself in the form of pneumonia, he looks upon the deposition of miliary tubercle as quite secondary; and hence the views taught by Laennec and held by all, we may almost say, since his time, must be abandoned. Before we speak of these views, it may be well to notice that the name given this lecture is "Pathology of Phthisis." Now, to these terms and to the way they are here applied we must make the strongest objections. And these objections are peculiarly applicable here; for the author all through, argues as if the morbid anatomy were the real pathology of phthisical disease, and speaks as if a form of pneumonia were the very foundation of the affection; and no where—as far as we are aware—does he allude to that general state of the constitution which precedes, and to our mind must precede the development of the disease. Now this arises from confounding morbid anatomy with pathology; than which there cannot be, to our minds, a greater mistake—and it seems to pervade the entire views of our author. That a something precedes the pneumonia, to which our author gives such prominence, or the formation of tubercles, is absolutely certain. Yet he no where expresses himself to this effect; but expressely states that pneumonia is, in the vast majority of cases, the starting point of phthisical disease; and at page 13 he asserts that no one form of pneumonia gives rise to the affection, but that all do so, though not equally; and this leads on to the main question: are these views correct? Is inflammation the starting point of phthisical disease, or of phthisis? or is pneumonia? The answer to these questions must, on our parts, be in the negative. We consider the views the author has advanced to be partial; and not taking that extended view of the subject which it demands, we might almost add beyond all other and, without at all wishing to dogmatise, we must, with our present knowledge, still hold the opinions advanced so long since by Laennec. Here, however, our space will not allow us to do more than make a few remarks. In the first place, we would call attention to the physical signs of phthisis, and to the slow and insidious way in which they make their advances. It is not needed now to state what these signs are. But we would ask: are they attended in the first instance in any symptoms whatever of pneumonia? Is the cough of threatening phthisis dry or the contrary? Every one knows it is the former. Would it be so if pneumonia were present? We think not; and it devolves on the author, or his adherents to tell us why, with pneumonia present, no expectoration exists. It is true, cases of pneumonia may occur without expectoration. Such have come under our own notice. But they are known to be far in a way the exception—not the rule. Speaking of the absence of expectoration in the early stage of phthisis, reminds us too, that at this period, no crepitus is heard. To us it seems

* Clinical Lectures on Pulmonary Consumption. By Felix von Niemeyer, Director of the Medical Clinique, and Professor of Clinical Medicine in the University of Tubingen. Translated by permission of the Author, from the second German edition, by C. Baumler, M.D., Member of the Royal College of Physicians, Assistant-Physician to the German Hospital, and to the Hospital for Diseases of the Chest, Victoria Park. The New Sydenham Society, London, 1870. Pp. 71.

* The names of Hoffman, Simon, A. Clark, Sanderson and Wilson Fox may be mentioned in connection with the pursuit of the subjects in these countries.

very difficnt, if not impossible, to reconcile this fact with the supposed presence of pneumonia; and on the contrary when crepitus is heard, it is well known that it must have been preceded for months by what are known as the earliest signs of phthisis. Neither is the crepitus of phthisis of the same character as that of pneumonia, as every one knows. But again, the locality which tubercles occupy, in the vast majority of instances, is known to be the upper lobe of the lung. We take it for granted, the author does not dispute this. But how is it to be reconciled with the equally well recognised fact that pneumonia in similar number of instances affects the lower lobe of the lung. If there were no other argument than this one, it would be enough to shake, in our minds, the entire views of the author; and we would add we are quite at a loss to reconcile it with one of the conclusions at which he has arrived, and which we copy from the work:—

"The consolidations and destructions of the lung, which form the anatomical basis of pulmonary phthisis are, as a rule, the products of pneumonic processes; and the more abundantly cellular elements accumulate in the alveoli, and the longer this accumulation persists, the more readily does a pneumonia lead to phthisis, because the cheesy metamorphosis of inflammatory infiltrations is thereby favoured." (Page 24.)

If these be the correct views, those who differ from them must truly be far astray. We firmly believe, however, they are not so; but that all experience and positive knowledge derived from the study of the morbid anatomy of tubercular disease are opposed to them. There is just one supposition which would explain the author's views; which is, that the disease presents different characters in Germany, from what it does in the British Isles. In other words, pneumonia may be an infinitely more common disease there than with us, and that its common *habitat* is the upper lobe of the lung. We must say, however, that this idea, while not impossible, seems to us in the highest degree improbable. We believe too, that pneumonia occurs 100 times for once that it has, or seems to have, any connection with the deposition of tubercle. If the two diseases stood to each other in the relation in which the views of the author would lead us to believe, the connection must have been long since recognised; and we would not have the numerous and separate works on the two affections which exist. Besides all this pneumonia is as little of a fatal disease as phthisis is the very reverse, but our limits prevent us following out this aspect of the question.

In keeping with the views held by the author, our readers will not be surprised to learn he holds the idea that phthisis is not an hereditary disease. "I do not hesitate to say, in spite of all assertions to the contrary, that it is by no means sufficiently proved that tuberculosis, in the strictest sense, is an inheritable disease." Such are his words, which agree, almost as a matter of course, with the views previously advanced; for a man who holds that inflammatory action is every thing in the production of tubercular disease need not go further for causes. But is this idea true? Is it the experience of English or Irish physicians? What has been the result of statistics as bearing on the question? We need scarcely tell our readers it has been the very opposite opinion which has been arrived at, and that it has been proved, as clearly as the nature of the subject admits, that phthisis is an hereditary disease. Very much more could be said on this particular part of the subject, but it does not seem necessary.

In concluding this notice of these important lectures, we must say that the views advanced by our author seem to us untenable. They do not agree with the well ascertained fact of the essentially constitutional character of phthisical disease. In all our experience, the earliest physical signs of the development of tubercle prove the pneumonia is not, at that period, present. The *habitat* of tubercle, as far as the lungs are concerned, is, in the vast majority of instances the upper lobes; whilst that of pneumonia is the lower lobes. The hereditary nature of pulmonary comsumption is, in these countries at least, an acknowledged fact. In truth the author's views seem to us to have been founded entirely on exceptional cases; and being such are "not proven."

Correspondence.

CELIBACY AMONG SOLDIERS AND OTHERS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Some very able writers in your journal have endeavoured to show forcibly the evils of seduction. I have always thought this a superficial way of looking at the question of prostitution, baby-farming, and infanticide. In my view, there is the constant force of the sex-appetite, which, unless attended to, inevitably causes ruin and wide-spread misery. Doctors know better than any others how strong the appetite is, and what dangers we incur by attempting to check it partially or entirely. Thus, Sir B. Brodie, at the meeting of the Social Science Association in Birmingham, said, that the evils of celibacy were so great that he would not mention them, but that they surpassed those of prostitution. Mr. Holmes Coote, who was, and perhaps, is still surgeon to Bedlam Hospital, gave it as his opinion before the Medical and Chirurgical Society some years ago, that the diseases caught from prostitutes were, by no means, so deadly as the results of celibacy, as witnessed in the wards of lunatic hospitals; and Sir W. Jenner gave evidence to the same effect before the Committee of the House of Lords, when enquiring about venereal contagion.

My own experience entirely confirms the truth of these statements of our learned brethren; and I cannot, by any means, look with complacency on the late marriages, which are so much in vogue among a large portion of our countrymen, and especially countrywomen, even although perfect chastity be observed by both the males and females before the legal contract is entered into. I don't know whether there is not more diseases, on the whole, produced by the late marriages of Britain, than by the dissipation of the French population. Insanity is a terrible phenomenon, and is doubtless the result in very many cases of the present customs of celibacy. Now, the theory of our army, as at present existing in this country, is, I submit, according to these principles, quite monstrous. We, as a nation, require a certain number of able-bodied men to remain constantly under arms, in order to defend us from aggression, and we have an idea that we have a right to keep these men in a state of absolute continence (that is the theory), in order that they may be in constant readiness to start off to any campaign at a day's notice, without the impediments of wives and children—such is the theory—now for the practice. These men do *not* live in a state of abstinence, none do so less than soldiers, perhaps. And, thus, we condemn a number of men full of leisure time, and *ennui*, to pass an existence dangerous to the happiness of the female population of the country, on account of a *theory*, which will not hold water,—viz., that it is "quite easy for every one to live in a state of celibacy, with a little moral control."

The whole of this is a lie, and has led to prostitution and the ignoble Contagious Diseases Acts. In future, if we can but look Nature calmly in the face, we shall come to confess that *all* human beings, male and female, have a perfect right to claim from any society which wishes to merit the names of civilised, their fair share of love, offspring, and domesticity. Soldiers, priests, and women are very hardly treated by our modern trashy theories, and should all have their partners, as well as the rest of the citizens. The only thing we, of the Scientific School cannot allow of is, large families. No advance in morality is compatible with the starvation caused by such rapid breeding as early marriage has hitherto produced in Great Britain and notably in Ireland. But we find that celibate soldiers don't fight so well even as men with wives and babies; and hence, we must think of giving our soldiers these desirable companions. The Germans get on very well with their campaign, remembering that comfort and affection await them when they return home.

I do not, in any way, mean to be intruding on the theory

of any church, in saying what I do. I am not, I believe, bound to agree with the tenets of any one church. I speak merely as a medical man, and, moreover, as an individual who admits of no arguments which are not addressed to my intellect. Infallibility, I lay no claims to, and if others do, I cannot accept their adjudications. Nature cares little for our systems or churches, and if we desire to be happy, we must make them square with Nature, and not desire to set ourselves in opposition with the laws of animal life.

I remain, yours faithfully,

CHARLES R. DRYSDALE,
M.D., M.R.C.P.L., F.R.C.S.E.

99 Southampton row, London, W.C., Nov. 21.

Medical News.

Glasgow University Medical Society.—The following gentlemen have been elected office-bearers for the current year :—Honorary President, Prof. Dickson ; President, Robert Sinclair ; Vice-Presidents, William Sneddon and James Glendinning ; Corresponding Secretary, G. B. Clark ; Secretary, John Highet ; Treasurer, Robert Murdoch ; Committee, W. C. Watt, James Smith, William Grant, Hugh Miller, William Leith, George Thompson, and James Adams.

Apothecaries' Society of London.—At a Court of Examiners held on the 24th instant the following gentlemen were admitted licentiates, viz.—Messrs. W. W. Atkinson, of Cheshunt, Herts ; C. F. Gray, of Newmarket ; E. J. Pugh, of Waltham Abbey ; and A. C. Simon, of St. Helier's, Jersey.

"Studies for the Time."—To go back to the Crimean war itself, Russia continued her aggressions because she did not believe we would fight. The Czar's ambassadors advised him that England, casting aside her old traditions, had entered upon a new epoch, which had for its motto, "Peace at any price." Lord Russell's encouragement of Denmark's resistance to the demands of Prussia and Austria led to the merciless slaughter of that plucky little State. The tragedy thus commenced had its principal scene at Sadowa ; and Paris besieged is the sequel to Sadowa. England out of the way, the ambition of the more powerful nations of Europe breaks out with demoniac force and heat. It is the mission of England to stand between these contending passions, and the present condition of Europe is the penalty of our withdrawal from that grand *rôle* among nations which a mysterious Providence has assigned to us.—*Gentleman's Magazine.*

Presentation to Dr. Wm. MacCormac from the Students of the Queen's College, Belfast.—The students of the Queen's University, Belfast, assembled last week for the purpose of presenting an address to Dr. William MacCormac, on the occasion of his removal from Belfast for residence in London. Dr. Wm. MacCormac, on entering the theatre, was received with loud and long-continued cheering. Mr. Murphy, B.A., assured Dr. MacCormac that every word which it contains expresses the very sincerest convictions of the students, and that, whether reference is made to his skill and experience as a surgeon, or his courtesy as a gentleman, or to the disinterested efforts which he has made in ameliorating the sufferings of his fellow creatures, the words used have been cold and measured compared with the warm sentiments of admiration entertained for him, alike for the many estimable qualities of his head and heart. The address and reply having been read, the meeting adjourned.

Medical Mayors.—The following members of the profession have been elected mayors for 1870-71 :—John Griffin, M.D., for Banbury ; Evan Pierce, M.D., for Denbigh, fifth time ; George Green Sampson, M.R.C.S. Eng., for Ipswich, re-elected ; Lawrence Spencer, M.D., and F.R.C.S., Eng., re-elected for Preston ; William F. Rooke, M.D., for Scarborough ; Frederick Chambers, M.D., for Margate ; Joseph May, F.R.C.S., for Devonport ; Fortescue J. Morgan, M.R.C.S. Eng., for Stamford ; Richard Ley, M.R.C.S., for South Molton ; and Dr. John Tibbits, M.R.C.S., for Warwick.—*The Times.*

The Birth Place of Contagions.—The following account by Mr. Parkinson occurs in a contemporary, and shows us how we may account for the spread of cholera from India to Europe :—The Pilgrim Trade—"I've never been to Jerusalem, and I never mean to go, thank ye !" said the English engineer of the Russian steamer, "though I've been up and down these waters for these fifteen years, touching at Jaffa, and bein' within a day's ride of Jerusalem, as you may say, these twenty years. We see a precious deal too many o' them nasty pilgrims on board this boat for me to want to visit a place I know to be chock full of them, for I hate pilgrims, mind you, as I hate pizon, and I'd give a good deal to keep altogether out of their way." . . . . The good steamer, the 'Emperor Alexander,' is "in the pilgrim trade." . . . The pilgrims were packed in little dens like those in which menagerie keepers show their wild beasts, save that there were no bars. Two stories of these dens ran along both sides of the deck, and in each of them were exactly as many human beings as it would hold. Here were ragged priests in long black robes and fur caps like frouzy grey muffs, peasants in sheep-skins which had been sewn on them years before, and had never since been taken off, small Russian farmers and their wives and children, Turks, Armenians, and Egyptians, all bound for one or other of the ports of the Holy Land. They cooked, ate, slept, and prayed in their dens, and the pilgrims in their abject filth and disorder, almost justified the abhorrence of the English engineer. They all appeared to be miserably poor, The Russian peasant who was a serf yesterday, and is a beast of burden hampered with superstition to day, has been putting by small sums all his life for the grand work he is now upon. Before he started on his sacred errand he satisfied the authorities of Odessa, the port he took his passage from, that he had sufficient means to carry him to the Holy City and to bring him back, and he is now fulfilling the darling wish of his heart, for he is about to earn the sanctity only to be acquired by a pilgrimage to the Holy Places, and is already calculating on the relics he will take back. The Mahomedan in turban and clean robe, who turns to Mecca and prostrates himself the prescribed number of times, profoundly indifferent to surrounders and lookers on ; the black-robed Armenian, who lies on his stomach to engrave something in the Greek character upon a crumpled and dirty piece of water ; his brother ecclesiastic, who is even more ragged and less cleanly than himself, and who is absorbed in his book of prayer ; and the swarthy, handsome silk-merchant from Damascus, who is on his way to join his brother's warehouse at Jerusalem, and who talks "shopi" as 'cutely as a Yorkshire bagman, were types which were repeated many times in the course of our tour round the ship's decks. . . . . Some well-dressed Russian pilgrims, who were our fellow-passengers in the saloon, had decidedly boiled their peas. They were bound for the Holy Places too, but they lived royally and drank hard, and were as little like religious enthusiasts as loose speech, loud voices, and convivial habits could make them.

Gleanings.

Extraordinary Keloid Tumour of the Neck.

WE have had an illustration drawn and engraved, that our readers may the more readily follow the report of this extraordinary case, which we glean from the *New York Medical* :—

This case, the author remarks, is the most wonderful of its kind I have ever beheld. This negro is from North Carolina, and is twenty-eight years of age. He is of immense muscular development, and, save his affection, looks to be the embodiment of health. This immense tumour which encircles his neck, like an Elizabethan collar, is an affection of the skin, first accurately described by Alibert in 1810, and called keloid, from its fancied resemblance to a crab. This growth is hard, semi-elastic, and looks very much like an enlarged cicatrice resulting from a burn. The inhabitants of hot countries seem particularly prone to this affection. I remember assisting Professor Gross to operate upon a creole from the Bermudas, when this growth occurred on the ear, following the boring of the lobe of the ear so that rings might be worn. I have at this time a patient under my charge upon whom I have twice operated for this affection, a coloured man, but each time the tumour has recurred. Burns and scalds are common causes of keloid,

You see many of these morbid growths are scattered over the body of this man. Keloid, though rarely, if ever, degenerating into malignancy, is troublesome on account of its unvarying recurrence. When excised, it nearly always returns, and its second growth is generally worse than the first. This man's father had a similar affection, which the patient states disappeared spontaneously. (?) In consequence of prolonged pressure, part of this growth around the neck, has taken an ulcerative action, and you see the pus dropping upon the man's shoulder. A section of a keloid tumour, under the microscope, shows fibres interspecting each other in every possible direction, intercepting cells, or spaces occupied by plastic matter, of a softer nature. To the naked eye it presents a whitish, homogeneous aspect, or, if the man be very old, very much the appearance of an unripe pear or turnip. It creaks slightly under the knife, and is of a dense, firm consistence, with little elasticity. Hardly any vessels are perceptible in its interior, but the surface of the growth is very vascular, so that if I would cut this man the hæmorrhage would be tremendous.

There is no remedy but the knife or écraseur. The intense disfigurement to which the affection subjects this man, to say nothing of its inconvenience, would warrant any feasible procedure to free him from the growth. But the subject demands more careful thought than I have yet had time to give it. In conclusion I would mention that this growth is of eight years duration.

Clearing of Muddy Water.

Dr. C. Schlæsing states, in an article in the *Comptes Rendus*, that waters contaminated by floating particles of clay may be readily clarified by small quantities of salts of lime. It is well known that the waters of rivers, after a heavy fall of rain or snow, and sometimes throughout the winter, do not become quite clean by deposition, even if left undisturbed in large reservoirs for a long space of time. The author recommends the addition of 1-1000th part of chloride of calcium for one part of water (or seventy grains to the gallon), a quantity which effects clarification in a moment. The precipitated substance can be readily separated by filtration. Other salts of lime, such as the nitrate and bicarbonate, and caustic lime, effect the same object.

Hydrate of Chloral.

An octogenarian lady took morphia by the advice of her physician thirteen or fourteen years ago. She continued to take it of her own accord afterwards, and has persisted in the habit thus acquired. She now takes about two grains of sulphate of morphia every night. In consequence of an attempt to discontinue its use, awhile ago, she became restless, excited, nervous, and sleepless, with symptoms not unlike those of delirium tremens. After two or three days and nights had elapsed without sleep, Dr. Clarke gave her fifteen grains of chloral hydrate. This quantity calmed her. A second dose of the same amount was followed by a sleep of several hours. Unfortunately, the habit of taking morphia could not be broken up, and she resumed her customary dose at night, This has quieted and comforted her, but has not always induced sleep. When it has not, fifteen grains of chloral have always been sufficient to put her to sleep in a short time. Less chloral was required to produce sleep when morphia had been previously administered, than when the latter article had not been given.—*Boston Medical and Surgical Journal.*

Dr. Clarke, in the same journal confirms Dr. DaCosta's views, and states that a fourth of a grain of one of the salts of morphia, followed in an hour by fifteen or twenty grains of hydrate of chloral, will produce a greater anæsthetic and hypnotic effect than a larger dose of either of them given alone. In many cases, where a certain dose of morphia is sufficient to allay pain, but not to produce sleep, it is better to follow the morphia by hydrate of chloral than to repeat the former.

Obituary.

JAMES LUMLEY EARLE, M.D., M.R.C.S.

It is with much regret that we have to record the death of Dr. Lumley Earle, of Birmingham, at the early age of thirty years. A few weeks back Dr. Earle, while apparently in good health, was seized with an attack of hæmoptysis, which recurred several times, and ushered in rapid phthisis. After obtaining the membership of the London College of Surgeons and the M.D. of St. Andrew's in 1861, Dr. Earle, who was a student of King's College, and had acted as Resident Assistant to the Obstetric Physicians at King's College Hospital, came to Birmingham to fill the office of Resident Surgeon Accoucheur to the General Dispensary. His appointment he held for some two years, and devoted himself with great ardour to the study of obstetrics. So well did he utilise his opportunities that while residing at the Dispensary, he published a valuable series of paper "On the Mammary Signs of Pregnancy and of Recent Delivery" which were afterwards published in a separate form. In 1863 he commenced private practice in Newhall street, Birmingham, and soon afterwards was elected Acting Physician to the Children's Hospital, and Obstetric Surgeon to the Queen's Hospital. The former appointment he held at the time of his death, the latter he resigned some two years ago when the midwifery department of the Queen's Hospital was abolished. The revival of the appointment of Obstetric Surgeon at the Queen's Hospital in October last, led Dr. Earle, to look forward with confidence to again filling his former position, and it was during the worry of the contest for the appointment that he fell ill. It was strangely enough on the very day on which the committee for securing his election were to meet for the first time, that the first attack of hæmoptysis occurred. Dr. Earle was a frequent contributor to the Medical Journals, and in our own pages and in the Obstetrical Transactions, there are many papers from his pen. In 1865 he published a work "On Flooding after Delivery and its Scientific Treatment," which was characterised by the same learning and practical good sense, as all his other writings. He had considerable mechanical ability, and devised several ingenious midwifery instruments, among which we may mention a new Pelsimeter, and a modification of the transfusion apparatus. Almost his last appearance if not the last, at a public meeting was at the Queen's College conversazione, when he exhibited a new case of obstetric instruments, which certainly was one of the most perfect we have seen. As a practitioner of midwifery, Dr. Earle was most skilful and successful, and from the high estimate of his ability entertertained by the profession, he would, no doubt, have attained a very high position. Dr. Earle was well known at the Medical Societies of Birmingham, and for some years acted as Secretary to the Midland Medical Society. He was also appointed early in his career a member of the Council of the Obstetrical Society of London. His early death when the difficulties had all begun to disappear, and an abundant harvest of success was just opening to his view, has caused much regret among all his professional brethren by whom he was highly esteemed, alike on account of his personal character as his professional ability.

A NEW PHASE OF MALINGERING.

THE story of the Sleeping Beauty a Yankee competitor with the Welsh Fasting Girl for the money of the unwary, will be familiar to our readers. As the story goes, the patient (now twenty-nine years of age), enjoyed average health until the age of eight years, when she had "recurring intermittent fever," as a result whereof she fell into a condition of almost constant somnolence, lasting nearly twenty-three hours out of the twenty-four, and accompanied by certain choreic movements of the head and shoulders—a condition which is alleged to have continued for more than twenty years, or until the present time.

The phenomenon in question having been taken by her exhibitors to St. Louis, and her case brought to the notice of the St. Louis Medical Society, that body appointed a committee to investigate the case. These gentlemen report :—The patient, so far as we can learn, has taken no medicine, for a number of years, with a view to the relief of the alleged condition. Remedies and means were proposed, such as, in our judgment, were safe, but they were declined. It was proposed to watch the case for forty-eight consecutive hours, which was also declined. We procured means by which the case could be observed in the night, by persons selected by the committee, and we report unanimously that on three nights there was no paroxysm at ten o'clock p.m.; and she appeared to sleep as naturally as any one. Notwithstanding the positive assertions that the paroxysms continued during the night as well as the day, they did so only at such times as they were in the room *by appointment*; we respectfully submit the unanimous opinion that it is a case of collusion, misrepresentation and systematic pretending, for the purpose of deceiving.

NOTICES TO CORRESPONDENTS.

☞ CORRESPONDENTS requiring a reply in this column, are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Out of thousands of such persons it may cause enquiries so signed, on very various subjects much confusion.

⁂ We must also request our Correspondents to write only on one side of the paper and in *legible* characters. We are often compelled to consign MSS. to the waste-paper-basket merely because it is illegible.

CORRESPONDENTS not answered in the current Number are requested to look to the Notices the following week.

TO SUBSCRIBERS.—The publisher has received a Post-office Order for £2 5s., without the name or address of the sender, who would oblige by forwarding it to the London office, that credit for the amount may be given, and a receipt sent.

AN ARMY SURGEON.—The subject shall receive our best attention.

DR. DWYER.—The Minute and letter to hand. Shall appear next week.

MEETINGS OF THE LONDON SOCIETIES.

THURSDAY, Dec. 1st.

HARVEIAN.—8 P.M. "Apoplexy," by Dr. T. Ballard.

FRIDAY, the 2nd.

ST. ANDREWS MEDICAL GRADUATES' ASSOCIATION.—At 7½ P.M. Dr. Whitmore will read a paper "On the results of Sanitary Legislation on the Health of the Metropolis and our present urgent Sanitary requirements,"—On Saturday Dec. 3rd, at 5 P.M. The President, Dr. Richardson, F.R.S., will deliver the Anniversary Address, "For the Future of Physic."

MONDAY, the 5th.

MEDICAL.—8 P.M. Ordinary Meeting.

TUESDAY, the 6th.

PATHOLOGICAL.—8 P.M. Ordinary Meeting.

VACANCIES.

Manchester Royal Infirmary.—Senior House-Surgeon. Also two Physician's Assistants. Salary £80 guineas for each appointment.

Southport Infirmary.—Resident House-Surgeon. Salary £120 per annum.

Scottish National Institution for Imbecile Children, Stirling.—Superintendent.

Farringdon Dispensary, London.—Resident Surgeon. Salary £70 per annum.

Clinical Hospital, Manchester.—House-Surgeon. Salary £60, with board.

Hartley Wintney Union.—Medical Officer. Salary £80, with extra fees.

Poor Law Unions, Ireland.—The Commissioners will elect a Superintendent Apothecary, at a salary of £500 a year, with residence. (See advertisement).

Carlow Union.—Midwife for the Bagenalstown District. (See advertisement).

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

Syphilis of the Nervous System. By E. L. Keyes, M.D. New York: Appleton.

The Change of Life in Health and Disease. Third Edition. By Edward J. Tilt, M.D. London: John Churchill and Sons.

The Dental Diploma Question. By C. F. Fox, M.R.C.S. London: Churchills.

Life and the Equivalence of Force. By J. Drysdale, M.D. London: Turner and Co.

Felo-de-se. By J. G. Davey, M.D.

Phrenological Journal; Nature; Boston Medical Journal; Practitioner; New York Medical Gazette.

MARKED NEWSPAPERS.—Worcester Journal; Birmingham Gazette; Lincoln Chronicle; Exeter Gazette; Manchester Guardian; Scotsman; Public Opinion; Observer; The Shield; Brighton Guardian; Londonderry Sentinel; Belfast Newsletter, &c.

APPOINTMENTS.

ANDERSON, W., F.R.C.S., Surgical Registrar to St. Thomas's Hospital.

BERESFORD, Mr. F., Assistant House-Surgeon to the Staffordshire General Infirmary.

BOTT, T. B., M.D., Medical Officer of Health for Bury, Lancashire.

CHRISTIAN, J. G., M.R.C.S., Medical Officer for the Pelham District of the Bishop Stortford Union.

COLLIE, A., M.D., Resident Medical Officer to the Homerton Fever Hospital.

COUTTS, J., M.A., M.D., Medical Officer for the Cuckney District of the Worksop Union, and the Third District of the Mansfield Union.

DAVIES, D., L.K.Q.C.P.I., Surgeon to the Almshouses, Gwydyr Charity, Llanrwst, and Certifying Factory Surgeon for Llanrwst.

EVANS, E. T. R., M.R.C.S., District Surgeon to the Salford and Pendleton Royal Hospital and Dispensary.

GAYTON W., L.R.C.P.Ed., M.R.C.S., Resident Medical Officer to the Homerton Small-pox Hospital.

GRATTAN, J. S., L.K.Q.C.P.I., Assistant Medical Officer to the West Derby Union Workhouse, Walton.

GREEN, Mr. J., House-Surgeon to the Royal Infirmary, Edinburgh.

HORSLEY, H., M.R.C.S., Surgeon to the General Hospital, Croydon.

IRVINE, J. W., Medical Officer to the West Derby Union Workhouse.

MAHON, T., L.K.Q.C.P., L.R.C.S.I., Medical Officer for the Crossmolina Dispensary District of the Ballina Union, Co. Mayo.

PRIESTLEY, H., L.R.C.S.Ed., Assistant House-Surgeon to the Sheffield General Infirmary.

REID, R. B., L.R.C.S.Ed,, Medical Officer to the West Derby Union Workhouse, Walton.

ROBERTS, W. L., M.R.C.S., additional Resident Medical Officer to the Bradford Infirmary, Yorkshire.

SHARP, J. A., L.R.C.P.L., M.R.C.S.E., House-Surgeon to the Derbyshire General Infirmary, Derby.

Birth.

ASHE.—On the 21st inst., at Sprackburn House, Letterkenny, the wife of Isaac Ashe, Esq., M.B., of a daughter.

Marriages.

CHURCHILL—FORBES.—On the 15th inst., at Weston-super-Mare, George Fleetwood Churchill, M.D., Army Medical Staff, to Mabelle, daughter of the late Rev. Wm. Forbes.

EDWARDS—THOMAS.—On the 22nd inst., at Llanbadrig, Anglesey, E. P. Edwards, Surgeon, of Plas-Llanfigael, Llanfachreth, to Miss Margaret Ann, second daughter of O. Thomas, Esq., of Neuadd, Llanbadrig.

Deaths.

BELL.—On the 13th inst., Wm. Bell, M.D., of Garstang, Lancashire, aged 81.

BRABANT.—On the 19th inst., at Bath, Elizabeth, relict of the late R. H. Brabant, Esq., M.D., aged 89.

DOW.—On the 21st inst., at Keith, John Dow, M.R.C.S., of London.

EARLE.—On the 23rd inst., at Birmingham, James Lumley Earle, M.D., youngest son of the late Lieut.-Colonel J. L. Earle, of the Indian Army.

FOX.—On the 10th inst., at Bristol, after a brief illness, Emily, the beloved wife of Dr. Wilson Fox, of London.

MCRAE.—On the 24th inst., at Holloway, Louisa, relict of the late John McRae, M.D., R.N., aged 79.

TAYLOR.—On the 18th inst., Francis Taylor, M.R.C.S., of Romsey, aged 59.

WEST.—On the 17th inst., at Alford, Lincolnshire, R. U. West, M.D., aged 60.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 7, 1870.

CONTENTS.

Original Communications.

IDIOPATHIC TETANUS—CONTINUED USE OF TINCTURE OF BELLADONNA—INTERCURRENCE OF ANTHRAX—RECOVERY.

(Under the care of G. H. Porter, M.D., F.R.C.S., Surgeon to the Queen in Ireland.)

Patrick McCluskey, thirty-seven years of age, the driver of a bread cart, was brought to the Meath Hospital on the morning of the 15th October, 1870, suffering from well marked symptoms of tetanus. There was no history of a cut, wound, bruise, burn, or injury of any kind, to account for his condition. His wife was closely questioned with reference to the origin of the affection; and she corroborated her husband's statement, that "there was nothing to bring it on but the will of God." He was examined immediately after his admission, as soon as he had been got into bed; the body was curved and stiff, the head retracted, the lower limbs rigidly extended, and their muscles in a condition of tense symmetrical spasm, the abdomen was hard, the jaws about half an inch apart, face flushed, conjunctivæ congested, skin perspiring profusely; the articulations of the neck, hips, knees, and ankles could not be moved, actively or passively; the power of voluntary movement was not lost in the upper extremities, although considerably impaired, and the muscles of these parts exhibited a much slighter degree of tonic contraction than did those of the lower extremities. His respiration was not hurried, nor his pulse rapid, although very variable in its rate. Frequent spasms occurred spontaneously, or were excited by the slightest irritation or disturbance; in these, the opisthotonos was increased, the alæ nasi became widely dilated, and the tetanic expression was well marked. He could swallow liquids, but the act of deglutition often excited a convulsion of the muscles, and he set about drinking in a most cautious and deliberate way. He spoke in a thick and indistinct manner, like a person half intoxicated, partly from the close approximation of his jaws, and partly because, as was afterwards ascertained, he was under the influence of hydrate of chloral when admitted. He was at once given ten drops of the tincture of belladonna, and the dose was ordered to be repeated every third hour; a flannel wrung out of a hot infusion of tobacco was laid upon the abdomen; he was directed to have a liberal allowance of wine and beef-tea, and means were taken to have the ward in which he lay kept as quiet as possible.

The antecedents of the case were these:—He had to give up his employment of driving the bread cart on Saturday, the 1st of October, because he did not feel able for the work; during the previous week he had become unable to eat, because his jaws were stiff, and it was very difficult to swallow solids, meanwhile he could drink without any trouble, and during that week he lived principally on liquids, mostly of a highly stimulating nature. He then lay at home for a fortnight before his admission to the Meath Hospital, and at this time was carefully attended to by Dr. Devine, who treated him with bromide of potassium, hydrate of chloral, and turpentine embrocations. According to his own account, he had always been a healthy man, but had latterly "become nervous from smoking and drinking." For a long time his daily allowance of whiskey had been a very liberal one, and he was more than moderate in the use of tobacco, as his consumption of it averaged an ounce a day. There was no account of any cold or wetting, nor could any assignable cause for the disease be discovered upon the closest and most frequent investigation.

In the afternoon of the day of his admission (15th of October) his temperature was carefully registered; it did not exceed 99·8 Far., a circumstance which gave a favourable aspect to the case; the pulse at the same time ranged from 68 to 84 in the minute, its rate being constantly accelerated upon the occurrence of spasms. He made no complaint of pain except in his back, and he did not allude to this unless questioned on the subject. He was quite free from the epigastric pain so frequently complained of in tetanus, as extending from the pit of the stomach under the xiphoid cartilage to the back, and forming the initial

point of spasms. The absence of this pain, regarded by Chambers as the pathognomonic symptom of tetanus, would point to the slight or non-implication of the diaphragm in the tetanic spasm—a view confirmed by the great tranquillity of his respiration. In the intervals between spasms, he lay stretched out stiffly on his back, breathing without noise, and answering questions in an intelligent but indistinct manner. In the evening, he was given a large enema of gruel and mucilage, containing two ounces of castor oil and half an ounce of tincture of assafœtida. Two hours after this he got two drops of croton oil by the mouth. The enema was skilfully administered by the resident pupils, Mr. Middleton and Mr. Bowers. Great difficulty was experienced in introducing the enema tube, owing to the spasmodic condition of the muscles of the rectum and perineum. The tube was grasped by the forcible contraction of the sphincters; the parietes of the rectum appeared to be in contact, and contracted to such a degree as to incarcerate the finger of the operator, causing a well-marked congestion of the ungual phalanx. In some cases of tetanus, each effort to introduce the enema tube has provoked such dangerous spasms that it has been found more judicious to give up the attempt, especially as sudden death has occurred during the operation; in such cases the preliminary use of chloroform would appear desirable.

No fæcal evacuation resulted from these means, but he was relieved by the expulsion of great quantities of offensive gases. He passed a bad night, being afraid to let himself go to sleep, from an apprehension of suffocation —"for fear he would be choked." On one occasion before admission, as he was dropping asleep, his jaw snapped suddenly, and he bit his tongue severely. The tincture of belladonna was administered regularly through the night every three hours by Mr. Middleton.

On the morning of the 16th, his pulse reached 120, but was at times much lower; the respirations were about 32 in the minute, but varied in proportion to the rapidity of the pulse; the trismus was increased, only the tip of the tongue could be seen; the opisthotonos was more strongly marked. The dose of tincture of belladonna was increased to twelve drops every third hour, and he was removed into a small quiet ward where there was but one other patient; a bolus of ten grains of calomel, the same quantity of jalap, and one drop of croton oil was made up with butter, and put on his tongue with the aid of the handle of a spoon, and an ice bag was applied to the spine and fastened on with tapes. The bolus given at ten a.m. began to produce large fæculent evacuations at noon (his bowels had not been opened for five days), and continued to act during the afternoon, dislodging at the same time immense quantities of wind, to the patient's great ease and benefit. He got some sleep the following night, but observes that as he is dropping asleep spasms come on and awaken him; in these spasms the pain or cramp "runs up from his feet to his body."

On the 17th, his pulse did not exceed 106; there was no aggravation of the trismus or opisthotonos, nor had the spasms increased in frequency or severity; he "felt that he was no worse," and spoke most gratefully of the relief he had experienced by the evacuation of the bowels on the previous day. At 6.30 p.m. his pulse was 80, full and regular, and his temperature in accordance with the state of the circulation; he can move no part of his body except the upper extremities, the muscles of the face, and to a very slight degree his toes. He takes in the twenty-four hours ninety-six drops of tincture of belladonna, twenty ounces of wine, and beef-tea in unlimited quantities. He suffers from continued thirst. The temperature of the small ward he was now in was much more equable and elevated than that of the larger one he had been in, a point on which Dupuytren and others have laid much stress in the treatment of tetanus. This night he got twenty grains of hydrate of chloral, and had "some real sleep" for periods of an hour at a time.

On the 18th, the excitability of the spinal cord was evidently diminished, although the retroversion of the head and trunk continued in a marked degree; he was "certain the spasms were less frequent than they were." Questioned as to their intensity and duration, his answer was that "not one in every twenty comes in earnest now." He described these "earnest" spasms as travelling upwards from his feet to his throat, then "they catch him there and choke him;" his toes "straighten out" at the outset of a spasm. He feels sore across the loins, as if his back were breaking across there. The abdomen continues hard and tympanitic, notwithstanding loud and frequent deliveries of flatus *per anum*. In the afternoon of this day he brought on a very violent spasm by stretching out his hand to reach a urinal, which was on a chair beside his bed; he was semi-asphyxiated, becoming "black in the face," according to the account of his companion, who was greatly frightened, and thought "he was off." The spasms which occurred subsequent to this very earnest one were much milder than usual; he had a good night, the best since his admission, sleeping for a couple of hours at a time, without any narcotic.

Oct. 19th.—Pulse was 95. No relaxation of the tonic spasm of the muscles of the trunk or jaws. An observation was made on the rigidity of the abdominal walls. He remarks that his belly is soft, until some one handles or percusses it, then it becomes rigid, and remains so for as long as ten minutes. When about to be handled the muscles seem even to anticipate the touch, and to become rigid before any actual impression is made on them, showing that the great increase of reflex excitability suspends the inhibitory influence of the brain, and the order of things is reversed, the spinal cord ruling supreme over the cerebrum. The ice-bag has been hitherto diligently applied to the spine, but was now discontinued, as an incipient anthrax was discovered on the back between the vertebræ and the posterior border of the left scapula; pressure by strapping with opium plaster was at once applied to the part, and a bolus of eight grains of calomel, the same quantity of jalap, and one drop of croton oil was administered, which acted effectively. At 6.30 p.m. he had a bad spasm, which affected the muscles of the larynx; chloroform, which was kept close at hand for such emergencies, was applied with benefit; he passed the night well, getting "two good sleeps."

Oct. 20th.—Pulse 96; the trismus abating; is able to open his mouth better; the opisthotonos continues; he complains much of the anthrax; his throat was feeling dry, and the dose of tincture of belladonna was reduced to five drops three times in the day. His account of the spasms is that "some heavy ones come now and then, but though they last longer, they are not so severe as those he has had; he has not five or six now for the ten or fifteen he used to have in the hour."

The following day (21st) he had a violent seizure at 8.30 a.m., occasioned by his movements to try and relieve the pain of the anthrax; he was able now to move his head a little from side to side, and the retraction is perceptibly less. The bowels were moved without the use of medicine. As he had never made any outcry or complaint of pain when attacked by the spasms, nor seemed to suffer from the continual cramp of the muscles, enquiries were made on this subject, and his answer was, that the "pain *was* bad, but that he was not chicken-hearted enough to roar." Such an enquiry was a reasonable one, as Sir G. Blane mentions a case of tetanus, in which the spasms were unattended by pain, even to the last moment of existence. In that instance the cramps were accompanied by a tingling and agreeable sensation, and the accesses were attended by feelings of pleasure, and a strong tendency to laughter.

On the 22nd he could open his mouth wider and could turn on his side, and keep in that position; hitherto he had lain on his back. This change of position was a great comfort to him, taking so much pressure off the anthrax, which was now assiduously poulticed with linseed meal and port wine.

On the 24th, the belladonna was omitted for the present. He had used, in the ten days since his admission, 724 drops of the tincture. This day he was able, for the first time, to bend his hip-joints, and to sit up in bed for a very short time. The mouth can now be opened wide enough to let the dorsum of the tongue be seen.

On the 26th and 27th he had several attacks of spasmodic cramp in his feet and legs. His legs became numb and cold towards evening, and at night "he does not know his feet are on him, till the warmth of a hot jar brings them to him." The belladonna was resumed for three days (27th, 28th, 29th), on account of these "cramps," during which time he took ninety-five drops; it was then finally discontinued. The total quantity which he used was 819 drops, and at no time were his pupils dilated beyond a medium size. The slough of the anthrax came away at this time, its separation may have given rise to the "cramps" which distressed him a good deal; the deep cavity which it left was soon filled up with healthy granulations under the influence of careful strapping and the constant use of equal parts of castor-oil and of Canada balsam.

On the 29th, he was able to open his mouth to its full extent, to eat a chicken, to bend his knee-joints, and to lift his head slightly off the pillow. The pulse was 96 and regular; his principal complaint, now that the anthrax was healing rapidly was, of general muscular pain, and soreness in every part of his body, as if he had been severely beaten with heavy sticks; he describes this feeling as "a sore stiffness," and clearly distinguishes it from the "old pain which came on suddenly and in shocks."

On the night of the 30th he did not feel comfortable, and at 11 p.m., what he described as a "regular solid spasm," came on him, it "came on him in a strain, till it strained the whole frame as if he was in a vice, or some powerful thing was pressing him down on the bed, he could not stir or move, and perspiration teemed off him," this spasm continued till 3 a.m., he was wide awake the whole time. For several successive nights he had minor attacks of cramp, but never any more severe spasms, the muscular soreness gradually diminished.

On the 14th of November he was up for the first time, sitting in a chair for a few minutes while his bed was being arranged. He caught cold on this occasion.

On the 15th a feverish attack set in with headache and giddiness, and lasted till the 24th, when it subsided after two profuse critical sweatings. During this feverish attack, his pulse and temperature were higher than they had been in the course of the tetanus; the pulse averaging 104, and the temperature 102° F.

On the 25th, the pulse was 87, and the temperature 97·6 F.

On the 28th, he could move all his joints quite freely, the soreness of his flesh had disappeared, and a very slight stiffness across the loins was the only relic of the violent muscular spasm which remained. He had almost completely lost the facies tetanica, the stiffened and aged expression of features which, in life and death, so frequently stamps the subjects of tetanus. His pulse and temperature were those of health, appetite and spirits good, and he felt himself to have quite recovered.

If any apology be necessary for having given this case somewhat in detail, it may be pleaded that tetanus from unknown causes is not a common occurrence, and every such case is very worthy of record. The term idiopathic, as Le Gros Clark has well pointed out, is not to be accepted as synonymous with spontaneous or causeless, there being many irritations unseen by the surgeon and unfelt by the patient, fully capable, under certain predisposing conditions, of exciting fearfully the reflex power of the spinal cord. Furthermore, although the so-called idiopathic form of tetanus is, in this country, generally more amenable to treatment than is the traumatic form, yet, the published records of idiopathic tetanus in Ireland show a frightful mortality in this affection. In India, it appears to be the more fatal form of the disease, as Dr. Peet, Professor of Surgery in the Grant Medical College, Bombay, found that while 72·2 per cent. of the admissions for traumatic tetanus ended fatally, the mortality in the idiopathic form reached to 76 per cent.

ON SOME CHRONIC VARIETIES OF SYPHILITIC ULCERATIONS.

By Mr. Morgan, F.R.C.S.I,

Surgeon to Mercer's and to the Westmoreland Lock Hospitals; Professor of Surgical and Descriptive Anatomy, R.C.S.I.

(Continued from page 434.)

Chronic Ulceration of the Urethra.

A remarkable and rare form of this ulceration has occurred in two instances at the urethra, destroying the canal up to the very orifice of the bladder, and causing distressing incontinence.

A most marked example, occupying both the urethra and vaginal orifice, has been under my observation from time to time for upwards of two years. The patient had been in the hospital suffering from pains, ovarian irritation, and a most severe hysterical attack—contrary to the received idea that women of this kind are not subject to hysteria, most marked cases, on the contrary, being not unusual in the wards of the hospital.

M. K., aged twenty-five, was admitted October 16, 1867; had a sore some years ago, which was healed by the application of lotia nigra. She received another sore twenty months since, which formed around the vagina, and continued all that time, its character being that of smoothness, density, insensibility, and tardiness of progress; it is not auto-inoculable. The illustration shows the remarkable characters of her case, and the severe ulceration of the urethra, which caused incontinence and at intervals considerable pain in micturition—the whole tract being a sheet of ulcer. The sore at the vaginal orifice was analogous in appearance and character to that occupying the urethra, and had existed now upwards of one year and eight months; for one year and two months being under actual hospital observation, and every effort made for its cure. She has never had any skin or throat affection, but had suffered severely from pains, particularly of the sternum and ribs.

She gradually improved, and regained, to a great extent, the power of retaining the urine; the cicatrix of the original sore being very dense and smooth.

Ulceration of the Rectum.

A very remarkable instance of ulceration of the rectum, depending, probably, on the deposition of gummatous matter in the subcutaneous, and also on the direct extension from the exterior, has been under my observation for nearly two years. The appearances during life were most marked, and were the cause of the greatest misery.

The patient was the subject of a well marked chronic sore, which she stated had existed for more than two years; during several months she was living irregularly with the sore on her. She had been under my observation for more than ten months, during which time she was affected with ulceration of the rectum of a most perverse and extensive character; the sore was of great extent as revealed by the speculum, with hard edges, presenting several inches square of ulcerated surface. There was a most copious discharge, and pain on going to stool; but no tendency to contraction, on the contrary, rather the reverse, apparently from partial destruction of the sphincter—the genital sores preceded that of the rectum. There were no constitutional signs beyond the formation of gummata on the body; the ulceration of the rectum commenced as an ulcer exactly as did the chronic genital sores themselves.

This patient was most benefited by arsenical treatment, and the use of gr. xxv. of tannin as a suppository each night; and, from time to time, the ulceration would improve very considerably. The drain on the system was, however, most severe, vast quantities of mucous pus being discharged, and, occasionally, tinged with blood.

The patient finally sank, suffering from all the symptoms of amyloid liver and cachexia.

A careful *post-mortem* examination was made, and the rectum was removed; on opening it, two immense sheets of ulceration extended upwards on each side, fully twelve inches long, and from two to three inches wide; the edges were marked and dense; the surface of the ulcer was smooth, and had destroyed the sub-mucous tissue; there were patches of the same kind of ulceration far up in the sigmoid flexure, but diminishing in size as the intestine was examined upwards; the liver was thoroughly amyloid, and there were two gummata, deep seated on the leg. There was no intra-vaginal or intra-vesical sore.

Mr. Paget (Sydenham Society, 1865-66), has described similar forms of ulceration; and, as in this case, remarks the diminution of the ulcerations according as the intestine is examined higher up; he also remarked "the sharp even defined edges not undermined." The appearances in this case were just so; but the ulceration was more extensive, and gave the appearance of the mucous and submucous tissue having being gouged away smoothly by some sharp instrument, leaving the edge boldly cut, and resembling in a minor degree the sores on the labium. The disease was beyond question of nearly two years' duration. In this case I have no doubt the combination existed of the ulceration extending from the outside, and also of the formation higher up of the gummatous form of ulceration. During life, I frequently examined with a large speculum the extensive sheet of ulceration, and dressed it over with strong caustic and tannin solutions; there was not the slightest stricture, as in the case given by Mr. Paget, where it was obstinate; nor in the cases given by M. Gosselin, which so resemble, in many particulars, the account given by the late Mr. Calles, of what he termed the schirro-contracted rectum, and where he alludes so particularly to the mucous discharges.

Another case has also come under my notice, where the ulceration of the rectum was of much the same character, but not quite so extensive.

The patient was aged thirty. Had had some years previously a sore and suppurating bubo, followed by the birth of a dead child. She subsequently got a few gummata, and suffered severely from pains. By several weeks' active treatment with escharotics, injections, and tannin suppositories, the ulceration much improved, and the patient has not been since seen; but is supposed to have been perfectly cured. Here, also, the ulcer had the characteristic edge and smooth surface, and there was not the slightest stricture. This distressing and obscure affection is of much practical interest—its tediousness and obstinacy being almost as trying to the surgeon as it is exhaustive to the patient.

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the MEDICAL PRESS.)

No. XV.

PRECIPITATION OF SEWAGE WITH THE SALTS OF ALUMINA AND IRON.

THE salts of alumina and iron have been the subjects of numerous patents for the disinfection of night-soil and sewage. The preparations of alumina, for example, are mentioned in the patents of Siret (1843), Browne (1850), Stothert (1852), Pinel (1856), Manning (1853, 1854, and 1855), and others; and the compounds of iron are claimed in the patents of Deboissieu (1762), Briant (1824), Sire (1837), Barounet (1845), Dubois (1846), Brown (1847), Ellerman (1847), Browne (1850), Gilbee (1852), Dimsdale (1853), and others.

All these inventions rest on the well-known property of the recently precipitated oxides of iron and alumina, to combine with the organic matter contained in the solutions in which they are precipitated, and to form insoluble compounds therewith. In the case of alumina, its affinity for organic colouring matters is so great that it is not merely used as a mordant or fixing agent for such colours when applied to fabrics, but it is also employed to precipitate these matters from their solutions, and to produce the insoluble compounds called "lakes." Even when alumina and oxide of iron are used in their denser condition, as they exist in common earth or loam, they have the power of absorbing and fixing soluble organic matters, as well as the compounds of ammonia and phosphoric acid. It is natural, therefore, that these substances should have been proposed for the purification of sewage.

The *salts of alumina* claim our first attention, because they are somewhat more effective as defæcating agents than those of iron; and the earliest practical suggestion for their use is in the patent of Mr. Stothert, dated the 17th of April, 1852. He therein recommends that fresh made caustic lime, sulphate of alumina, or sulphate of zinc, and a combination of animal and vegetable charcoal, obtained from sewage or night-soil, should be employed for the precipitation of the substantial parts of sewage water, so as to produce a valuable manure. This process was tried in the year 1857 by Dr. Hofmann and Mr. Witt, when they were experimenting on London sewage, and they found that it rapidly caused the flocculation and precipitation of it. Forty gallons of ordinary sewage were treated with five ounces of lime and ten ounces of the mixture of charcoal and sulphate of alumina. The lime, which was first added to the sewage, produced considerable aggregation of the suspended matters; but the aluminous preparation caused a marked increase in the flocculation and separation of these matters, forming them into a dense precipitate which rapidly subsided. The effect of this treatment of the sewage was as follows:—

Constituents per gallon.	Raw sewage	Effluent Water.
	Grains.	Grains.
Dissolved matters . . .	107·60	87·73
Organic matter . . .	52·36	37·56
Mineral ditto . . .	55·24	50·17
Oxygen required for oxydation	—	—
Matters in suspension . .	52·49	0·00
Organic matter . . .	36·40	0·00
Mineral ditto . . .	16 09	0·00

In this way the whole of the suspended matters were removed, together with 19·87 grains of the dissolved matters, and of this 14·8 were organic, so that nearly 58 per cent. of the total amount of organic matter in the sewage was thus removed. The precipitate when dried contained 1·21 per cent. of nitrogen (= 1·44 ammonia), 3·97 phosphoric acid (= 8·6 bone earth), and 35·97 organic matter, and it was

worth two guineas per ton. According to Mr. Stohert, a ton of the materials, costing 30s., will make two tons of manure.

In the year 1853, Mr. James Alexander Manning obtained a patent for defæcating and separating certain matters from sewage by means of animal charcoal, alum, and carbonate of soda and gypsum, the precipitate being mixed with certain waste products, rich in phosphates, so as to form manure; but as the use of alum was found to be expensive, he improved the patent in the following year (1854) by employing a waste product called "soft sludge," from alum works. This is the deposit which forms during the first boiling down of the rough liquors obtained from alum shales in the manufacture of alum, and it consists of basic and other sulphates of iron and alumina. Later still, in 1855, he again improved the patent and cheapened the production of the alum compound by the application and use of alum slate, alum shale, alum schist, alum stone, and alum ore, and other aluminous minerals and earths, as precipitating and clarifying agents for cleansing sewerage matters. The method which he recommended for the preparation of these shalts, &c., was much the same as that used in the early part of the ordinary process for making alum whereby the material called "soft sludge" is obtained; and in this manner an aluminous compound is easily obtained at a price, according to Mr. Manning, of about five shillings a ton. He also recommends in each of his patents that powdered caustic lime and animal charcoal should be used with the aluminous compound: his directions are that the soft sludge, or other aluminous preparation, is first to be added to the sewage, and then, while it is being agitated, the powdered caustic or unslacked lime and animal charcoal are to be thrown in; after which it is to be allowed to subside in the precipitating tanks. The process was carefully tried in Edinburgh and a few other Scotch towns, and it was reported very favourably of by the late Professor Penny, of Glasgow, who found that it defæcated sewage in a very satisfactory manner, and gave a product which contained 2·22 per cent. of ammonia, 2·05 of phosphate of lime, and 43·72 of organic matter. This product, according to Dr. Hofmann and Mr. Witt, is worth £1 16s. 5½d. per ton. Another sample of the precipitate, from the sewage of Pinckston Burn, analysed by Dr. Penny in 1854, contained 31·74 per cent. of organic matter (with 0·728 nitrogen, = 0·884 ammonia), and 13·57 per cent. of phosphate of lime. According to Dr. Penny this was worth 35s. per ton.

More recently still a like process has been patented by Mr. Lenk for the defæcation of sewage by means of a solution of crude sulphate of alumina, called "alum cake." We examined a sample of Mr. Lenk's solution in the year 1865, and found that it contained about 12 per cent. of alumina. A gallon of ordinary London sewage required 24·5 grains, by weight, of the solution to defæcate it, and in twenty minutes the flocculent precipitate had completely subsided, leaving a perfectly clear and almost inodorous supernatant fluid. In the year 1868 the process was tried for more than a week on the sewage of Tottenham, and the results were quite satisfactory to the local authorities, for they say that "a cask of water taken from the tank became, after settling, perfectly clear and free from all smell, two gold fish living in it for some weeks." From three to three and a-half cwt. of the chemicals were used per day for about 700,000 gallons of sewage, or one ton per week, at a cost of £6 10s. The process was examined by Dr. Voelcker, who analysed the several products, and reported that "Lenk's Deodorising Liquid certainly effects a ready precipitation of suspended sewage matters, and at the same time removes a very large proportion of obnoxious soluble refuse matters. The sample of deodorised Tottenham sewage, examined by me, certainly was very satisfactorily disinfected. Sewage, after efficient treatment by Lenk's process, in my judgment, may be poured into a water-course without causing a nuisance like ordinary sewage." According to Dr. Voelcker's analysis, the following was the composition of the raw sewage and the defæcated sewage water:—

Constituents per gallon.	Raw Sewage.	Effluent Water.
	Grains.	Grains.
Dissolved matters	91·10	63·39
Chloride of sodium	14·46	14·21
Ammonia	9·76	4·23
Organic matter	42·30	9·70
Phosphoric acid	3·77	trace
Matters in suspension	367·70	3·01
Organic matter	225·60	0·77
Mineral ditto	142·10	2·24
Total ammonia obtainable	24·237	5·103

From which it appears that the process removed almost the whole of the suspended matters, and 27·71 grains of the dissolved matters, 32·6 grains of which were organic. The precipitate when dry contained 1·86 per cent. of nitrogen (= 2·26 ammonia), 4·91 phesphoric acid (= 10·71 of bone earth, and 42·26 of organic matter. "In a perfectly dry state," according to Dr. Voelcker, "the deposit would be worth to the farmer about £2 2s. a ton. In such a perfectly dry state, however, it is not possible to obtain it on a large scale. Sufficiently dry to become powdery, the sewage deposit would probably retain from one-fourth to one-third its weight of water, and in that condition, the sample would be worth from 25s. to 30s. a ton as manure." Looking, therefore, at the profit of the results, it would seem that, if all the sewage of Tottenham produced, as in the present instance, at least 392·4 grains of dry deposit per gallon of sewage, the 4,900,000 gallons per week, must furnish nearly 123 tons of dry deposit, which, with one-third of its weight of water, to form a commercial product, would weigh about 164 tons—worth according to Dr. Voelcker, 25s. a ton. So that for an outlay of £6 10s. per week, for a ton of Lenk's chemicals, there would be realised a product werth £205. Even supposing that the suspended matter of the sewage amounted to only 38·2 grains per gallon, which is the average of London sewage, the return would have been sufficiently large to have deserved the attention of the Tottenham Local Board of Health, seeing that they were not only the custodians of the public health, but were also under an injunction not to pollute the river Lea with their undefæcated sewage. All the attention, however, which it received from them was, a memorandum to the effect that "Lenk's process was tried for more than a week at the Tottenham works, with very fair results." They did not even go to the trouble of ascertaining what was the real effect of the process on the effluent water, or what was the nature of the deposit obtained. This, how-

ever, is only one example of the many ways in which the carelessness and parsimony of our local sanitary boards are constantly bringing the sewage question into the region of difficulty and doubt; and, in this case, if it had not been for the investigations of Dr. Voelcker, it would most probably have been said that the process of Lenk had been tried at Tottenham and had failed.

Other processes have been proposed for the defœcation of sewage by the aid of an impure sulphate of alumina and iron, made from sulphuric acid and common clay, but, as these will be best examined after the consideration of the several processes for defœcating sewage by means of the salts of iron, we shall defer them for the present.

Hospital Reports.

METROPOLITAN FREE HOSPITAL.

On Tuesday, Nov. 22nd, Mr. Sheffield operated on a patient suffering from fistula in ano. A young woman, aged twenty, was sent to Dr. Sheffield by Dr. C. R. Drysdale. She had been under the care of one or two surgeons previously, who had treated the case as if it were an incomplete fistula. She had suffered for two years. There was a fistulous opening about three inches from the margin of the anus, through which a probe could, with some difficulty, be thrust up to meet a finger on the bowel about 2" above the sphincter. Bichloride of methylene was administered by Mr. Ruju, and the fistula completely laid open by a very extensive incision. Forty drops of laudanum were administered after the operation, with the injunction that twenty drops were to be given at night, with an ounce of chalk mixture thrice a day for some days. Mr. Sheffield has under his care a case of fungus of the testes; but, on consulting with Dr. Drysdale, as the man had a cavity in his left lung, it was thought useless to operate. We observed a well-marked case of tertiary syphilis in a strong, healthy-looking man, aged forty, who dated the time of contagion thirty-five years back to a gonorrhœa, or small sore, about which he seemed to have but small recollection. There were extensive nodes over both tibiæ and two depressions in the skull from loss of bone, also, there were large exostosis on the bones of the forearms. Otherwise the patient seemed by no means cachectic. The Metropolitan Free Hospital contains less than forty beds, and seems well suited for operative surgery, as the wards are small, and the patients comfortably attended to and contented. There is some idea, we hear, of a new site, close to the terminus of the Great Eastern Railway, being selected for a new hospital. We trust that the committee may take a hint from the late Sir J. Simpson's writings, and make the new hospital a congeries of small buildings instead of a palatial edifice.

ROYAL OPHTHALMIC HOSPITAL, MOORFIELDS.

In a recent visit to this hospital, we saw Mr. Bowman perform the old flap operation for cataract on the left eye of an old woman without the use of chloroform. The patient did not seem to suffer very great pain, and we hear that such is the case generally in such operations. The cornea is not very sensitive, and as the flap is confined to that structure, chloroform is hardly required in many cases. We have very rarely indeed, seen the old fashioned operation performed at the Moorfields' Hospital since the previous performance of iridectomy seems all but universal at that institution in operations for cataract. We have, indeed, heard it stated by one of the most distinguished surgeons there, that the advantages of the last-named process are very great, both because the flap in the old operation was liable to slough, and because of the risk of prolapse of the iris a few days after that process. Mr. Bowman, also, excised a piece of cornea from a patient suffering from corneal cornea, putting in a suture to keep the parts together.

ROYAL FREE HOSPITAL.

At a recent visit to this hospital, we saw a patient who had just been treated for severe stricture of the urethra by Holt's plan of rapid dilatation. Patient, a man, aged thirty-five, had applied to Dr. C. Drysdale on account of painful micturition and complete impotence. For diagnosis, that gentleman passed a catheter and found that the man had a very narrow stricture, only admitting No. 1 gum elastic. Mr. Hill performed Holt's operation on Saturday, and the man could make a full stream on Monday, and left the hospital on Wednesday quite well, with a *promise* to return to have the catheter passed occasionally. In the wards was a woman, aged thirty, or thereabouts, with a large growth attached to the left scapula, and extending into the axilla, but not attached to the tissues in that region. Mr. J. D. Hill proposed to excise part of the scapula and remove the tumour, which he deemed to be cartilaginous in nature. The new operating theatre, due to the munificence of a worthy gentleman whose heart must be in the right place, is now open, and there are few theatres in the London hospitals where more cases of important operations may be witnessed.

Transactions of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIFTY.

Tuesday, November 22nd, 1870.

Dr. Burrows, F.R.S., President, in the Chair.

John Harley, M.D., F.R.C.P., read

A THIRD COMMUNICATION ON THE ENDEMIC HÆMATURIA OF THE SOUTH-EASTERN COAST OF AFRICA, WITH REMARKS ON THE TOPICAL MEDICATION OF THE BLADDER.

An almost daily opportunity of watching a case of this disease for nearly a year enables the author to give precise information concerning, firstly, the prostatic form of the disease and its treatment; and, secondly, the structure and development of the parasite. The prostatic form of the disease is attended by an intermittent discharge of venous blood, never exceeding a teaspoonful, and always mixed with urine, recurring after variable intervals of from two to fourteen days, and continuing for several days in succession. The morbid appearances are confined to the last tablespoonful of urine, which contains the blood and casts (composed of mucous or blood) of the passages in which the parasites lie. Apart from the passage of blood, and the egg-bearing casts, there was no inconvenience—no impediment to the flow of urine, nor the slightest irritation of the genito-urinary apparatus.

The treatment was, at first, general, consisting in the use of such remedies as iodide of potassium, henbane, &c., which are eliminated unchanged by the kidneys. This general treatment affected the parasite to a limited extent only, and was, therefore, supplemented by local medication in the form of injections of strong infusions of wormwood and quassia, emulsions of oil of male fern in these solutions, and of solutions of iodide of potassium and some other salts. The author describes the effect of each of these drugs, and relies most of all on iodide of potassium, which was given in quantities varying from ten to thirty grains in five ounces of infusion of quassia as a daily injection. Evidence of the absorption of this remedy was manifest, and the effect was very beneficial; and by the intercurrent use of injections of oil of male fern, the parasitic products with which the tunnels in the mucous membrane are stuffed were thrown off and the parasites destroyed. Morbid products, including portions

of the adult animals, and laminated corpuscles, derived from the prostate, are figured and described.

With a view to its detection in the waters of the infected districts, the author has very carefully described and delineated the embryo of the parasite, which is a little ciliated animalcule strongly resembling some of those found in stagnant water in this country. He says: "I have several times succeeded in liberating simultaneously from the egg as many as twenty embryos, and watched their movements in a drop of water under the microscope. No sight can convey, either a more vivid impression of the activity of animal development, or a more complete realization of the energy of parasitic life. It is an interesting display, but its general attractiveness is certainly not increased by the unavoidable reflection that the tissues and fluids of the human body may readily become the abode of these lowly animals."

Experiments were made to determine whether the parasite may be developed from ova introduced into the body. From negative results, and from other facts, the author concludes that, as a rule, this does not happen, from some cause which prevents, or too long retards, the liberation of the embryo from the egg. He is, however, inclined to think that if the hatching be timely effected, or if the liberated embryo be artificially introduced into certain parts of the body, more especially the bloodvessels, its further development into the adult parasite may proceed.

As to the primary mode of invasion, the author mentions the fact that the colonists of the infected districts are early attacked by a peculiar kind of boil, which passes into an indolent ulcer, and which, ultimately healing, leaves a large and indelible scar. He thinks it very probable that these boils result from the insertion of ova beneath the skin in the act of bathing, and that the subsequent progress of the ulcer and the infection of the genito-urinary organs, is due to the liberation of embryos (which may readily occur upon the naked surface of an ulcer), and their convection or ascent to the pelvic organs along the veins which lead to them.

The PRESIDENT spoke of the great value of the researches which Dr. Harley had, now for the third time, communicated to the Society; and said that, possibly, other diseases attended with hæmorrhagic or serous discharge from mucous membrane, might be due to parasitic invasion.

MR. JOHN WOOD inquired whether there had been any opportunities of *post-mortem* examination of the prostate in these cases, and whether the parasite invaded any other part of the urinary organs.

MR. FAIRLIE CLARKE suggested the application of the solid nitrate of silver to the prostatic portion of the urethra.

DR. SYMES THOMPSON inquired as to the extent of country in South Africa over which the disease prevailed.

DR. WEBSTER inquired whether the disease prevailed chiefly in high or in low localities. He believed that loss of blood was more common at elevated than at low situations, and under low barometric pressure. He inquired also the state of the water.

DR. CHURCH asked whether anything was known about the stages of development of the parasite; and suggested that it might require two hosts.

DR. HARLEY, in reply, said that he hoped shortly to receive more detailed information from a practitioner in Natal about the *post-mortem* appearances, and also about some other points that had been raised. The parasite was sometimes located in the pelvis or veins of the kidney; and, when thus situated, its embryos were apt to form the nuclei of oxalate-of-lime renal calculi. The disease was chiefly seen in the district of Port Elizabeth, where the water was said to be "brackish," and was almost confined to stations within twenty miles of the coast, and elevated not more than 300 feet above the sea level.

GEORGE JOHNSON, M.D., read

A CASE OF TRAUMATIC TETANUS; RECOVERY AFTER THE REMOVAL OF A FOREIGN BODY FROM THE WOUND, AND THE ADMINISTATION OF CHLORAL.

H. N.——, aged thirteen, a newspaper boy, was admitted into King's College Hospital on the 24th June. Three weeks before, whilst getting over a hedge, he ran a sharp piece of wood into his thigh. He stopped the bleeding by tying a handkerchief round the thigh. The wound soon healed, and he is confident that no portion of the pointed wood remained beneath the skin. About nine days before his admission the lower jaw began to feel stiff; this gradually increased, until it interfered with mastication. Then the muscles of the trunk and limbs began to be affected with spasm, and he came into the hospital.

On his admission he was well nourished, with a healthy colour. There was a peculiar expression of the face, resulting from spasm of the occipito-frontalis, corrugator supercilli, and other facial muscles. He could separate the incisior teeth only to the extent of about half an inch. There was some rigidity of the abdominal and erector spinæ muscles, and movement of body occasionally increased this rigidity to a painful degree of spasm, the pain being especially severe in the back. The spasm also implicated the muscles of the legs. The temperature, pulse, and respiration were normal.

At the upper third of the thigh there was a cicatrix about half an inch long, the scar and the tissues beneath felt unusually hard, and pressure caused considerable pain. It was suspected that there might be some foreign body beneath the skin, therefore chloroform was given, and an incision made through the cicatrix by the house-surgeon, Mr. Whitmore, who discovered and removed a small dark mass; this proved to be a pieee of woollen stuff from the boy's trousers, which had been driven in and lodged beneath the skin. The piece of wool was about the size of a small pea. A poultice was applied to the wound, and during the next twenty-four hours no medicine was given. There was continuous rigidity of the muscles, with occasional paroxysms of spasm and pain. He was now ordered to take fifteen grains of chloral-hydrate, at first every four hours, afterwards at longer intervals. Between the 26th June and the 9th July he had twenty-four doses of the chloral, amounting in all to 360 grains. The symptoms gradually subsided, the spasms became less frequent and less severe, the last slight attack of spasm occuring on the 13th July; the wound healed, and he was discharged cured on the 27th July.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, NOVEMBER 16TH.

PROFESSOR BENNETT, President.

MR. ANNANDALE showed—1. Parts illustrating condition of hip-joint some months after an unsuccessful excision; 2. Parts removed in excision of knee-joint; from extension of the disease, amputation had afterwards to be performed; 3 and 4. Bones removed in excision of the os calcis; one specimen exhibited well marked tubercular disease, the other necrosis; the bone was thickened and dense; 5. Tumour removed from the lower jaw, partly cystic and partly fibrous; 6. Preparation illustrative of a case of croup in which tracheotomy was performed. The child died forty hours afterwards.

DR. CADELL exhibited—1. An apparatus used at Lyons in the treatment of club-foot; 2. An apparatus for reducing to the straight position anchylosed knee-joint, by means of gradual and constant elastic traction.

DR. GRAINGER STEWART showed—1. A man presenting a well marked example of the pseudo-hypertrophic paralysis of Duchenne. The limbs were greatly hypertrophied, but weak, the connective tissue being increased, while the muscular fibres are nearly destroyed; 2. A man suffering from aneurism of the aorta. The tumour pressed upon the œsophagus and recurrent laryngeal nerves, and, from the dilatation of the right pupil, the right sympathetic was also involved.

DR. CHIENE communicated a "Case of Obturator Hernia." The case occurred in the practice of the Cowgate Dispensary. The affection was met with more commonly in women than in men, and, when diagnosed, has been once or twice relieved. The present case was that of a woman, and had proved fatal, because not observed soon enough. It was a case, indeed, in which an absolute diagnosis, during life, was impossible. Dr. Chiene showed a diagram and pathological preparations illustrating the nature of the case. It was a triple obturator hernia. No similar case, he believed, had been previously observed or reported. The Fallopian tube on one side was carried into the sac, along with the peritoneum and two inches of ileum.

DR. JOSEPH BELL made remarks laudatory of Dr. Chiene's paper, in the course of which he mentioned, that the present advanced condition of surgical science entitled the experienced surgeon to cut into the abdominal cavity in cases of ileus,

not only when the seat of obstruction had been accurately diagnosed, but in those cases also where the cause and position of the obstruction were doubtful. He justified these remarks on the ground, that recent observation had shown that the peritoneal sac was much less liable to inflammation from surgical interference than was supposed.

Dr. HANDYSIDE asked why in this case the weakest point in the abdominal wall was not the inguinal canal. The obturator foramen had become the weakest point, how did this happen? Had the patient prolapsus of the uterus? Had she suffered from hæmorrhoids? These questions were all connected.

Mr. ANNANDALE called the attention of the Society to the fact that pain passing down the inside of the thigh was a prominent symptom, in some cases of this kind, and, in fact, was diagnostic of the patient's condition, as Dr. Chiene had remarked. The hernial tumour stretched the obturator nerve.

The PRESIDENT confirmed the statements made by Dr. Bell. He referred to a case which had come under his own observation, in which had surgical interference been resorted to, the life of the patient, he had no doubt, would have been saved. In this case he had requested a surgeon to cut into the cavity of the abdomen, but the surgeon had refused, alleging that such a proceeding was contrary to the rules of surgical practice. The evidence of strangulation in this instance was undoubted. Dr. Bell went as far, however, as to advocate exploratory interference in uncertain cases.

Dr. GRAINGER STEWART observed as a result of his experience as pathologist to the Royal Infirmary, that he had no doubt many lives might have been saved, in cases of ileus, by surgical interference.

Dr. ARGYLL ROBERTSON read a paper "On Albuminuric Retinitis."

Dr. MATTHEWS DUNCAN and others testified to the frequency of the disease during pregnancy.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

AT a meeting of the above Society, held on the 11th ult.,

Dr. CLAPTON, President, in the Chair.

Dr. CARR read a very interesting paper

ON PURGATIVES, THEIR GOOD AND EVIL.

of which the following is an abstract:—

Dr. CARR endeavoured to show the value of purgatives when given with judgment, notwithstanding the almost universal condemnation of them; and the evil they are capable of doing in the hands of the unskilful. The once popular and favourite "black draught" has been left out in the cold, with its companion the "lancet"—both ostracised by the existing race of medical men.

In a former lecture, Dr. Carr brought before this Society the subject of bleeding, and endeavoured to show that as a remedy it was still entitled to our confidence; that there were certain conditions of disease largely benefited by the abstraction of blood; that its omission in some cases permitted the patient to die, whose recovery might be favoured by bleeding. In a similar spirit, and with the same objects in view, he asked the attention of the Society to the consideration of the claims of purgatives; in the assurance that in the hands of careful, prudent, and reflecting physicians, they will be found as valuable as in days of old; whilst at the same time, he was ready to allow that many evils might result from their injudicious use.

Previous to entering on the main question, Dr. Carr very briefly reviewed the anatomy and physiology of the various organs engaged in alimentation, dwelling specially on the nerves of the bowels—cereberal and sympathetic; on peristalsis, which he illustrated with diagrams; on the extent and special characteristics of the mucous membrane; on the glandular structure of the bowels, and the various sources of fluids provided as solvents of the food, with those special provisions for carrying the excreta *per vias naturales*. He estimated the food taken at about thirty-five ounces per diem, thirty of which are absolved and five left as true excreta. All the processes engaged in alimentation, beginning with mastication, were carefully and briefly dwelt on, as aiders and abettors of assimilation, and finally of defæcation. The proper food of man, taking his teeth as a guide, was insisted on as essential to maintain the body in health, one great test of which is proper defæcation, and the subject of our future remarks.

Doubtless, if man lived in a state of nature, taking his simple food, &c., he would not merely enjoy, as a rule, uninterrupted health, but would need little help from art. But, as man ordinary lives at variance with the laws of nature, it follows that he does require occasional assistance. Habit, in spite of improper diet, will do much to correct the evils of domestication and civilization. The child or man who pays his regular "visit" will usually find it rewarded by relief. Still, in many cases, there is need of aids to defæcation to remove the miseries and the ill consequences of constipation.

In the lower animals, who are subjects to domestication, and who, like ourselves, suffer from torpor, it is no uncommon thing to see them eat grass—not natural food to dogs or cats, but which they are prompted to do by the results of domestication.

It is not unworthy of remark that homœopathy "entirely discards the use of purgatives on the ground that the body is not only marvellously perfect as a whole, but that every separate organ is adapted in an equally admirable manner, to the performance of its peculiar functions." If the bowels be confined, *let them alone*. "The only legitimate aperient is an enema of water, gruel, or the like."* Now, surely, if the rectum, one part of that body which is marvellously adapted to perform its functions, requires help when it fails, the other portions of the stomach may require the same help when they fail. Or applying the rule of help to any organ when it can't perform its functions, is simply to carry out the common sense of medical aid. Surely, if any individual is the subject of discomfort from the failure of obtaining daily relief, and some simple remedy will induce it, common sense says apply it; and having once used this remedy, experience approves its continuance when the occasion occurs.

Reason, however, goes further than this, and asks for preventitive measures—a dietary and habits which favour the daily or bi-daily relief. This good habit of emptying the rectum daily used to be insisted on by Dr. Bailey, of Edinburgh, in this language: "Gentlemen,—Ever remember, never forget, twa things—first, to pray to God; second, to visit the goddess."

No doubt, a dietary capable of nourishing the body, and yet of favouring daily or bi-daily relief, is very desirable, and may be readily discovered. In the case of young children who live mainly on milk and farinaceous food, and who are torpid, the substitution of cream for milk is of great value; the omission of casium as a food, and the substitution of butter, proves a great boon. In children, who partake largely of animal food, the decrease of this, and the increase of vegetables, will effect the desired change; or fruits, baked apples, prunes, and the like, will be followed by good. The torpid state of young people, middle aged, and aged, will often be cured by eating brown instead of white bread, or drinking a tumbler of water early in the morning. Oatmeal porridge, with cream or treacle, has proved a great boon to many habitual torpids. Above all, habit does much; the forced visit paid immediately after breakfast will often induce, if persevered in, the daily relief; and, if repeated in the evening, will be followed by an equally satisfactory result. Regular walking, in addition to change of diet, will also do much to effect a cure. Should, however, these fail, recourse must be had to drugs, and of these, usually, the mildest are the best. It is also worthy of remark, that all forms of aperients answer best, if taken at bedtime. Thus, among the laxatives, castor oil is the most reliable; and a teaspoonful taken at bedtime for a night or two will usually produce free defæcation. Among the salines, sulphates of magnesia and potash are the best; and the former combined with taraxacum, the latter with rhubarb, form excellent cathartics. The most valuable of the acrid cathartics are senna and jalap, both of which require to be combined with carminatives. If hydrocatharsis is desired, bitartrate of potash should be given with jalap, or elaterium may be used. For removing evident hepatic affections, the various forms of mercury may be given, notwithstanding the opinions entertained by Dr. Hughes Bennett.

As a record of the value of purgatives in special cases, we possess no better book than that of Dr. Hamilton, who wrote in 1805. Dr. Carr's experience supports this writer, and he further remarks that habitually torpid bowels are always accompanied by more or less of disturbed health, an unhealthy skin, usually yellow, with fœtid breath. Such being the case, it is the duty of the judicious medical man to ascertain the causes of this torpor, and, if possible, to remove it. If the

* Yeldham on Acute Diseases. 1870.

diet or habits be faulty, to correct it; and, this failing, then to give suitable drugs. Against interference, it has been urged that many persons will pass days or weeks without relief, and yet retain health; to which it may be replied, that these cases are exceptions; that, as a rule, health is alone possessed by the individual who obeys the laws of nature, and defæcates at least once a day. So important is this to the well being of the individual, whether young or old, that its omission is, as a rule, followed by functional disturbance, and, if continued, by actual disease. And this fact cannot be too much impressed on all persons. Hence, the management of the bowels in early life should be well understood by mothers; so, too, their proper regulation in the middle periods of life; and the care of these organs should be well regarded in the decline of life—not so much by physic as by the laws of common sense. Here the value of enemata may be spoken of—they simply empty an over-loaded rectum.

Of the evils of purgatives, Dr, Carr dwelt with much force, contrasting the practice of the present day, which goes in for gentle rather than strong remedies, with that of thirty years ago. No form of cathartic can do good over and above the removing from the prima via its contents, and the exciting the exhalents to pour out of the blood its serum. Purgation must be, after the removal of the excreta, a weakening process, and should never be practised in cases of atonic disease, or where there is a condition of shock. In the parturient state, it is always a good rule to pass three or four days without relief, after which, if there be no action, to give at bedtime a teaspoonful of castor oil.

Aperients should seldom be given in known, or suspected, malignant disease of the abdominal viscera. In these cases, opium combined with belladonna, will give the needful relief. A similar treatment, Dr. Carr always practices in cases of acute torpor with urgent symptoms of constipation, severe abdominal pain, and sickness, with a high temperature; repeated doses of opium with belladonna, and continued for a few days, usually succeed in obtaining the desired alvine evacuation.

In persons whose powers are feeble, and who eat both little and light food, the daily relief may be, as pointed out by Sir Henry Holland, too much. An action on alternate days, in their peculiar circumstances, is far better; still with them it is very undesirable to permit the bowels to get over loaded.

It will thus be seen that, as a rule, health is maintained by obtaining a daily relief; that diet and good habits favour this; that, failing the good rule, gentle medicines will establish it; and that strong purgatives should be rarely resorted to.

An animated discussion followed, in which the President, Drs. Gooding, Thorowgood, Lockhart, Purvis, Creed, &c., took part; after which, a vote of thanks was passed to the essayist.

The Dublin Obstetrical Society held the first meeting of its Thirty-third Session on the 26th ult.

The Report presented by the Council represented the Society to be in a flourishing condition, and advised that the President should be eligible to re-election, and should hold office for two years.

Dr. Rigland, in moving the adoption of the Report, said, that he regarded with approval the proposition that the President should act for two years, especially as the gentleman who would first experience the operation of the rule would be their former valued secretary, Dr. Kidd.

Dr. Darby, of Bray, seconded the motion.

Dr. George Johnson, Master of the Rotundo Hospital, in delivering the Inaugural Address, reviewed the progress of the Society, and the communications which had been made to it during its last session.

The President then announced that Dr. Kidd had been elected President, who thereupon assumed the chair, and returned thanks for the honour.

Dr. Sawyer moved the thanks of the Society to the ex-president, which was seconded by Dr. More Madden.

The President then announced that Drs. Byrne and H. Kennedy had been elected Vice-presidents, and Drs. Beatty, Churchilll, Denham, McClintock, and Roe as Council.

Dr. Churchill proposed, and Dr. Corrigan seconded the vote of thanks of the Society to the Presidents of the Colleges of Physicians and Surgeons, which was responded to by Drs. Banks and Walsh.

The President of the College of Surgeons alluded to the connection which his College was proud to acknowledge with the Society.

SUGGESTIONS OF THE CONFERENCE OF IRISH LICENSING BODIES, AS TO MEDICAL LEGISLATION.

A conference was held of Representatives appointed by the Board of Trinity College, Dublin, the Senate of the Queen's University, the King and Queen's College of Physicians, and the Royal College of Surgeons in Ireland; in accordance with the following Resolution passed by the College of Physicians, on 7th October, 1870:—

"That it appears desirable, in regard to the probability of approaching legislation on Medical matters, that a Conference should be held of the several Universities and other Corporate Bodies in Ireland, authorized to grant Degrees or Licenses in Medicine or Surgery, with the object, if possible, of laying down principles or views as the united opinions of those several Bodies."

The Representatives named by the respective Bodies were—*University of Dublin*:—Andrew Searle Hart, LL.D; William Stokes, M.D; James Apjohn, M.D.; *Queen's University*:—Sir Dominic J. Corrigan, Bart., M.D., M.P; Sir Robert Kane, M.D; William M'Cormac, M.D; *King and Queen's College of Physicians*:—John Banks, M.D., President; Thomas Edward Beatty, M.D; Rev. Samuel Haughton, M.D; *Royal College of Surgeons*:—Albert J. Walsh, M.D., President; James Henry Wharton, M.B., Vice-President; Rawdon Macnamara, M.D.

The following Suggestions were agreed to at the Conference, to be submitted for the consideration of the respective Bodies:—

Suggestion I.

That the privilege of granting Degrees or Licenses in Medicine or Surgery, as at present possessed under Law or Charter by the several Universities and Medical or Surgical Corporations, should not be interfered with.

Suggestion II.

That this Conference does not oppose the establishment of a General Medical Examining Board, whose Certificate shall be indispensable for Registration.

Suggestion III.

That the holders of Degrees or Licenses in Medicine and Surgery, granted by any one or more of the Universities, or Medical or Surgical Corporations, empowered by Law or Charter to grant such, should be entitled to present themselves for Examination before the General Medical Examining Board, on production of such Degrees or Licenses.

Suggestion IV.

That no Candidate should be admitted to the Examination of such General Medical Board, who does not previously possess a Medical and Surgical Qualification from one or more of the Corporations legally entitled to grant the same.

Suggestion V.

That the General Medical Examining Board should consist of an equal number of members from England, Ireland, and Scotland; and that the Meetings for Examination should be held successively in England, Ireland, and Scotland, by all the members of the Board, or such as may be deemed requisite from time to time, provided always that each Division of the United Kingdom shall be represented at each Examination.

Suggestion VI.

That the General Medical Examining Board should not have any power to interfere with the General or Professional

Education of Candidates; that the regulation of the curriculum of education should remain with the several Universities and Colleges, as at present; the functions of the General Examining Board being altogether confined to the principle and details of Examination.

Suggestion VII.

That Candidates should not be put to any expense in undergoing the Examination of the General Examining Board; that such Examination, being for the advantage and protection of the public, the State should defray the expenses, in like manner as the expenses of Examination for the Army and Navy are paid by the State.

Suggestion VIII.

That the Examiners from each Division of the Kingdom should be elected by the Universities and Medical Corporations entitled by Law or Charter to grant Degrees or Licenses in Medicine or Surgery, in such division of the Kingdom.

Suggestion IX.

That the General Medical Examining Board, so elected, should be empowered and required to draw up a Scheme for the Examination, both in general and professional knowledge, of all Candidates entitled to present themselves; such Scheme of Examination to be subject to the approval of the General Medical Council. Signed,

J. T. Banks, *Chairman.*

29th November, 1870.

Registered for Transmission Abroad.

THE

MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6

„ If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of A. A. Tindall, 20, King William-street, Strand, London, W.C.

Moffat and Co., 6, D'Olier-street, Dublin.

Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—

New York—Turner and Mignard, Nassau-street.

Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 7, 1870.

PHARMACY IN IRELAND.

The Bill for the Regulation of Pharmacy in Ireland, put forth by the Irish Apothecaries' Company, and published *in extenso* in the Medical Press and Circular the week before last, would seem to be the forlorn hope of the Company to maintain intact its privileges as a licensing body, challenged on one side by the College of Physicians, and on the other by the pharmacists of Ireland. We have no anticipation that the compromise to which the Apothecaries' Company asks the adhesion of the Licensing Bodies and the Chemists will ever become law, and it would be very unfortunate for the future of Irish pharmacy that it should.

The Apothecaries' Company has, in spite of every warning, lost its footing on Pharmaceutical ground, and it has utterly failed to establish itself on a Medical standpoint, and the weakness of its foothold has made it the subject of allied attack. The College of Physicians, on the one side, has taken vigorous action to have annulled the meagre title to grant licenses in Medicine, in maintaining which the Company has almost spent its last breath, and the public, in refusing the license proferred to them by the Company, has *de facto* effected that which the College of Physicians desires to complete. The Medical qualifying power has already slipped from the hands of the Company, and it only remains for Parliament or the Medical Council formally to take away the semblance of the much-desired reality. But while the College of Physicians is pressing the Company hotly in the effort to force it back upon its pharmaceutical functions, the Chemists of Ireland are contesting the possession of those functions with much vigour and with the prestige of recent success in England.

The English Pharmacy Act has been but a short time in operation, and already its provisions have effected so good an object that the Irish Chemists are ardent in the desire to have the practice of Pharmacy amongst them regulated on some more definite principle, and directed by some more nervous hand than that of the Apothecaries' Company.

Beset thus in front and rear, and abandoned by its public patrons, the Apothecaries' Company has wisely set itself to do without violence to its own prejudices that which others threaten to carry out by summarily sweeping it out of the way.

The Bill promoted by the Company creates a Pharmaceutical Society of Ireland to be composed of all registered chemists and licensed apothecaries. It vests in this Society the making of "all bye-laws and rules for the advancement of pharmacy," and creates by an equal contingent from the Company and the Society an Examining Board before whom every Chemist must pass before he can practise Pharmacy. The machinery of registration and the penalty for practising without that qualification are substantially the same as those provided by the Medical Act.

We epitomise some points of interest in the clauses. Clause 1 forbids any person other than a duly-qualified Apothecary or a Registered Pharmaceutical Chemist "to "sell or to keep open shop for retailing, dispensing, or "compounding medical prescriptions in Ireland." Clause 4 authorises and requires the Examiners to examine candidates "in their knowledge of the Latin and English "languages, in Arithmetic, in Botany, in Materia Medica, "in Pharmaceutical and General Chemistry, in Practical "Pharmacy, in the British Pharmacopœia, and such other "subjects as may be determined on." "Provided always "that such examinations shall not include the Theory and "Practice of Medicine, Surgery, or Midwifery, or any "branch of Medicine or Surgery."

Clause 6 fixes the fees at the following rate:—

Apprentices and Students . .	2 guineas.
Assistants	2 „
Pharmaceutical Chemists . .	5 „
Registration	5 shillings.

Clause 13 provides that *any person* other than a Registered Chemist or Apothecary, "who shall keep an open "shop or wareroom for the retailing, dispensing, or com- "pounding of medical prescriptions," or who shall use any title implying that he is a qualified Apothecary or Registered Chemist. "And any Apothecary or Chemist who

shall take a Student, Apprentice, or Assistant, shall be liable to a penalty of £5.

Clause 14 declares that registration under the Act shall not entitle any person to practise Medicine or Surgery, or any branch of Medicine or Surgery.

Clause 15 enables the Examiners to grant Registration to all existing Chemists and Druggists who have been in business for five years on an examination "as to his know-"ledge, skill, and competency to carry on and conduct the "business of a Pharmaceutical Chemist."

Our analysis of the Bill shows us, therefore, that its object is one which the Profession in Ireland cannot approve. By it the Apothecaries' Company alienates for ever its pharmaceutical functions, and elects to confine itself *en permanence* to the work of giving Medical qualifications and selling drugs, and it is the duty of those who have in charge the education and qualification of our Profession to see that that object is defeated. Whether the Pharmaceutical guardianship of Ireland is in the hands of the Apothecaries' Company or the Pharmacentical Society is not material to Medical men so long as the function is well discharged, but the Profession cannot connive at the transfer of such important functions to an untried body.

The infatuation which has induced the Apothecaries' Company to promulgate this measure is inconceivable. The field of Irish Pharmacy is yet open to them, and if they were ready to accept its cultivation as a duty, the agitation for a Pharmaceutical Society would at once cease to exist, and the co-operation of the Medical authorities would be secured to them. Casting aside this *rôle* under which they might, without doubt, achieve influence and riches, they choose rather to pursue an *ignis fatuus* which has already slipped from their grasp, and which, if they could ever hope to seize it, would not be worth holding. We appeal to the Governors to abandon this foolish and vain self-deception, to abandon a pursuit in which they have left behind alike income and influence, and to take up and wield with energy and effect the instruments which the empire placed in their hands, but which they have allowed to rust in wilful disuse.

Notes on Current Topics.

About the War and Wounded

Those who believe that Germans cannot be brutalized, should read the correspondence of the *Daily News*. That paper sides strongly with Prussia as do its correspondents. Yet these gentlemen throw a strong light on the horrors of war. The other day there was an account of the cruelties of the Bavarians, under the Grand Duke of Mecklenburgh, which shows how fiendish men can be made by war.

***

Another correspondent states, that for the week ending 5th November, the mortality of Paris had risen to 1,800, and the fatal small-pox cases to 380; in the next week, the total mortality was 1,900, and by small-pox 419. There are a great many deaths from gastric complaints, a consequence of the prices of the necessaries of life. Paris was maintaining a death-rate from 300 to 400 in excess of that of London.

***

Eleven weeke have elapsed since the Registrar-General began to note in his Weekly Return the non-arrival of the mortality returns from Paris which he had been in the habit previously of receiving from the Paris authorities and publishing weekly. Before the investment of the city, the deaths were averaging about 1,200 weekly. Small-pox, which had caused earlier in the year from 200 to 300 deaths weekly, had subsided to a weekly average, in August and September, of 100 to 200 deaths.

***

From some official statistics lately published in the *Pall Mall Gazette*, it appears that Paris possesses some exceptional advantages which may prolong its resistance. The adults of Paris capable of work, amount to nearly three-fourths of the whole population. On comparing London with Paris, the former city has 61, the latter 71 per cent. of population at the working age, fifteen to sixty. The *Pall Mall Gazette* says, that the importance of this fact is undeniable, and adds that the proportion of medical men to the population of Paris is almost identical with that of London.

***

The Special Correspondent of the *Daily News* at Amiens gives an account of the neglect of the wounded, which is a sad disgrace to that rich city. While the wealthy of the place eat as usual, hundreds of brave fellows who had fought for them lay untended on the battle field. Happily, the provision of the English National Society had done much. But for the English ambulance, we are told, 1,000 wounded would have perished like dogs, without one effort to supply them with a single comfort. The English Society's doctors—Leslie and Goodenough—were for days the only gentlemen whose professional services were available, and, says the correspondent, I believe it is to the exertions of this Society that some hundreds of these poor Frenchmen have been rescued from death. A few civilian doctors arrived in course of time from Amiens, and some military medical gentlemen turned up, but instead of setting to work they commenced a quarrel on the point of etiquette. The Jews would have no dealings with the Samaritans. Meantime, there lay hundreds of men on the cold floors, nothing in the way of bedding or bed clothes, lying as they were placed days previously when carried off the "field, and no aid, except the English Society's united stores supplied."

***

The relief of the French peasants by the fund which Mr. W. H. Bullock has so nobly administered, and which exceeds £10,500, is one of the brightest acts of charity developed by the horrors of the war. We regret to say that the life of one of Mr. Bullock's ablest professional coadjutors has been sacrificed to the toils he underwent. He is another noble martyr in the cause of humanity, of which our Profession may well be proud. Mr. Bullock, in a letter dated Sedan, November 30, and published in London on Monday, thus writes of him—"I grieve to have to report the death of Dr. Davis, the coloured physician, which took place on Sunday last, November 27, at Pont Mangy, where he was devoting himself to every kind of good work for the benefit of the poor operatives and peasantry of the surrounding villages.

The Marriage of Soldiers *v.* Syphilis.

A correspondent of the *Times* says "If the opponents of the Contagious Diseases Acts would direct their efforts to an increase in the number of married soldiers, they

would do more to remove the causes of disease than by any other means. A regiment, when on Indian or foreign service, is allowed a limit of 12 per cent. of married men, but even this increase on the home limit is so applied that, most regiments leave England without so many married men, and wives are not to be got in India. It is simply a scandalous fact, that in 1866, of 51,578 rank and file in all India, only 4,210 were married, or 8·11 per cent. What is the result? The daily sick rate of the unmarried is more than double that of the married men, due no doubt in great measure to venereal disease. If all the army were allowed to marry to-morrow not half the men would avail themselves of the permission. Let the experiment be tried to the extent of one-fourth, and let every corps leaving England, be allowed to marry up to that limit, and we shall gradually see the root of the evil removed. Of course soldiers' wives and children die in India, and they are expensive, and in war they are impedimenta. But the new barracks will reduce the mortality, and no one, save a military martinet, can hesitate as to which course is the least evil."

Teaching of Dental Surgery in America.

THE Correspondent of the *Times* at Philadelphia, writes as follows of the American Schools of Dental Surgery :— While Americans of culture to finish their education usually go to the Universities of Europe, in the speciality of dentistry the current is reversed, the graduates of the highest medical schools abroad coming to the United States, and chiefly to Philadelphia, to finish their dental education. There are in the United States nine dental schools, two being in Philadelphia, two at Boston, and one each at New York, New Orleans, Baltimore, St. Louis, and Cincinnati. Two-thirds of all the students attend the two colleges in this city, of which the "Philadelphia Dental College" is the chief, and it is noticed that about one-fourth of the students at this college are generally from abroad, nearly every country in Europe being represented. Of the high distinction of having graduates from the Universities of London, Vienna, and Berlin come here to finish their dental education the Philadelphians are quite proud, as they also are of the fact that their city contains the most extensive manufactory of dental instruments and artificial teeth in this country, if not in the world.

An Outbreak of Fever in England.

AN outbreak of typhoid fever has occurred at Stevington, and is, we believe, engaging the attention of the Medical Department of the Privy Council. From a report by Dr. Price, of Bedford, it appears that, of a population of from 600 to 700, at least 170 have already suffered from the disease. Its importation has been traced and its course from house to house ; its peculiar and known mode of propagation is illustrated from instances in which families of six and nine have contracted the disease, not from the simultaneous action of a virulent epidemic poison, but successively by the conveyance of the poison from one to another, and its perpetuation in soil and water. The conditions of life at Stevington are favourable for such a course. In one house were found six men lodgers sleeping on the floor in a low room twelve feet square ; they had to pass through a room where a young woman lay ill, and died of the fever ; and one at least of the lodgers (navvies) took the disease. The whole family of men above mentioned, who all took the disease, slept in a space which gave about 1,150 cubic feet of air. The amended regulations of the Poor-law Board for workhouses would allow them a *minimum* of about 5,000 feet in health. and of about 9,000 in illness.

Matriculations at the University of Edinburgh.

THE number of students matriculated in the present session of Edinburgh University up to this date in the various Faculties is greater than in any year since 1832. Including the summer session, the number matriculated is 1,732.

London Hospital for Incurables.

THE sixteenth annual meeting of this institution was held at the London Tavern, on Friday afternoon, The report stated that the receipts of 1869 and 1870 exceeded those of any former year. The investment fund owing to heavy expenses attendant upon building, showed a deficiency of £7,069 5s. After consideration the Board decided to reduce the rate of election. The balance due to investments stood at £1,044 5s. being a reduction of £6,025. The Board, while expending directly upon the beneficiaries £12,800 a-year, were able to add to the reserve fund.

Thymol.

MR. HENRY DRAPER, of Dublin, exhibited to the Dublin Chemical Club at its last meeting, a specimen of a new preparation which has been proposed as a substitute for carbolic acid. It is named thymol, and is a derivative of the Thymus vulgaris, the monarda or horse-mint, and the Ptychotisan East Indian umbelliferous plant. It is of a similar chemical composition to carbolic acid, but destitute of the very unpleasant smell of this popular disinfectant. It melts at 44° Centigrade, and is soluble in 300 parts of water It resembles carbolic acid in forming compounds with potash and soda, but differs from it in that these compounds are very unstable, being decomposed even by carbonic acid.

The introduction of this preparation recalls to mind the fact, that oil of thyme was in past years a favourite popular remedy for the toothache, and it is only now that its efficacy and the causes of such efficacy have been made manifest. Last year one of our foreign correspondents drew attention to this agent in a very interesting letter.

The oil of thyme is prepared in large quantities in the South of France, where it is used for printing on china.

Ozokerit.

THE mineral, ozokerit, the celebrity of which has been achieved, it is said, by an expenditure in advertising of something approaching £15,000 by Messrs. Field, of London, was exhibited by Mr. Henry Draper, at the last meeting of the Dublin Chemical Club.

This substance is found overlying the coal measures in Moldavia, Austria, and at the Urpeth Colliery, at Newcastle-on-Tyne. It is purified by distillation, and afterwards by pressing it and treating it with sulphuric acid, and when purified has an extremely high melting point. For this characteristic, which has not been

found in any other similar substances except wax, it is selected for the manufacture of candles, because it affords a larger wick and a better illuminating power at a lower price. From Mr. Draper's experiments, it appears that pure ozokerit and white wax melt at 150° F., the candle as sold at 138°, paraffin at 129°. There is, therefore an admixture with it of some other material.

Even the residue of ozokerit after its purification has been utilised. The late Dr. Mathiesson, whose untimely death by his own hand is still in our memory, patented it as an insulator for telegraphic wires, for which purpose it is said to be eminently suitable.

Small-pox in London.

THE wards of the Small-pox Hospital, it appears, are crowded at present, and some patients are sent away who apply for admission. This is a very rare occurrence indeed, and suggests the fact that our foolish fellow-citizens of the Anti-vaccination League have persuaded many of their poorer neighbours to neglect the vaccination of their children, and re-vaccination of themselves. On Saturday at the Asylum Board, Dr. Brewer in the chair, it was stated that a temporary hospital for small-pox had been opened at Hampstead. The number of cases at first 90 had increased to 120. Dr. Bridges the Poor-law Inspector, said there were now 308 cases among the paupers of London.

Medical Will Making.

A VERY scathing rebuke was administered last week by the judges of the Dublin Probate Court to a medical practitioner of a provincial town, in reference to the part taken by him in the concoction of a will.

The gentleman in question had been in attendance on the testatrix. At the bidding of the local priest he attended on the night of the testatrix's death to witness the will, which it is unnecessary to say, conveyed the testator's property almost entirely to the church to which the priest belonged. Although as admitted by himself the testatrix was absolutely unconscious and all but dead, the medical man, by holding her hand, made a mark which he considered equivalent to a signature of the will and attested the document, and the fact that it had been only read by or to the testatrix. Under the circumstances, the judges, of course, unanimously set aside the will, and emphatically condemned the actors in the matter. We cannot hesitate to endorse that censure. It would be a great calamity for our profession if the public should derive the impression that advantage may be taken by their physician of their dying confidence for such a purpose.

We are distressed and astonished to learn that a medical gentleman, whom we know to be justly respected, could yield to an order or inducement, to lend himself to so scandalous a transaction. Clerical will making is, unhappily, no new disgrace to those who practice it; medical will making is fortunately not yet habitual, and we earnestly trust that it will never be so.

Cancer.

MR. HAVILAND says that, geologically, the hardest and most elevated rocks are the sites where the least mortality from cancer is found. Along the river courses which flood their banks seasonally, such as the Thames, the Severn, the Mid-Devon, and Yorkshire rivers, are to be found the districts in which the highest mortality takes place: and that whereon from the nature of the rocks forming the water-shed, the floods are much discoloured by alluvium, and where, from the flatness of the country, the floods are retained and not easily drained off, there we fiud the greatest mortality from cancer among females.

Dr. Protheroe Smith's Exhausting Needle-Trocar.

DR. P. SMITH adapts needle trocars to an exhausting air-pump or glass syringe, and thus evacuates the contents of effusions into the joints, pleura, &c. He even uses the plan for cases of tympanitic distension. He has, on one occasion, he affirms, withdrawn sixteen pints in less than half-an-hour from an ascitic abdomen. Mayer and Meltzer, of London, manufacture this instrument.

Dr. Robert Knox.

DR. LONSDALE has just brought out a life of Robert KNOX, the once famous lecturer on anatomy of Edinburgh. From this interesting biography, it seems that the terrible affair of Burke and Hare in 1828 proved the ruin of this distinguished teacher's fame in Edinburgh, and that he died comparatively unknown and poor in Hackney parish, London. One of his last works which has been much admired by some is the "Races of Man."

Mr. Langley on Poverty.

DR. BAXTER LANGLEY, speaking at Manchester, on the subject of the Contagious Diseases Acts, is reported in the *Shield* to have said that, "Poverty was the great cause of prostitution. They saw around them a population of which one part was extremely rich, and the other part dreadfully poor. When the agitation against the Contagious Diseases Acts had achieved its purposes, they would have to look to these broader and deeper issues, and consider whether something could not be done to modify the condition of at least one of these two classes of society. If you could so amend the conditions of Society that every man could obtain a fair day's work, and a fair day's wage for it, if you could place your young men in such a position that they could create a home, and cultivate family ties, you would have laid the axe at the root of the upas tree, which blossoms with prostitution."

The Next Naval Examination.

IT is announced that an Examination of Candidates for appointment as Assistant Surgeons in the Royal Navy will be held in London in the course of February next, and of which further particulars, as to date, &c., will be duly announced.

The Proposed New Regulations for Examinations in the Royal College of Surgeons of Ireland.

THE Council of the Irish College has not yet concluded its consideration of the proposed alterations in its examination system. The publication by the *Lancet* of the details of a part of that scheme is, therefore, premature, and unauthorised, and the statement that it will not come into operation for a year is entirely devoid of foundation.

The Irish Poor-Law Unions Apothecary.

THE qualification required by the Poor-law Commissioners for the contemplated office of Poor-law Unions Apothecary is likely, it seems, to secure the election of the "square" man for the "round" hole.

The Commissioners have required only that the candidate shall be a Licentiate-Apothecary, and it is unnecessary for us to tell those who know how much knowledge of drugs is requisite for that qualification, how little chance there is that an efficient officer will be found within the body of Apothecaries. It may be stated, as a general principle, that in Ireland no apothecary knows anything about the purity or prices of drugs—and no one who knows anything about the purity or prices of drugs is an apothecary. Sir William Carroll, ex-Lord Mayor of Dublin, a genial and hospitable member of the Corporation, who about twenty years ago dispensed prescriptions, and since then has been happily relieved of any such precarious occupation, is the best known candidate. His modest claim must speak for itself. His election address says :—

"I am thoroughly and practically conversant with the nature and qualities of every description of Medicines and Medical and Surgical Appliances. I am practically familiar with the detection, analytically and otherwise, of all adulterations and impurities. I know the best markets for the purchase of Medicines ; and last, and not least, I have great experience in all Pharmaceutical operations."

With "whispering humbleness" we confess to being for the first time aware that Sir William Carroll's pleasant exterior included all these virtues, and with characteristic scepticism we suggest a competitive examination.

But what boots the question of special knowledge ! Sir William Carroll is impressed with the hall mark, beyond which no elector dare go. His religion and politics are *de rigueur*, and surely they will be potent to secure good and cheap medicines to poor Paddy Murphy, the dispensary "red ticket" at Ballysloughguttery.

Already, the fatal policy of putting the appointment in the hands of guardians is bearing its fruit. There are 163 Unions, and we expect, at least, 60 different persons to be chosen by the Irish Guardians. Here are a few of the reputed candidates—Sir William Carroll and three governors of the Apothecaries' Hall ; Dr. Tucker, Sligo ; Dr. Raverty, Bray ; Dr. Byrn, New Ross ; Dr. Hayes, Naas ; Mr. Oldham, of Dublin ; Dr. England, of Galway ; Dr. —, but no ! Our space fails us ; perhaps next week we may add an extra sheet, and hope the space may be sufficient.

The Chance of the Corporations.

WE last week examined, in a leading article, a new Medical Bill. Here we are desirous of recalling to our readers an article on the "Chance of the Corporations," that appeared in our columns a few months ago, and which elicited many expressions of approval. That article pointed out how easy it would be for the medical authorities in the three kingdoms severally to amalgamate or combine *voluntarily*, and thus effect all that was proposed by the Government Bill last year.

Negotiations are now going on, both in England and Ireland, with a view to accomplish this, and it is just possible they may be successful. In that case the Bill proposed by the *Lancet* would be as useless as the one lost last year. Everything of any value proposed in either, would be carried out by voluntary agreement, This would be better than compulsion, and, who knows, when once union were found to be successful, it might make such progress, that after all the Profession would become a united fraternity, and the medical authorities no longer divided by jealous rivalries. It seems Utopian, but the Irish authorities seem going the right way to work.

Method and Medicine.

UNDER this title, Dr. Balthazar Foster, of Birmingham, has recently published a remarkable essay on "The History of the Development of Medicine as a Science." The essay originally appeared in a volume, entitled "Essays by Members of the Birmingham Speculative Club." This volume, which contained six other essays, has been so well received and noticed by the London and provincial press, that two months have sufficed to see it out of print. Dr. Foster's essay is now about to appear in a separate form, and we commend it to all interested in the scientific progress of medicine.

Organization of Military Hospitals.

THE *United Service Gazette* announces that the Committee appointed some time since to consider this subject have presented their report. It is rather difficult, from the way in which the report is worded, to arrive at the intentions of the Committee or their suggestions. It is recommended that the Regimental Hospital system shall, to a great extent, be broken up, and that the present complete organization which permits a regiment to have its distinct surgery and special hospital attendants, told off from its own ranks, shall cease to exist. The sick will, therefore, have to be transported from one district hospital to another. They also suggest that the regimental medical officers shall not attend exclusively upon their own patients, but be at the disposal of the senior officer of their department in the district hospital.

Poison in Snuff.

DR. GARROD lately lectured at King's College on a case of lead-poisoning in which the mineral was taken in snuff. It was rappee that the patient habitually took, and the damp snuff packed in the usual lead cases converted some into carbonate. The symptoms were serious, and with difficulty traced to their real source. Then several packages were purchased and found to be contaminated with the poison. Snuff-takers would do well to take this lesson to heart, and the profession is hereby reminded of the subtle manner in which lead is apt to be conveyed into the system where in time it is sure to give rise to its injurious effects.

Report of the Alice Hospital at Darmstadt.

ON the 10th of November, Her Royal Highness the Princess Louis of Hesse was at the hospital and repeated her visit on the 11th.

Dr. Mayo had the honour of dining with the Queen of Prussia at the palace, Homburg on the 10th instant. Her Majesty expressed the greatest interest in all the arrangements of the Alice Hospital, and regretted that indisposition had prevented her from visiting it during her stay at Homburg.

Staff-Surgeon Fitzgerald of the Medical Department of the British War Office paid an official visit to the hospital on the 12th instant, and examined all its arrangements minutely.

A supply of stores consisting of 69 bales and boxes was received from the National Society for aid to the Sick and Wounded on the 12th and 13th ; and a present of 13 large packages from Manchester for the Manchester ward, on the following day.

Dr. Mayo was informed on the 15th by Ministerialrath von Preuschen, of tthe Hessian War Office, that in pursuance of instructions from Berlin it was proposed to increase it, by adding wards for 120 more beds, the cost to be defrayed by the Government. As the kitchen and offices had been prepared with a view to the possibility of increased numbers, Dr. Mayo accepted the proposal without hesitation.

H.R.H. the Princess Louis of Hesse again came to the hospital on the 16th inst., and expressed her satisfaction at its projected enlargement.

A further subsidy of £1,000 has been received from the National Society, together with a very kind letter from Colonel Lindsay.

Medical Reform.

The *Lancet* devotes another article to the exposition of its Bill in which it acknowledges that our criticisms of last week were "fair and friendly," and endeavours to remove the effect of some of them and to show the advance that would be made by the Bill. We trust the criticisms of the Medical Press will always be marked by fairness, and we have always been anxious to adopt a "friendly" tone whenever a great question demanded the union of all interested in it. We never hesitate to condemn what seems to us wrong in any one of our contemporaries, but we hope always to be as ready to give credit when due. As to the size of the Council we wish to explain that our objection to reduce it is not merely the work to be got through. We thought we made it clear that we could not think the existing number too large to represent all the interests involved. Another important point is, the practicability of carrying any measure. Will it be so easy to snuff out the corporations in the manner proposed? We almost fancy the more logical and more radical plan of Mr. Charles Hawkins would be quite as easy to accomplish, and it really has the merit of being more thorough and complete. There are a good many other points touched upon which all reformers are as one. The fact is, the existing system has only been endurable because the men who administer it are, as a body, unexceptionable. The same may be said as to the General Medical Council. It is not the individuals to whom objection is made. The fault lies in the constitution of the Council. We wish our contemporary would look over our last week's article again. There are many points in that, we think, deserve full consideration. We may especially mention the question of one portal or three. Others will suggest themselves to any reader as those which our contemporary should particularly consider.

Dr. Loughi is translating Professor Erichsen's standard work on Surgery, into Italian.

The Appeal of Sir Patrick Dun's Hospital.

Appeals for public charity are unfortunately the normal condition of hospitals, and they are so deserving of aid and assistance from those who know, as we do, their claims to attention and response, that it is an unpleasant duty for us to find fault with their form or substance. An advertisement lately issued by the Governors of Sir Patrick Dun's Hospital, and signed by the President of the College of Physicians in Ireland, appears, however, to require some observation.

Sir Patrick Dun's is an institution as deserving of public generosity as the rest of the Dublin Hospitals, and it is quite unnecessary for its administration, in appealing for help, to resort to clap-trap or to attempt to climb into popularity on the shoulders of other hospitals or their medical officers.

The Governors claim credit and support for the institution, on the grounds that, "from its foundation, Sir Patrick Dun's Hospital has been administered *solely for the benefit of the poor* and the purchase of its hospital appointments is rendered impossible by Act of Parliament, its medical officers being selected *on the grounds of merit and fitness only*."

This statement conveys a false and unkind inuendo respecting other institutions. It is perfectly untrue to suggest that the Dublin Hospitals are administered for any other purpose than the benefit of the poor, in any greater degree than is Sir Patrick Dun's itself, and it is also untrue that merit and fitness receive less consideration in the selection of medical officers in other hospitals than in it.

Still less does Sir Patrick Dun's require to employ the following ludicrous specimen of "claptrap" in its appeal for charity :—

"During the cholera visitation of 1866, a gift of seven half-pence was made to the hospital by a child of a very poor man whose life was saved in the hospital. This donation, which was highly prized, was expended in the purchase of a cheap doll to amuse a child suffering from hip-joint disease."

It is not complimentary to the benevolent citizens of Dublin, to suppose that the disinterment of the child's doll of 1866, is the sort of stuff which will stimulate their compassion. A conparison of the sums spent annually on salaries and establishment charges, and on the direct relief of the sick poor, would be more convincing than any quantity of such puerility, and if the Governors are not prepared to make such a statement public, the less they say about the "benefit of the poor and merit and fitness" the better.

New Books in Medicine, Surgery, and Science.

(*Continued from page* 425.)

The following books referring to Medicine, Surgery, and the Collateral Sciences, will appear within the forthcoming Session :—

A Fourth Edition of Yarrell's British Birds. Edited by Professor Alfred Newton.

Dr. Bevan on the Honey Bee. Revised Edition. By W. Augustus Munn.

Beeton's Dictionary of Natural History. A Compendious Cyclopædia of the Animal Kingdom.

Man, in the Past, Present, and Future. A Popular Account of the Results of the Recent Scientific Research as regards the Origin, Position, and Prospects of the Human Race, from the German of Dr. L. Buchner. By W. S. Daly, Assistant-Sec. Geological Society, London. &c.

New Edition of Jukes's Manual of Geology. Edited by Archibald Geikie, F.G.S., &c.

Introductory Text-book of Meteorology, for the Use of Schools and Private Students. By Alexander Buchan, M.A., F.R.S.E.

The Heavens. By Amedée Guillemin. Edited by J. Norman Lockyer, F.R.A.S. New Edition.

The Earth, being a Descriptive History of the Phenomena and the Life of the Globe.

Geology. By E. Phillips, M.A., F.R.S., Professor of Geology, Oxford.

Spectrum Analysis, familiarly explained by Dr. H. Schellen. Translated from the German. Edited with Notes, by William Huggins.

The Sun. By Richard A. Proctor, B.A., F.R.A.S.

The Sun. By Balfour Stewart, LL.D., F.R.S., and J. Norman Lockyer, F.R.S.

A Treatise on Magnetism. By G. B. Airy, Astronomer Royal.

A Dictionary of Science. Edited by G. Farrer Rodwell. The Haydn Series.

The Metallurgy of Gold, Silver, and Mercury. By John Percy, M.D., F.R.S.

Admiralty Manual of Scientific Enquiry. Edited by Sir J. F. Herschel and Robert Main, M.A.

The Student's Elements of Geology. By Sir Charles Lyell, Bart., F.R.S.

Handbook of Physics. By William Rossiter, F.R.A.S.

The Essentials of Geometry, Plane and Solid. By J. R. Morrell, formerly Inspector of Schools.

Elementary Lessons in Physics. By Balfour Stewart, LL.D., F.R.S.

Key to Algebra, for Colleges and Schools. By I. Todhunter, M.A., F.R.S.

Amory, R., Experiments upon the Physiological Action of Bromide of Potassium and Ammonium (as determined on Man and Lower Animals).

Barclay, A. W., Manual of Medical Diagnosis. 3rd edit.

Duncan, J. Matthews, On the Mortality of Child-bed, and Maternity Hospitals.

Fergusson, Sir William, A System of Practical Surgery. 5th edit.

Foote, E. B., Plain Home Talk about the Human System.

Gee, Samuel, Auscultation and Percussion, together with the other Methods of Physical Examination of the Chest.

Hill, Berkeley, Treatment of the Sick and Wounded. Illustrated by Observations made at the Seat of War.

Hutchison, J. C., A Treatise on Physiology and Hygiene, for Educational Institutions and General Readers.

Moffit, A Staff Surgeon, A Manual of Instruction for Attendants on Sick and Wounded in War.

Moynier and Appia, MM., Help for Sick and Wounded. Translated by John Furley.

Myer, Arthur B. R., On the Etiology and Prevalence of Diseases of the Heart among Soldiers; The "Alexander" Prize Essay.

Ward, T., First Grade in Inorganic Chemistry.

Storer, F. A., A Cyclopædia of Quantitative Chemical Analysis.

Snelling, T. G., Relaxation of the Pelvic Symphyses during Pregnancy and Parturition.

Baird, S. F., Cassi, J., and Lawrence, G. M., The Birds of North America. With an Atlas of 100 Plates. 2 vols. Royal 4to, pp. lvi.

Lunatic Asylums (Ireland). 19th Annual Report. 8vo.

Public Health. 12th Annual Report. 8vo.

Prisons (Ireland). 48th Annual Report. 8vo.

Workshops Regulation Act, Return relating to.

Berwick, George, The Forces of the Universe.

Flower, W. H., Osteology of the Mammalia.

Freeman, A., Solar Fictions: Inquiry into the Received Astronomical Doctrines and Popular Opinions concerning the Sun.

Ponton, Mungo, Earthquakes and Volcanoes.

Yellow Fever has effected a footing on Governor Island, near New York.

The old Birmingham students are to dine together on the 8th inst.

A capital set of baths for the treatment of skin diseases is about to be erected at University College Hospital.

Professor John Gamgee thinks the new disinfectant chloralum will be very useful in purifying dairy utensils.

Dr. Parkes and Count Dr. Wollowicz have presented to the Royal Society some experiments with claret in continuation of their former paper on alcohol.

Boarding-out pauper children seems to be growing in public favour. We have, in all directions, heard of its success—nowhere of its failure.

Mr. Canden, of Worcester, is to preside at the next annual dinner of Fellows of the Royal College of Surgeons of England.

The Dublin Pathological Society has announced that the subject for its prize medal for the ensuing year wil be "The Diseases and Injuries of the Spinal Cord."

The profession will have learned with much regret of Sir R. Murchison's illness. The enquiries of the Queen are no empty compliments, but reflect the general feeling of the public.

Dr. Jacoby, of New York, shows that the mortality in the Nursery and Child's Hospital in that city is enormous. In the former the rate has been forty deaths to sixty admissions.

Professor Erasmus Wilson, F.R.S., has published for the Royal College of Surgeons a catalogue of the Dermatological Museum, which he presented to that body when he endowed so munificently the chair of his favourite branch of medicine. The student in the Hunterian Museum, with this catalogue, cannot fail to learn much.

Dr. Argyll Robertson, in a paper read at the Medico-Chirurgical Society of Edinburgh, drew a distinction between Albuminuric Retinitis and Uræmic Retinitis. He dwelt on the importance of using the ophthalmoscope as an agent of diagnosis, as the eye-affection often gave the first indication of kidney diseases.

Dr. Turton, of Wolverhampton, recently mentioned the case of a girl, aged nineteen, who died from tympanitic distension of the abdomen in sixteen hours. On *post-mortem* examination, the stomach was found extending from the level of the nipples to midway between umbilicus and pubes. On allowing the gaseous contents of the organ to escape, it was found to contain a mass of black odourless, homogeneous matter, of about the consistence of putty, which was found on removal, to weigh seven and a half pounds. There was neither peritonitis nor obstruction.

Dr. Balthazar Foster recently showed at the Medical Association of Birmingham, on Nov. 10th, a heart in which both the right and left auricula-ventricular orifices were narrowed by endocardial inflammation. The patient had been admitted into hospital with well marked signs of mitral obstructive disease. The murmur at the apex was purely præsystolic. A few days before death, a murmur preceding the first sound was detected at the right edge of the sternum, and tricuspid obstruction was diagnosed. The *post-mortem* examination showed a funnel-shaped mitral valve, with an orifice only admitting a goose-quill. The tricuspid orifice only allowed the top of the little finger to pass; the segments of the valve were agglutinated, and the edges of the orifice studded with recent vegetations.

The argument that it is not indecent for female medical students to study anatomy and surgery side by side with males because female nurses discharge their duties under similar circumstances, seems to us a lame and impotent conclusion. Even indecency is relative, and that which would be a matter of course in one class would be highly objectionable in another.

As a matter of fact, female nurses do not voluntarily put themselves in the way of indelicate objects when male students are in the way.

In ward visiting nurses should, and usually do, stand aloof from the sight of indecent objects, which it would not be possible for them to avoid if they were surgeons instead of nurses.

But, we submit, that that duty which would not be so indecent as to forbid a nurse undertaking, might well be objectionable in a young lady, who hopes and expects to hold the position of a lady and to practice a learned profession. There are many things which a servant may do without disgracing herself, but which the mistress might not, and we, therefore, hold that there is no analogy between hospital nursing and lady doctoring.

The Journal of the Irish Medical Association called attention last week to a project for the appointment of an officer in whom the contract of the supply of medicines to all Irish Unions should be reposed, decided on by the Irish Poor-law Commisssioners, and to a sealed order, issued by them for the regulation of the system under which the functions of that officer shall be administered.

A "Poor-law Unions Apothecary," possessing the licence of the Hall, is to be appointed at a salary of £500 a year, with a residence, and whatever assistance may be neeessary.

He is to be appointed by the votes of a majority of the Boards of Guardians in Ireland, they being furnished by the Commissioners with a list of candidates and their testimonials, and it will be his business to "contract for, or purchase, the supplies estimated to be required, of the best quality and at the cheapest rate for which they can be obtained."

In the Circular which accompanies the order, the Commissioners explain the reasons which have led them to make this appointment—Firstly, on the ground of economy. They state that "great profits" are made by the contractors, and that inasmuch as the existing expenditure in drugs, in the Irish Poor-law, is £32,000 a-year, and the probable expense of the central depôt not more than £1,500, a considerable saving may result. Secondly: They desire to secure to medical officers the means of using medicines on which they can rely.

The *Journal of the Irish Medical Association* expresses its entire approval of the course the Commissioners have taken to remedy the most scandalous abuse which existed in the Medical Charities' system of Ireland. Every one will agree with acclamation, that it was a simple duty for the Commissioners to take the matter into their own hands, and that neither the contractors or the Boards of Guardians are worthy of the slightest consideration in the matter, and, if fault be found with the sealed order, it will much more probably be with its consideration to guardians than with its decisive and sweeping character.

In two respects, indeed, the order seems open to question. The function of the Poor-law Unions Apothecary introduces, it thinks, a new and commercially unfair principle into a branch of the public service He is to supersede all contractors, and to deal directly with the large wholesale houses.

It is a wrong principle for the public to save money by absorbing the legitimate profits of traders. It is enough for a Government department to make sure that those profits are reasonable, and that the article supplied is genuine, without constituting itself buyer and seller to those over whom it has control.

Moreover, the purchasing of drugs on so great a scale will afford a lasting temptation to those abuses which may be expected to creep into such a system. The distribution of much money and many favours will be in the hands of one man, and his responsibility not clearly defined, and a little laxity of supervision, may, at any time, produce as great evils as those for which we are seeking a remedy.

It would have been a safer and, apparently, more diplomatic course to confine the functions of the Poor-law Apothecary simply to determining the purity of the drugs, and the propriety of their prices, leaving the purchase and payment between individual contractors and Board of Guardians.

The other point which appears objectionable in the scheme is the placing of the appointment of Poor-law Apothecary in the hands of the Boards of Guardians. It is quite plain that the intellectual and social

material of which Boards of Guardians are made is quite unfit to pronounce judgment on any such point.

They will appoint a candidate because they have seen his name in the papers, no matter in what form; or because he pesters them with circulars and testimonials; or because he is of some favoured religion, or politics; or for any other reason which has nothing to say to his fitness; but they will *not* appoint him because he is learned, or industrious, or business-like, or experienced, or honest, or for the possession of any quality which might make him a good officer.

The election will be carried by the biggest bundle of testimonials, and the most persistent private ear-wigging, and the result will be a thoroughly stupid, inefficient officer, and "confusion worse confounded."

SCOTLAND.

EDINBURGH.—The Town Council by a large majority, have elected Lord Gifford one of the Senators of the College of Justice, and Mr. W. Chambers, late Lord Provost, curator of the University in room of Mr. Russell and the late Mr. Fyfe.

ROYAL MEDICAL SOCIETY.—Edwin Hinchcliff, M.D., Alexander Macdougall, M.B., I. Muir Howie, and William Livesay, have been elected presidents of this Society.

THE University authorities have give notice, that in future any offence committed by a student leading to conviction in a police court, will be treated as a university offence, and punished accordingly. This tardy exhibition of common sense on the part of the Senatus, will, we trust, prevent a repetition of the disgraceful "rows" the Edinburgh students were so fond of indulging in This session the number of students in the various faculties, is greater than in any year since 1832.

GLASGOW.—The increase of relapsing fever has necessitated a large increase in the accommodation for fever patients.

DR. ALEXANDER WOOD reports, "1. That the Heriot, the Talla, and St. Mary's Loch all afford water of a quality suitable for all the purposes for which it is required in a town. 2. That the Heriot is a better water for general domestic use than the Talla. 3. That the spring water of the Heriot and the Talla is superior to the lake water of St. Mary's. 4. That the construction of the necessary ponds for storing the produce of these springs would go far to deprive them of any superiority which they at present possess, and would certainly render the water supplied from such ponds inferior in some respects to that obtained from the natural lake. 5. That the analysis of the water of St. Mary's Loch shows it to contain a sufficient quantity of the salts of lime to remove all fear of the danger suggested in the letter of 'A Physician' especially when the copiousness of the supply of these salts from other sources is considered 6. That, under these circumstances, it appears to me that the water procurable from any one of the three sources of supply being suitable, the trustees should be guided in the selection by the questions of quantity, engineering difficulties, and comparative expense, and not by the opinion of any physician. 7. That the present supply of water in Edinburgh is manifestly insufficient, and that the poorer classes especially are not receiving enough to maintain them in a healthy state. 8. That should any epidemic disease appear among us, they will be less able on this account to resist contagion, or to bear up against disease if attacked."

DR. LITTLEJOHN, says, "The water of St. Mary's Loch is a very pure, and in my opinion, a wholesome water. It is remarkably free from organic contamination—the importance of which in the production of disease has only been satisfactorily established of late years; and while on a par in this respect with the Loch Katrine water, it possesses this advantage that its proportion of saline ingredients is larger, and therefore that it is still less likely to act injuriously on the leaden pipes used in its transmission, or on the cisterns in which it must be stored by the inhabitants. Its waters are not stagnant. They present a large surface to the pure air of a strictly pastoral region, and while several streamlets enter it, the Yarrow leaves it. As engineers and chemists have again and again pointed out, it possesses as a natural reservoir great advantages over all artificial collections of water secured by earthy embankments, such as are contemplated in all the other proposed schemes, and from the slight variations in the level of its surface in the driest seasons, it also contrasts favourably with natural reservoirs, such as those of our present water supply, which have been empty for months, and exposed to the disintegrating action of the air and sun."

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN NOVEMBER, 1870.

THE *following are the Returns of the Medical Officer of Health of the Association*:—

NAMES OF WATER COMPANIES.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia	before Boiling.	After Boiling.
	Grains.	Grains.	Grs.	Grs.	Degs.	Degs.
THAMES WATER COMPANIES.						
Grand Junction ..	19·23	0·050	0·091	0·005	14·9	3·4
West Middlesex ..	18·57	0·039	0·110	0·002	14·6	3·6
Southwark and Vauxhall ..	19·60	0·053	0·091	0·004	14·9	3·5
Chelsea	19·27	0·050	0·110	0·004	14·9	3·5
Lambeth	19·10	0·064	0.091	0·005	14·2	3·5
OTHER COMPANIES.						
Kent	26·60	0·004	0·175	0·000	20·0	5·6
New River	19·03	0·018	0·110	0·000	14·6	3·3
East London	18·23	0·014	0·110	0·004	14·8	3·4

NOTE.—The amount of oxygen required to oxydise the organic matter, nitrites, &c., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases.

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Association of Medical Officers of Health, 104,073,197 gallons; and the number of houses supplied was 482,565. This is at the rate of 32·4 gallons per head of the population daily. The last official return from Paris stated that the average daily supply per head of the population was 29·3 gallons; but this includes the water used for the public fountains, and for the ornamental waters in the Bois de Vincennes and the Bois de Boulogne.

Correspondence.

LOCK HOSPITALS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—May I ask for a space in your paper to say a few words to the public on the important and, at the present moment, somewhat engrossing subject of Lock Hospitals? The impression on the minds of many, I believe, is, that they can only be looked upon as a means of aggravating the social evil already too glaringly and unblushingly paraded in most of our towns; whereas, properly managed, the very opposite result

may be and, I have every reason to believe, is attained. I took the matronship of the hospital from which I am now writing, about six weeks ago, with a view to help on reform. Though I was sanguine that *something* might be done, I am amazed to see what a field of rich and hopeful labour it presents to those who have the love of souls at heart. If a few of the many devoted ladies in our land would direct their attention to this neglected portion of God's vineyard, very much might be done, with His blessing, among these poor women, who, but for these institutions, would remain quite out of reach. Here, they are clean, in spite of themselves, and in clean clothing, shut in from the possibility of getting strong drink, and therefore more likely to listen to the advice given by the Chaplain, myself, or others; and this is not all—the very young, after a course of a few weeks or months of sin, being brought in here, may be reclaimed, their downward course stopped almost at the outset; some are restored to their parents; others sent to homes, as the case requires; some—many, indeed—will obstinately return to their sin, and we can only pray that God will have mercy on them at last. In this hospital an excellent system is adopted, of separating those willing to turn from their evil course from those hardened and determined to continue in it. The simple tale of one of these children (which many of them are) is briefly this—Being in a small place of service, having been placed there by her mother, she wished to get something better; fearing to tell her parents of her intention, she made up her mind to get a lodging, when she left that service, till she got what she wanted. The poor girl went, unwittingly, to a house of ill-fame—a month after she was brought in here, and will be placed, as soon as possible, in a Refuge, having been reconciled to her distressed parents.

This is only one case of many. This very day, a young girl has asked me to be sent back to her friends instead of going where she came from, desiring to renounce her evil course. I will not intrude further on your space, but will only add I am willing to give any further information to those *really interested*, if you will kindly allow letters to be forwarded to me from your office. I must ask that no letters will be written from idle curiosity, and that all shall be as concise as possible.

I am, Sir, your obedient servant,

MATRON.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In the review of my "Manual of Qualitative Analysis," which appeared in the PRESS of November 23rd, the Reviewer, after expressing his opinion that my work is better adapted for cramming students than that of Fresenius or the Giessen Outlines, adds "A student enters a government school with the intention of passing an excellent examination after devoting a few sessions to the study of a gigantic science, and he is generally successful in it if he has any amount of ability. But is this all? Do these young men represent those that in their day are to bear the heat and burden of their respective sciences? We opine not. As regards the workers in science, the crammed examination system has been an utter failure."

As the Reviewer evidently makes my book and its author responsible for the failure, as he thinks, of chemical education in a government school, I trust you will allow me to make a few remarks on his statement. Very few of the laboratory students of the College of Science, Dublin, undergo an examination, very few even ask for a certificate of attendance, the majority of the students are the owners of, or employées in, some kind of chemical establishment or manufactory, and they come to get a knowledge of practical chemistry in order that they may carry on their business operations more successfully. Many of them cannot even afford the time to attend one session, much less the two or three sessions the Reviewer talks about. Some of those living in Dublin or its neighbourhood can only afford a few hours in the day, or two or three days in the week. But, even with the short time that the majority of the students have been able to give, their labours, as regards the advancement of pure science, have not been altogether barren; they have contributed papers to the Royal Society of London, the Chemical Society of London, the British Association, the Institute of Civil Engineers, London (the Institute awarded the author of the paper the Telford Medal and the Telford Prize of Books for his contribution), the Royal Dublin Society, the *Chemical News*, the *Technologist*, the *Agricultural Review*, &c.; and if your Reviewer will take up such a work as the French one, by Pelouze and Fremy, he will find some of these students quoted as authorities on the subjects on which they have written; or, if he will look over the French "Chemical Dictionary," which he is at present reviewing, he will find in one article out of the few papers which the reader is referred to for further information, that two of these were the contribution of my students. I may add that five have been engaged by eminent chemists in London to perform analysis, and assist them in performing original researches; one has been appointed Professor of Chemistry in one of our most important colonies; one is the part editor of a London chemical journal; and two have started a chemical manufactory in the neighbourhood of London, which has been highly successful. This may not be very much; but a great part has been accomplished by evening students, and I shall be obliged if your Reviewer, or any other person, will point out evening students in any laboratory in England or elsewhere who have accomplished so much.

I remain, dear Sir, yours faithfully,

ROBERT GALLOWAY.

Royal College of Science, Dublin,
December 2nd, 1870.

CAUSE OF GONORRHŒA.

PROF. W. A. HAMMOND, of New York, in his "Lectures on Venereal Diseases," asserts his belief, which he supports by cases, that gonorrhœa may be introduced either by the virus of hard chancre, or by the virus of soft chancre, when the chancrous matter has been deposited for a certain length of time upon the mucous surface, without any abrasion being present, or without any chancre following. Vaginitis and urethritis may be induced by other causes, but true gonorrhœa owes its origin to the contagion of chancrous pus alone. He also believes that the gonorrhœa induced by the matter of a hard chancre will be followed by and may impart constitutional syphilis, just as if a chancre had been present. Dr. Hammond's opinions in this respect coincide with those of Hunter. The experiment of Ricord appeared to have finally decided the question that gonorrhœa was incapable of producing syphilis, and that they were totally different disorders. But the conclusions arrived at by Dr. Hammond are:

"1st. That the virus of an infecting chancre, when deposited on a secreting mucous surface upon which there is no solution of continuity, may give rise to gonorrhœa unattended by chancre, but which is syphilitic in its character, and capable of producing constitutional disease.

"2nd. The matter of such a gonorrhœa is capable of causing an infecting chancre, either by natural or artificial inoculation, which chancre is followed by constitutional syphilis."

Similar propositions are made about soft sores.

The observations and practical remarks of Mr. Morgan, of Dublin, which we lately published in this journal, confirm very much these observations. His experiments prove that the product of inoculation from a vaginal discharge in a constitutionally-infected woman is the characteristic pustule and non-infecting chancroid sore, which is capable of propagation in this form from one individual to another; indeed, it seems pretty certain that contact with a gonorrhœal or vaginal discharge in a case of constitutional infection may produce a gonorrhœa or a soft sore if there was any abrasion of surface. Thus, a soft sore is not very unusually associated with gonorrhœa derived from the one contact; but the conception of gonorrhœa and a hard sore is very rare indeed. The subject is daily becoming a more important one, and the observations of Mr. Morgan, in Dublin, confirming by direct experiment the remarks of Dr. Hammond, of New York, are entitled to careful consideration.

Charity Organization Society. — An influential meeting was held at the Vestry-hall, Piccadilly, on Wednesday last, when the following resolution was passed:—"That it is expedient to form in the Poor-law Union of St. James, Westminster, a committee for the purpose of organizing charitable relief and repressing mendicity.

Gleanings.

Adipose Deposits in the Omentum and Abdominal Walls of Woman as a Source of Error in Diagnosis.

Dr. Geo. Pepper read a paper on this subject before the Philadelphia Obstetrical Society and related three illustrative cases.

All three patients had experienced considerable anxiety at the occurrence, and in two instances they firmly believed themselves pregnant, so that one of them even had engaged her accoucheur. The third fancied herself the victim of ovarian disease, and was beginning to fail in health, owing to the ever-present dread this thought inspired. In the first case, the excessive deposition of fat took place at the termination of the menstrual life, and after an exhausting uterine hæmorrhage had been checked; in the second, after the cure of a profuse purulent uterine and vaginal discharge; whilst in the third, after a rather unusually abrupt cessation of the catamenia. In all, some accustomed discharge had ceased; and in all the deposition of fat took place principally in the abdominal walls, and probably in the omentum and various tissues of the abdomen and pelvis, without materially implicating other portions of the body. It appears improbable that, in any or each of these three cases, the enlargement of the abdomen could have been merely an accidental concomitant, for it so promptly followed the cessation of the habitual discharge, and continued to increase so regularly for a time, and yet came to a standstill, or diminished, without any material aid from treatment.

"The diagnosis of these conditions," Dr. P. remarks, "should be made only after a careful consideration of the history, and a thorough physical examination of the patient; for only by such a combination can an intelligent opinion be formed. The fact of a recent suppression of the menses, or of some other habitual discharge, and, coincidently with this, the abdominal enlargement, must strongly direct suspicion, especially if from her age, or other circumstances, it would appear improbable that the woman had conceived. As a rule, the more profuse the discharge has been, and the more sudden the cessation, other things being equal, the greater will be the deposit of adipose tissue, and the more profound the psychical impression on the patient."—*American Journ. Obstetrics.*

Ovarian Tumour; two Pregnancies during its Existence; Extirpation; Recovery, and third Pregnancy following.

Dr. A. B. Crosby records (*Michigan Univ. Med. Journ.*) an interesting case of this, the subject of which was twenty-eight years of age, commenced to menstruate at sixteen, and was married at twenty-five. Two months after marriage menstruation ceased.

Two months subsequently there was evident enlargement of the abdomen, which attracted little attention, because the patient was suffering from nausea. Six months after marriage there existed marked pain in the right iliac region. The abdomen was very prominent, and just below the umbilicus measured forty-two inches. The usual signs of pregnancy existed, and it was supposed to be complicated with ascites. At full term she was delivered of a healthy boy. After confinement the abdomen only slightly diminished in size. Six months after the birth of her child paracentesis abdominis was performed, and thirty-five pounds of a slightly amber-coloured fluid removed. A small, solid tumour, the size of a hen's egg, could now be detected. A month later Prof. D. Crosby saw the patient and diagnosticated ovarian dropsy. One month after this (June, 1863) the patient again became pregnant. In January, 1864, she was tapped, and in March was delivered of a healthy girl.

On the 15th of June following she was again tapped, after which, a tumour about the size of a pint bowl could be felt in the left iliac region.

During the latter part of the nine months after the last tapping the tumour increased rapidly in size, and the patient desired its removal; which operation was performed March 22nd, 1865. On September 1st, 1866, she was delivered of a living, healthy, male child, after a natural labour.

Quinine Manufacture.

The *Madras Quarterly Journal of Medical Science*, has published a number of official documents bearing upon the manufacture of quinine at the government plantations at Rungbee. The superintendent of the plantation gives the number of cinchona trees planted as 1,200,000. He proposes to extract from the bark of the prunings and trimming the alkaloid in its amorphous state, and to issue the same to the Inspector-general of Hospitals until such time as practice in the manufacture shall enable the separation and crystallization of quinine. Such great plantations, kept up at government expense, cannot fail in time not only to insure a sufficient supply of this essential drug, but also to materially reduce its price.

The Liver the Seat of Formation of Urea.

The latest researches upon the place of origin of urea, and especially the beautiful experiments of M. Gréhant, have demonstrated that the kidneys are by no means secretory, but purely excretory, organs for urea. Dr. Cyon, in the last number of the *Centralblätt*, publishes a few facts in the form of a provisional communication, to show that it is probably produced at the liver. The plan of experimentation adopted (in common with M. Istomin) was as follows: The whole of the blood was abstracted from the carotid of a dog, and a portion, after being defibrinated, was transmitted by means of mercurial pressure through the liver. Coincidently three canulæ were introduced—one into the inferior vena cava, the second into the hepatic artery, and the third into the vena porta. The results of careful analysis showed that the blood which had passed through the liver contained a much larger proportion of urea than ordinary arterial blood. In one experiment 100 c. c. of the arterial blood when defibrinated contained 0·03 grammes of urea; but, after having been passed four times through the liver, the same quantity contained 0·176 gramme.

On the Application of Carbolic Acid as a Local Anæsthetic in Surgical Operations. By J. H. Bill, M.D., Surgeon U. S. Army.

All who have handled this substance must have noticed the tingling sensation (not unlike that produced by aconite) in the finger tips and other parts touched by the acid, which presently passes into a greater or less anæsthesia. On trying to determine the amount of this anæsthesia with an ordinary æsthesiometer it was found not only impossible to distinguish two points, however widely separated, but even to recognize the presence of one.

The prick of the point was not felt at all as pain, nor was an incision productive of uneasiness. The experiment was, therefore, extended thus:—The radial side of the writer's left forearm was covered with a cloth soaked in a saturated solution for a half hour, then a streak was traced over the course of the radial artery with a camel's hair brush dipped in acid liquefied by one-twentieth bulk of water. This streak extended from the styloid process to near the elbow, and, after a few minutes, was rubbed off. An incision was then made with a common scalpel from a point about two inches above the styloid process towards the internal condyle for five inches, occupying as near as possible the middle of the streak made with the brush, and extending down to the fasciæ investing the flexor muscles (superficial) of the thumb and fingers, so that at its lower extremity the radial artery was exposed, and could have been ligated. This incision was unattended with pain, save where nerves distributed to, or passing over the muscular fasciæ were pricked or divided, and even in this case the pain was not at all unbearable. *The incision of the integument was painless*, and the writer would have been unconscious of the injury save from the sensation communicated to his hand holding the knife as it was drawn through the tissues. This observation or experiment was made nearly a year ago. It was applied practically at once to all minor cutting operations. The writer has not incised a felon or bubo since without successfully employing this method for preventing or greatly mitigating pain. Many cases could be given—one will suffice. David Harris, of Vancouver, applied with his second finger of the left hand highly inflamed from a felon, the parts much injured by burrowing of pus. A previous felon had been treated on another finger a few month before, and the requisite incision had given him exquisite pain; the patient, therefore, apprehended great suffering from any operation on the finger now diseased, and begged for chloroform. However, the finger was soaked for fifteen minutes in warm water containing three per cent. of carbolic acid, dried, and then a brush dipped in the concentrated acid drawn over the finger in the course of the intended incisions. These, two in number, were then made, using a thin edged scalpel by a slow sawing motion, allowing only the weight of the knife to make the

cut. The patient stated that he had suffered no pain, or not more than would have resulted from handling the parts. The parts healed at once. Sometimes it is necessary, after making an incision nearly through the integument, if sensibility becomes apparent, to brush out the wound made with some liquefied acid before extending the incision deeper. This was necessary in a palmar abscess treated by this method without pain. The writer has excised a small tumour partly by this plan. Buboes have been operated on painlessly, and in short, the writer can recommend the plan in any cutting operation where no dissection of the skin is involved, and where all the pain results from the cutting of the skin. It is hoped that it will be of special service to those who are compelled to operate without an assistant. The writer was thus compelled this summer to remove from his right hand, by an incision of over two inches in length, a large wooden splinter which had been thrust through the palmar fascia, and had lodged under the tendon of the lumbricalis of the index finger. It was done without pain, save where a nerve was divided. The incision healed without scar.

These facts, which the writer believes he is the first to point out, have theoretical relations of great interest which may be discussed in a future paper.—*American Journal of Medical Science.*

Tetanus.

The *New York Medical Journal* has collated a number of cases of tetanus, in which chloral was employed, both with and without benefit Heroic doses of opium have also proved successful in this disease. *L'Union Médicale* gives the experience of Dr. Chazarin, who practised for seven years in the French colony of Senegal. He mentions altogether twenty-eight cases, twenty of which, treated by various means, terminated in death. The eight others were snbmitted to the following treatment:—First day, 15 grains of gummy extract of opium in solution; second day, 22 grains; third day, 30 grains; fourth day, 37 grains; fifth day, 45 grains; and so on, increasing the dose each day seven grains if the symptoms did not improve. When 90 grains were reached, the doses were diminished in the same ratio from day to day. Of these eight patients one only died, and this in consequence of frictions of oil of turpentine imprudently undertaken on the advice of a neighbour. These cases deserve particular attention, though they are not very uncommon, as some analogous ones were published in *L'Imparziale*, of Florence, in the year 1868. Quinine was, however, in these latter instances added to the opium.

Extract of Belladonna in Cholera Morbus. By W. E. Whitehead, M.D., Assistant-Surgeon United States Army.

Having had occasion to treat several cases of severe attacks of cholera morbus this summer, and, after complete failure to effectually relieve the first patient, even after the use of free doses of opium for forty-eight or more hours, I determined to use the solid extract of belladonna; consequently, I ordered for the patient pills containing one-third to a grain of extract of belladonna; one pill to be taken every four hours. The first pill relieved the sense of constriction, or knotty pain in the region of the umbilicus, and after the third pill had been taken the bowels were freely moved, notwithstanding several purgative draughrs had been taken before I saw the patient, without effect.

This patient (female) took two grains of the extract altogether. Her recovery was rapid and perfect; no constipation, headache, or any unpleasant symptoms remained, as is very apt to be the case in the treatment of this disease with opium, or its alkaloids.

The result in each of the other three cases (males), treated from the first with the solid extract of belladonna, was the same as in the case above described, only that the recoveries were more rapid, no delay having been caused from the use of other remedies.

It has been, and is my habit, to order from the third to one-half of a grain of the solid extract of belladonna, made into as small a pill as possible—this sized pill to be taken every four hours; to be continued till the toxical effects of the medicine manifest themselves, or till relief comes, which latter is generally the case long before the former are manifested.—*Pacific Medical and Surgical Journal.*

Nature says it is stated that Prof. J. S. Smith, F.R.S., has been appointed to succeed the late Dr. W. A. Miller as a member of the Royal Commission on Scientific Instruction and the Advancement of Science.

Medical News.

University of London.—The following is a list of the candidates who have passed the recent second M.B. Examinations for honours:—

Medicine.—*First Class:* Curnow, John, (Scholarship and gold medal), King's College; * Irvine, James Pearson, B.A., B.Sc. (Gold Medal), and Roberts, Richard Lawson, University College.—*Second Class (equal):* Bruce, J. M., M.A., Aberdeen, University of Aberdeen; Burgess, W. F. Richardson, and De Liefde, John, Guy's Hospital; Pollard, Frederick, and Seaton, Edward Cox, St. Thomas's Hospital.—*Third Class (equal):* Carter, Charles Henry, B.A., and Smith, Richard Thomas, University College.

Obstetric Medicine.—*First Class:* Curnow, John (Scholarship and Gold Medal), King's College; * Burgess, Wm. Fred. Richardson (Gold Medal) Guy's Hospital; Pollard, Frederick, and Seaton, Edward Cox, St. Thomas's Hospital; Carter, Charles Henry, University College; De Liefde, John, Guy's Hospital.—*Second Class:* Irvine, James Pearson, University College; Barnes, Edgar George, St. George's Hospital,—*Third Class:* Smith, Arthur William, Guy's Hospital; Smith, Richard Thomas, University College.

Forensic Medicine.—*First Class:* Bruce, John Mitchell (Scholarship and Gold Medal), University of Aberdeen; Burgess, Wm. Fred. Richardson (Gold Medal), Guy's Hospital. *Second Class (equal):* Irvine, James Pearson, University College; Smith, Arthur William, Guy's Hospital.—*Third Class:*—Carter, Charles Henry, University College; Curnow, John, King's College; Seaton, Edward Cox, St. Thomas's Hospital.

At the remote city of Indianapolis an Academy of Sciences has just been formed under the presidency of Professor E. T. Cox. The exclusive object of the association is the cultivation and imparting of knowledge of the natural and physical sciences. Though the number of members at present does not appear to be large, it will, no doubt, like most other things in the Far West, increase rapidly. We (*Nature*) wish all success and a proper future to this the youngest society for the advancement of natural history.

The Census of 1871.—The Commissioners for the census of 1871 for Ireland are the same as in 1861, viz.: Mr. William Donelly, Registrar-General; Sir William Robert Wilde, M.D., and Mr. George W. Abraham, LL.D. The census in England will be taken by Major Graham, Registrar-General; Dr. Farr and Mr. James T. Hammick, assistants to Registrar-General; Mr. W. Clode acting as secretary. A staff of 100 clerks will be specially employed for digesting the returns; a work likely to occupy some three years.

Rag Pulp in Butter.—After melting a sample of butter purchased at Brixton, a large clot separated, and although the sample was left all night in a cool place, it did not again solidify. This led the *Food Journal* to an immediate microscopic examination, and proved beyond a doubt that rags in a state of pulp had been employed in large quantity. The rags themselves conjure up ideas sufficiently nauseous; but, in addition, *the dyes had not even been discharged*, as the filaments presented a great variety of magenta, blue, brown, and other colours.

A contemporary says that from an official report forwarded to it from Basle respecting the French prisoners, in the lazarettes in Germany, it appears that of these prisoners, who amount to above 150,000, many are ill, many suffer from wounds, and most of them are quite destitute. The almoner of the French prisoners in Ulm writes that in that place there are 1,000 sick and wounded, and that the means of aiding them are absolutely wanting. Typhus makes great devastation among these unhappy Frenchmen; the average number of deaths is ten daily. At Minden, there are 500 prisoners ill with dysentry, typhus, and small-pox; and the number is daily increasing. There is the greatest difficulty in relieving them, even in obtaining what is strictly necessary, for there is a want of everything, especially linen. Scarcely one of the fever-patients located in halls and barracks has a shirt to change, and many have no stockings. With the best will, it is impossible to do what is necessary, without clean linen, warm clothes, woollen jackets, stockings, drawers, &c., which are not to be had. The Basle charitable agency has received similar distressing reports from Marienberg, Coblentz, and other places, on the truly terrible destitution which prevails among the prisoners.

* Obtained the number of marks qualifying for the scholarship.

NOTICES TO CORRESPONDENTS.

☞ Correspondents requiring a reply in this column, are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Out of thousands of such persons it may cause enquiries so signed, on very various subjects much confusion.

Dr. Jacob, Maryboro.—Note and pamphlet received with thanks. Will be made use of next week.

Dr. Moore, Southgate.—Your letter is very acceptable and encouraging. We have entered your name on our subscription list, and thank you sincerely for your intention to influence others to support what you are pleased to term our "very practical journal."

Dr. West.—Thanks, but you did not give the address of your son in Calcutta to whom you wish the Journal regularly sent. We hope his estimate of the merits of the Medical Press will be as high as your own.

MISS GARRETT, M.D.

The women have won a decisive victory. They have carried Miss Garrett into the London School Board. Nay! more, they have placed her at the head of the poll. She distanced all competitors by 20,000 votes. No doubt, many men voted because there will be so many girl's schools under the Board, and a very good reason too, while we suspect all the women plumped for Miss Garrett. The etiquette in all new Boards is, that the member who has obtained the largest number of votes should take the chair at the first meeting. Hail then the chairwoman!

THE PHYSICIAN'S VISITING LIST.

The small pocket diary designed by Dr. Seymour Haden, and issued by Smith and Co., of Long Acre, has made its appearance in anticipation of the coming year.

We have not space to say what it contains, and we really have a difficulty in saying what, of desirable contents, it does *not* contain. It is neither meagre in necessary matter nor choked with information which would not be generally useful, and it is issued in a very convenient and at the same time, suitable shape.

MEETINGS OF THE LONDON SOCIETIES.

Monday, Dec. 12th.

Medical.—Mr. Teevan will introduce some "Practical Remarks on Stone with an Analysis of twenty-four Cases."

Thursday, the 15th.

Harveian.—Dr. Farlie Clark will read a paper "On Surgical Dressings."

VACANCIES.

Birmingham Children's Hospital.—Acting Physician. Election 27th inst.

Brixworth Union.—Medical Officer. Salary £78, with extra fees.

Stamford Infirmary.—House-Surgeon. Salary £100, with board and residence.

Metropolitan Free Hospital,—Honorary Surgeon.

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

The Causes and Treatment of Lateral Curvature of the Spine. Second Edition. By Richard Barwell, F.R.C.S. London: Macmillan and Co.

Horses, their Rational Treatment, and the Causes of Premature Decay. By Amateur. London: Baillière, Tindall, and Cox.

The Pathology and Treatment of Venereal Diseases. By F. J. Bumstead, M.D. London: Trübner and Co.

Transactions of the Pathological Society of London. Vol. XXI.

Remarks on the Mode of Admission to our Medical Charities. By J. Thorburn, M.D.

The Chemist's and Druggist's Almanack and Diary for 1871.

British Journal of Dental Science; New York Gazette; Homœopathic Review; Food Journal; Science Gossip; The Shield, &c., &c.

APPOINTMENTS.

Adam, J., M.D., Medical Officer to the Asylum for Imbeciles, Caterham.

Blennerhassett, E., L.K.Q.C.P.I., M.R.C.S., Medical Officer for the Valencia Disensary District of the Caherciven Union, Co. Kerry.

Carter, W., M.B., Physician to the Liverpool Southern Hospital.

Caton, R., M.D., Lecturer on Comparative Anatomy and Zoology at the Liverpool Royal Infirmary School of Medicine.

Cayley, W., M.D., Assistant Physician to the Middlesex Hospital.

Chute, H. M., Assistant House-Surgeon to the Bristol Infirmary.

Dunkley, Mr. W., Assistant House-Surgeon to the Stockport Infirmary.

Harvey, H., L.R.C.S., House-Surgeon to the Hospital, Darlington.

M'Donnell, M. A., L.R.C.P.Ed., Medical Officer for the French park Dispensary District of the Castlerea Union, Co. Roscommon.

Topham, J., M.D., Honorary Physician to Torbay Infirmary, Torquay.

Townsend, Dr. Medical Officer for the Miltown-Malbay Dispensary District of the Ennistymon Union, Co. Clare.

Marriage.

Burke—O'Brien.—On the 21st ult., at the Catholic Church, Rathmines. Dublin, Joseph Burke, Esq., Deputy Inspector-General of Hospitals, to Susan Fraser, youngest daughter of the late Chas. R. Fraser Frizelle, Esq., of Stapolin, Co. Dublin, widow of the late Thomas O'Brien, M.D., Bengal Medical Service.

Deaths.

Adams.—On the 23rd ult., at Chatham, of apoplexy, Wm. P. Adams, one of the House-Surgeons of the Medway Union, aged 24.

Chambers.—On the 28th ult., F. Evans Chambers, M.R.C.S.E., of Upper Gloucester place, aged 36.

Colmer.—On the 27th ult., at Yeovil, Susan, the wife of P. S. H. Colmer, L.R.C.P.Ed., &c., aged 29.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 14, 1870.

CONTENTS.

Original Communications.

DR. CHARLES MAURIAC ON BLENNORRHAGIA IN WOMEN.

By Charles R. Drysdale, M.D., M.R.C.P.L., F.R.C.S.E.,

Physician to North London Hospital for Diseases of the Chest, Hampstead, &c.

I presume that many practitioners have found some difficulty in replying to the question put to us by some of our male patients suffering from urethral discharge—"Must this discharge have been caused by any virulent disease in the person who communicated it to me?" If this be the case, we shall, I think, be glad to hear what any person has to say on the subject, who, like Dr. Charles Mauriac, can lay claim to a wide clinical experience of virulent diseases in both sexes. That gentleman, in his translation of Dr. West's "Classical Lectures of Diseases of Women," has some really admirable remarks upon this thorny question, which I should like to introduce to the notice of English readers. The multiplicity of causes, says that gentleman, which may cause mucous or muco-purulent discharge of the internal or external mucous membranes of women, makes the question of blennorrhagia much more obscure in that sex than in men. We say that contagion constitutes the essential character of virulent vulvo and urethro-vaginal fluxes. No one denies it. It is clear that a catarrh, of which the secretion, placed in contact with the male urethra, provokes an affection of like nature, susceptible in its turn of transmission, is gifted with undeniably morbid specificity. But, if you ask whence arises this contagious catarrh, you will find insoluble difficulties arise. Can you affirm that the woman who communicates a blennorrhagia has received it herself by the method of contagion? Putting contagion aside, is it not possible that a utero-vaginal catarrh, arising under the influence of causes independent of all blennorrhagic contagion, should progress by the sole influence of ordinary morbid influences, to such a degree of virulence as to render it transmissible, and convert it into true blennorrhagia? In other words, is blennorrhagic catarrh always the result of contagion, or can it arise spontaneously?

In spite of all he has seen, Dr. Mauriac remains in doubt. Yet, he truly says, there are many doctors of great experience who affirm that any woman, whose genital secretions communicate blennorrhagia, is necessarily herself attacked by a blennorrhagia obtained from a virulent origin. They don't believe in the spontaneity of a specific catarrh. It may be admitted that this way of looking at the matter is true in the immense majority of cases. Yet, Mauriac is not so absolute as these gentlemen, and believes with others—and in particular with one of great authority in such matters, M. Ricord—that certain catarrhs of the genitals in women, whose source cannot be suspected, acquire of themselves the property of engendering that unexplained principle, that virus which makes the mucus and pus fit to cause in the male a legitimate blennorrhagia. When blennorrhagic inflammation has attacked the vulva, urethra, and vagina; when it is at its acme of acuteness, in all of its manifestations, and when the genitals are bathed with thick, greenish pus, acrid and irritating, the diagnosis presents no difficulty, especially if the antecedents bear no doubt as to the contagious origin of the disease. But, when the inflammation becomes slighter, and the secretion loses its purulence, no longer furnishing aught but a, more or less, abundant flow of mucus, whitish, and resembling the ordinary secretion in leucorrhœa, we are sometimes in doubt. In such cases, the persistence of urethritis is one of the best symptoms, one of those on which we can most surely rely when we affirm that a catarrh is blennorrhagic. When this symptom is absent (which takes place frequently enough), we have only as guides some corroborative circumstances, often of a doubtful character, especially if the woman has some interest in hiding or falsifying the truth. If the product of secretion were inoculable with the lancet, as the pus of soft chancre is, the question would be quickly solved. But this is not the case; and its application on a healthy mucous membrane, for example, on the mucous membrane

of the conjunctiva, would produce accidents too formidable for us to be authorized to seek a response in this mode of experimentation.

We all know how weak a point it is in the French system of incarceration of prostitutes with contagious diseases, that it is impossible to say when the time of contagion has gone by in many cases. Dr. Mauriac is well aware of this fact, and remarks that it would be very important, for practical purposes, to be able to fix, by means of characters worthy of confidence, the precise moment when a discharge, vulvo-urethral or utero-vaginal, which at first was virulent, had lost its specific qualities, and become incapable of reproducing a malady like that which has produced it. Unfortunately, there exists no positive sign. Doubtless, the contagious power of the secretion is generally in direct proportion to the proportion of pus it contains; and, so long as this secretion of the mucus of the genitals is greyish, or shaded yellow or green, we may be almost certain that the disease is communicable. But, when the blennorrhagic flux passes into the chronic stage, and, arrived at this phase of specific process, loses the character of clear pus to take on the aspect of leucorrhœa, it may remain contagious for a long period, or become so under the influence of great excitement, at the approach of menstruation, after excess in drinking of alcohol, or after unaccustomed stimulation of the generative organs. And, as to globules of pus, are these not met with in a multitude of discharges, of different sources, which are not at all contagious, and have never been so?

Thus, there is incertitude as to the question whether there can be, except in cases of contagion, a spontaneous generation of blennorrhagia; then uncertainty as to the characters which, with the exception of inoculation and of transmission, can permit us to affirm that a discharge is blennorrhagic; uncertainty as to the time when the alleged blennorrhagic discharge loses its virulence, and ceases to be transmissible; such is the *resumé* of what Dr. Mauriac has observed, when, leaving aside common and easy cases, he has attempted the delicate points of a problem, which has not yet been solved. In short, the partizans of absolute specificity have never demonstrated in a clear manner that it is impossible for a woman without blenorrhagia to communicate the disease. Some say, "every woman who gives a clap has received it before." This is true in 99 cases in 100. But are there not cases when the woman may create it entirely alone, and give it without having received it? So long as no one has demonstrated that the thing is impossible, Mauriac observes, he will be a specificist; but with some restrictions relating to the contagious catarrhs of women. Most will agree with this.

With regard to details, most modern authors have asserted that *virulent urethritis* is extremely rare in women. This view of the matter has been combated by A. Guerin in his work on the "Diseases of the External Genital Organs of Women." He declares that he has found urethritis in almost all women suffering from vaginal blennorrhagia. Whatever be its frequency, everyone agrees that the existence of urethritis is the most certain sign of the virulence of the disease. Simple, non-blennorrhagic, urethritis is extremely rare in women, even in little girls, when the vulva so often is inflamed, from teething, worms, or ill health, or want of cleanliness; but the functional effects which urethritis in women produces are far from being as marked as in men. Thus, it is often necessary to have recourse to a repeated exploration of the urethra to be sure that there issues, by pressure exercised from behind forwards, by means of the finger, a drop of pus. This exploration by the finger is indispensable when the inflammation, leaving the anterior portion of the canal, confines itself in the most hidden part, behind. There exists another variety of virulent urethritis, well described by Guerin as *external urethritis*. It is seated in two glands, which open close to, but external to, the meatus urinarius. It is not rare to see the inflammation of the vagina and vulva survive these. This discharge, however slight it may be, and although it may escape the researches of the doctor when the women wipe it away with a sponge or with their linen, gives the key to some mysterious contagions, whose origin we cannot trace, when a complete examination is not made.

The urethritis of women may be complicated by chancres, as is the case in men, or be symptomatic of such. For the most part, chancres of the meatus, or of the deeper parts of the canal, are infecting or syphilitic. They are not inoculable, and present an induration perceptible by the fore-finger introduced into the vagina. The hard, indolent, glandular swelling of the glands in the groin constitutes one of the most certain symptoms of urethral chancre, when it cannot be seen, or that its outer characters are equivocal.

Allied to the question of blennorrhagic urethritis, is the question of rheumatism of the same nature in women. Dr. A. Fournier, in a good memoir on this subject, relates how that, in a short time, he observed severe cases of blennorrhagic rheumatism in women as clear and as well marked as in men. All these women had urethritis. M. Fournier concludes from this, that blennorrhagic rheumatism is less rare in women than is commonly believed to be the case, and that it is connected with urethritis, and not with vulvitis or specific vaginitis. In the three facts he reports, the vagina was healthy; two of the women were pregnant.

In virulent or blennorrhagic urethritis in women, cubebs and copaiba are as useful as in the male, if administered at the epoch when the inflammatory symptoms are commencing to become less, either spontaneously, or after antiphlogistic treatment. But we may attempt in women a more energetic practice, *i.e.*, abortive cauterisation. For reasons easily divined, these are less dangerous than in males, and they almost always succeed in shortly arresting the specific inflammation, if we can touch the walls of the urethra in their whole extent. In order to allow cauterisation to touch the whole of the surface, we must press, with the finger introduced, out the vagina upon the whole length of the canal, from behind forwards. This being done, we introduce into the urethra a pencil of nitrate of silver, large enough to distend well the mucous membrane, and efface its natural folds, and this is slowly passed along the whole extent of the canal once or twice. This local treatment is without any danger, spite of its energy; it never causes retention of urine; the violent pains and slight bleeding produced diminish and stop pretty quickly. Sometimes, in a few days, it is necessary to recommence the operation, because the eschar falls, and the membrane again secretes pus. Copaiba or cubebs may be prescribed as adjuvants. If there co-exist with the urethral blennorrhagia, a vulvitis, or vaginitis of like nature, we must not count on a durable cure by this means, because the pus secreted on these two last surfaces must, sooner or later, come into contact with the meatus, and re-inoculate the urethra. To succeed in such like cases, we must treat at the same time the vulvitis and vaginitis. Urethral blennorrhagic injections, which are so useful in males, are of slight importance in women on account of the shortness of the canal.

As to *virulent vulvitis*, according to absolute specificists, it is always produced by a virus, and is the only kind transmissible by connexion. This inflammation may invade the whole vulva, or limit itself either to the clitoris, or to the internal surface of the labia majora or minora. It is superficial, deep, or follicular, &c. The liquid which bathes the diseased surfaces, at first serous, becomes rapidly sero-purulent, greenish-yellow, and sometimes bloody; it is gifted with such acridity that it determines redness or excoriations of the neighbouring parts. It exhales also, in dirty women, an insupportable odour. When blennorrhagic vulvitis is accompanied, as it is often, by a marked œdema, and when the surfaces of the mucous membranes are the seat of an irregular desquamation, and of bleeding and granular erosions, it is often very difficult to say if vulvitis is not the consequence of infecting chancrous erosions. In such cases, examination of the inguinal

glands is of great utility. If painful and swollen in non-infecting blennorrhagic vulvitis, in vulvitis with infecting chancres, they become very hard, voluminous, and generally remain indolent. When the follicles which open into the folds of the vulva ulcerate at their orifice, there result secreting surfaces, sharply cut, with greyish base, with swollen edges, and reddish border, which may be taken for soft chancres. Inoculation, in such cases, will remove doubts.

Among the complications of blennorrhagic vulvitis, we must point to the acute œdema of the labia minora, and the strangling of their base, an accident which presents an analogy with paraphymosis in males, and the inflammation and suppuration of the glands of Bartholine.

The treatment of virulent vulvitis varies according to the intensity and seat of the inflammation. When the process at once rises to a high pitch of acuteness and there is a tendency to propagation towards the deep parts, it is indispensable to have resource to an energetic antiphlogistic treatment. Local blood-letting, however, is rarely indicated; but prolonged baths, poultices, and soothing lotions are then of use. In cases, when the virulent catarrh of the vulva is accompanied by an acute œdema of the labia minora, it is good practice to make punctures on the surface with a needle or the point of a lancet. By thus giving issue to the serosity which infiltrates the interstices of the cellular tissue, we lessen, or make rapidly disappear, the phenomena of strangulation; but, before making this little operation, it is important to see that no chancrous ulceration exists.

In vulvitis of mean intensity, the above-mentioned treatment is applicable; but, perhaps, it is better to try abortive means—*i.e.*, to pass over the inflamed surfaces, after having first cleansed them, a hair pencil dipped in a solution of nitrate of silver. A solution of half a drachm to the ounce may be used, or less concentrated at first. This dressing should be used every four days, and it is useful to separate the diseased surfaces with dry lint, or lint dipped in styptic liquids, such as a solution of half an ounce of alum to the pint of water. General baths, sitz baths, frequent lotions with astringent lotions, such as a drachm of sulphate of zinc in a pint of water, with extreme cleanliness, repose and careful diet are the adjuvant means which must never be neglected. When the inflammation of the vulvar follicles has ulcerated their surfaces, it is sometimes necessary to touch the ulcerated points with a pencil of nitrate of silver, and not to allow the pus to remain on them. Abscesses in Bartholine's glands, or in the cellular tissue of the labia, ought to be opened early on the side of the mucous membranes, and by a pretty free incision to allow the pus to flow more easily.

(To be continued.)

CLINICAL MEMORANDA.

SUBCUTANEOUS INJECTION OF MORPHIA WITH CASES.

Reported by JOHN W. MARTIN, M.D., Assistant-Surgeon to Mayfield Factory Dispensary.

(*Continued from page* 391.)

CASE 6.—Mahony, æt. eighty, a farmer, suffering from *strangulated right inguinal hernia.* Notes taken Sept. 15th, 1870.

About half-past twelve o'clock, midnight, my father was called to see this patient, who resided some four miles from our residence, I accompanied him. The account given by the messenger, at once directed our suspicions to the occurrence of strangulated hernia, the accident having taken place at seven o'clock in the evening, so we went fully prepared for all hazards. About half-past one we reached the patient's house. On examining, we found a very large, tense, tumour, in the right side of the scrotum, from the neck of which, extending through "the ring," to the loins and back, severe pain was felt by the patient. There was some tenderness on making pressure.

The patient had, for a long time, been the subject of double inguinal hernia, for which he neglected to wear a proper truss. He was suffering severely from the pain already mentioned; the bowels had been slightly moved the preceding day; the abdomen was very tense and tympanitic. There was no vomiting; tongue clean and well protruded; pulse firm and regular, not much accelerated. A slight attempt to return the gut by taxis, making no impression on the extruded mass, at the suggestion of my father, I injected subcutaneously into the right groin one-third of a grain of morphia. For three-quarters of an hour, a firm and continuous pressure was kept up on the tumour, during which time the ether spray was kept constantly playing upon its surface, to promote contractions of the muscular fibres of the dartos. The full effects of the morphia not becoming apparent, another one-third of a grain was injected into the left arm, at the insertion of the deltoid muscle. About half-an-hour subsequent to the injections, the patient was fully morphianized: in the meantime the ether spray was kept continuously playing upon the tumour, which gradually contracted, and got very cold. At three o'clock, a warm water, sugar, and salt injection, was administered per rectum, part of it only returning through the tube with a little flatus. At half-past three, on my father desisting from the use of the ether spray, he again tried gentle taxis and, to our great gratification, the whole mass glided up into the abdomen.

Were it not for the *full* effect of morphine being so quickly obtained (one-and-a-quarter hours) by the hypodermic method of administration and the action of the ether spray, both my father and myself are confident that our attendance upon the case would have been greatly prolonged, and in all probability, operative measures would have been necessary for the reduction of the hernia.

CASE 7.—Patt Power, æt. sixty, labourer, *pain in the right lumbo-iliac region*, probably due to the passage of a calculus along the ureters. Notes taken Aug. 27th, 1870.

The pain was shifting in character.

1st. Felt severely over the ilio-cæcal valve.

2nd. Followed the distribution of the branches of the lumbo-sacral plexus, especially along the sciatic nerve.

3rd. In the lumbar region of the affected side, along the crest of the iliac bone, and down the course of the right spermatic cord to the scrotum, the pain was very violent, and the constitutional disturbance severe.

When first called to see him, he was almost howling with pain. The following symptoms pre-sented themselves to my notice:—

Abdominal muscles thrown into violent contraction; venous circulation engorged; marked tenderness to pressure in the region of the right kidney. Obstinate constipation; tongue furred and indented; pulse 112, weak, and general feverishness.

Treatment.—Bowels acted upon by aperients, and strong anodynes with hot stupes and turpentine applications failed to give the slightest relief. I then injected one-third of a grain of morphia, and with the immediate result of ease to the pain; the good effects were apparent in less than two minutes. This was about four o'clock in the evening; passed a good night, and next morning the bowels, which had not responded well to the aperient medicine given the previous day, were well and naturally opened; had a good day until four o'clock, when he was again attacked with pain, rendering a repetition of the injection necessary with a similar result to that previously obtained. Placed him on R Liquor potassæ, ℥j.; tr. hyoscyam., ℥ij.; doses ter die. Linseed-meal poultices over the seat of pain.

Gradually improved, but, for some time, whenever he went to pass water, he felt a pain shooting along the course of the ureter to the bladder on the affected side. Urine on examination was clear, acid and albuminous on boiling.

In this case the good effects of the hypodermic method of administering morphia were most marked.

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the MEDICAL PRESS.)

No. XVI.

PRECIPITATION OF SEWAGE WITH THE SALTS OF ALUMINA AND IRON.

THE *salts of iron* have been used for more than a hundred years as disinfectants of night soil and foul water, and they have, as already stated, been the subjects of numerous patents. The most important of these were the patents of E. Brown and C. F. Ellerman, both of which were granted in the year 1847. Brown's invention dates from the month of February of that year, and it professes to be a means of "neutralising the odious and noxious gases emanating from fecal substances, or as it is sometimes termed, the 'disinfecting' of such substances, whereby they may be preserved, in order to their being manufactured into carbonic compounds applicable as manures, without injury to the public health, or to individuals engaged in such collection and manufacture;" and among the substances employed for this purpose were the sulphates and chlorides of iron. In the month of October of the same year Mr. Ellerman obtained a patent for "certain processes or methods of rendering feculent, excremental, and other matters inodorous, and of disinfecting, and also of retarding, the putrefaction of animal and vegetable substances." The chemical preparations which he used were the crude chlorides, and pyrolignates or acetates of iron. Mr. Edward Brown's invention does not appear to have commanded much attention, but Mr. Ellerman's was brought prominently into notice, and was frequently made the subject of public inquiry. We examined his liquid shortly after the date of the patent, and found that it was a strong solution of perchloride and pyrolignate of iron, having a specific gravity from 1336 to 1443, and containing from 24 to 43 per cent. of these ferruginous salts. The retail price of the preparation was eighteenpence a quart, but Mr. Ellerman offered to sell it wholesale for ninepence a gallon. Directly after the patent was obtained, the deodorising effects of the liquid were tried by Dr. Sutherland and the late Dr. Duncan, of Liverpool, and in the following year (1848) its action was still further investigated by the late Dr. Ure and Mr. Scanlan, all of whom reported most favourably of its disinfecting power, when compared with the well-known deodorising solutions of Sir William Burnett, Labarraque, and Ledoyen. Our own experiments, however, at that time did not furnish equally satisfactory results; for we found that 100 grains of Sir Wm. Burnett's solution of chloride of zinc, of specific gravity 1594, were quite as effective in deodorising sewage as 470 grains of Ellerman's solution, of a gravity of 1443. Mr. Haywood, also, the engineer of the City Commissioners of Sewers, inquired into the subject, and reported that when Ellerman's solution was used in the proportion of three gallons to a cubic yard of night-soil, it was not so perfect in its deodorising power as five pints of a solution of chloride of zinc. In the same year (1848) Mr. Hodgson reported to the Metropolitan Sewers Commission, that when the solutions were used in sufficient quantity to remove the sulphuretted hydrogen and ammonia from a cubic yard of night-soil, it required eleven and a-half quarts of Ellerman's liquid to do the work of one quart of Sir Wm. Burnett's. More recently, however, in 1859, the deodorising power of a strong solution of perchloride of iron, called Dale's liquid, was thoroughly investigated by Drs. Hofmann and Frankland, and subsequently by the late Dr. Miller, for the Metropolitan Board of Works, who were anxious to prevent as far as possible the putrefactive decomposition of the sewage in the River Thames during the hot summers of 1857 and 1860. The solution which they employed had a specific gravity of 1450, and its price was sixpence per gallon. This was compared with the effects of chloride of lime, costing £12 a ton, and ordinary caustic lime, at sixpence a bushel. When used in quantities of equal value they found that the perchloride of iron had a marked superiority over the two other disinfectants, and that chloride of lime was more powerful than quicklime; in fact, they ascertained that an immediate deodorisation of 7,500 gallons of sewage was effected by each of the three agents when used in the proportions of half a gallon of perchloride of iron, three pounds of chloride of lime, and one bushel of lime. The quantity, therefore, required to deodorise a million gallons of sewage, and the cost thereof, in each case, were as follows:—

	£	s.	d.
86 gallons of perchloride of iron .	1	13	3
400 lbs. of chloride of lime . .	2	2	10½
132½ bushels of lime	3	6	6

But the permanency of the deodorising effect of the several substances was very different in the three cases; for, they say, that after two days the sewage disinfected by lime became slightly tainted, whilst that deodorised by chloride of lime and perchloride of iron remained perfectly odourless. At the end of three days the limed sewage had become decidedly offensive, whilst the other two specimens still remained free from smell. After four days the odour of the limed sewage had become worse, but that treated with chloride of lime likewise began to exhibit an offensive character, whilst the sewage to which perchloride of iron had been added remained perfectly inodorous. Even after the lapse of nine days the condition of the latter had not changed. The chief cause of the decomposition of the deodorised sewage was no doubt the organic matter contained in the precipitate, and therefore they recommended that the suspended matters should be removed from the defæcated sewage as soon as possible. But as this was not practicable in the case of the London sewage, the proposition of Dr. Hofmann and Dr. Frankland to add perchloride of iron to it without separating the suspended matters, was objected to by Dr. Letheby and Dr. Odling in their reports to their respective local sanitary boards. Dr. Odling, indeed, was of opinion that the action of the perchloride under these circumstances would be much the same as that of lime, though perhaps a little more permanent, for it would produce a black sludge of precipitated mud which would be scarcely less liable to putrefactive decomposition, and would be more objectionable to the eye, than the undefæcated sewage; whereas the clarified sewage, deprived of this mud, might be safely discharged into the river. Dr. Letheby, in his report to the Commissioners of Sewers for the City, expressed himself to nearly the same effect, saying that the mere addition of a precipitant, without the separation of the feculent matters so precipitated, would be worse than useless. He also attached importance to

the presence of a large quantity of arsenic in Dale's solution, which, by combining with the iron, would be found in the precipitate. According to his analysis of a sample of the perchloride furnished to him by Mr. Dale, as that proposed to be used by the Metropolitan Board, there was enough arsenic in it to yield as much as a hundredweight and a-half of this poison to the Thames daily, if used in the quantity proposed by the chemical referees; and all this would be retained by the precipitated mud, giving a proportion of one part of arsenic to three thousand parts of the precipitate. This, however, was thought lightly of by the referees, who said, in their reply to his report, that it was their "deliberate opinion that even were the perchloride of iron to contain ten times the maximum quantity of arsenic observed by Dr. Letheby, its application for the purposes contemplated in our report could not afford grounds for the slightest apprehension of danger;" but in answer to this it was very properly asked,—What would have been the conclusions of these gentlemen if in their professional capacity as witnesses for a prosecution, they had ascertained that a manufacturer on the banks of the Thames was daily discharging into the river a quantity of refuse containing as much as a hundredweight and a-half of arsenic? and what also would have been the undoubted result of a legal prosecution, if the Conservators of the river had, in the exercise of their duty, applied for an injunction to prohibit such a practice? It is fortunate for the public that the question has been re-examined by Dr. Frankland, in his capacity as one of the Royal Commissioners appointed to inquire into the pollution of rivers; for he now suggests that, "any liquid which, in 100,000 parts by weight, contains, *whether in solution or suspension*, in chemical combination or otherwise, more than 0·05 part by weight of metallic arsenic, shall be deemed polluting, and shall not be admissible into any stream." In point of fact, it is manifestly of the greatest importance that the precipitate produced by the chemical action of perchloride of iron in sewage, should be carefully removed from the defæcated water, and not allowed to pass into the stream.

In the years 1859 and 1860, attempts were made to deodorise the sewage of Croydon by means of perchloride of iron. It was used in the proportion of from 120 to 140 gallons of Dale's liquid, to from 800,000 to 1,400,000 gallons of sewage; that is in rather more than double the quantity recommended for the Metropolitan sewage; but as the separation of the suspended matter was not properly effected, the results, as might have been expected, were not satisfactory; for the black precipitate of sulphide of iron contained in the effluent water, gave it a disgusting appearance, and marked in a very objectionable manner the exact course of the undefæcated sewage discharged into the river; besides which the precipitate adhered to the herbage upon the banks of the stream, and formed an offensive slimy deposit. As in the case of lime, and every other precipitating agent, it is evidently essential to the success of the process that all suspended matters should be carefully removed from the effluent water before it is discharged into a running stream; and this appears to be effectually accomplished by means of subsidence and filtration at Ealing, where the sewage is treated with lime and a cheap salt of iron made on the premises by a process recommended by Professor Way. The lime, in a slaked condition, is added to the sewage as it enters the works and is passing onwards to the subsiding tanks—where the precipitate produced by the lime and the other suspended matters of the sewage subside; and at the last subdivision of the tanks, a solution of iron salt is allowed to run into the defæcated sewage water in a graduated manner—advantage being taken of a slight fall to move a little water wheel, which assists in effecting the mixture of the iron salt with the sewage water. It then flows upwards through two filter beds, and is discharged from the works in a nearly bright and inoffensive condition. Professor Way has reported on the process, after having made more than thirty visits to the works since the month of July, 1869—two-thirds of which were during the hot and dry months of last summer; and although the state of the weather necessarily affected the process, yet he says:—"Since the system has been in good working order, I have considered the result to be very satisfactory. The effluent water, though not absolutely bright, has only a faint milkiness, which a more liberal use of chemicals would entirely remove. It is free from smell, and samples that have been kept for weeks have only in rare instances become offensive." On a former occasion, in 1868, when merely subsidence and filtration were practised at the works, the defæcation of the sewage appears to have been very effective; for a sample of the effluent water, analysed by Dr. Letheby, for the Conservators of the river Thames, was found to be perfectly transparent, and free from offensive odour. It contained only fifty-six grains of solid matter per imperial gallon, all of which was in solution, and it consisted of calcareous salts, chloride of sodium, and alkaline nitrates, with a very little organic matter and ammonia. The liquid, in fact, was so absolutely inoffensive, that, on the certificate of Dr. Letheby, the Board of Conservators permitted it to flow into the Thames; and we are not aware that any offence has been created thereby. Professor Way, in speaking of these filters, says in his recent report—"They are, in my opinion, of very great importance in carrying out any process of purification of the sewage before it is discharged into the Thames. Without them it would be impossible, by the best precipitants known, to clarify the sewage in the tank; for no matter how perfect the system of precipitation may be, there is always some portion of flocculent matter which will not settle, and which can only be removed by filtration. These filter beds are an excellent feature of the Ealing Sewage Works;" and now that the process of precipitation is superadded to that of filtration, he considers the works to be among the most perfect, if not the most perfect, of their kind in the country. The two depositing tanks, which, like the filters, are in duplicate, are each sixty-four feet long, ten feet wide, and ten feet deep. They are divided into five compartments by cross planks, having small openings at the top for the passage of the sewage, and their total capacity is about 12,000 cubic feet. The first filter is composed of gravel, thirty feet long, ten feet wide, and two feet thick, and the second filter is of fine sand, sixty feet long, ten feet wide, and two feet thick. The population of Ealing is about 8,500; and the quantity of sewage received at the works amounts to about 400,000 gallons a day, or nearly 2,000,000 gallons a week. In summer time, when the chemicals are most freely used, the weekly proportion of lime is one and a-half square yards, or about 20 cwt. (costing 20s.), and the amount of the iron preparation is 15 cwt. (costing 6l.); but in winter time less would be used. In fact, according to the estimate of the borough surveyor, Mr. Charles Jones, the average annual cost of the works

for chemicals, labour, &c., would be about £325, from which there is to be deducted the sum paid by farmers for the manure. This, at present, is about £60 a-year; but if the precipitate were mixed with town refuse, as at Northampton, it would realise much more.

Sulphate of iron, in the form of weathered shales or lignites, and copperas has also been used, either alone or in conjunction with other things, for the deodorization of sewage and nightsoil. The patent of Mr. Richard Dover, for example (1851), claims the use of acids with iron filings or oxide of iron and protosulphate of iron—the defæcated sewage being filtered through charcoal, peat, &c. Later still, in 1853, Mr. Herapath's process was a combination of one part of sulphate of iron and four parts of burnt magnesian limestone—the mixture being intended to precipitate the phosphoric acid of the sewage in combination with the magnesia, as well as the sedimentary matters. The process was tried for some time at the sewage works of St. Thomas, near Exeter, when it was found that a ton of the materials produced two tons of dry manure, at a cost of 17s. a ton; but the process was not remunerative, and was therefore abandoned. More recently, a preparation of dry copperas, called Mudie's disinfectant, has been used for the deodorization of drains, stable manure, and nightsoil. It freely absorbs the ammonia and sulphuretted hydrogen of such matters, and renders them inoffensive. It has, therefore, been extensively employed in France, for the purification of slaughter houses, ditches, drains, &c. Very recently, it has been examined by Dr. Letheby and by Mr. Crookes, who say that it is well fitted for this purpose, although it is hardly suited for the defæcation of sewage. Lastly—the process of MM. Jules Houzeau and Eugène Devedeix, of Paris, which was patented in 1866, consists in the use of lignites, containing sulphate of iron, or of sulphate of iron itself with lime and coal dust. This process has been extensively tried at Bradford by Mr. Holden, and hence it is generally called Holden's process. About 130,000 gallons of Bradford sewage are daily treated with the proper proportion of sulphate of iron, and then with caustic lime, previously slaked, and coal dust. The mixture passes into a series of subsiding tanks, where the time of flow is about twenty minutes; and thus the precipitate falls and leaves a clear, supernatant liquid, which is quite inodorous. All the sedimentary matter of the sewage is thus got rid of, as well as about half of the dissolved organic matter. The precipitate when dried in the air contains about forty-three per cent. of organic matter, and rather less than one per cent. of phosphate of lime. The organic matter is not very rich in nitrogen, and, therefore, the manure is not of much value.

Hospital Reports.

LONDON HOSPITAL.

Very considerable improvements have been lately thoroughly carried out at the London Hospital, and especially with reference to clinical instruction, which has been organised on a complete basis, and will not fail to have an influence even on so old and renowned a school of medicine as that at the east of the metropolis. Before examining fully the method of instruction, we propose to give a summary of the history of the London Hospital and its Medical College.

The establishment of the London Hospital dates from the year 1740, when a few benevolent persons (the foremost of whom was Mr. John Harrison, the first Surgeon to the Charity) opened a small Infirmary in Featherstone street. This locality was speedily changed for Prescot street, Goodman's Fields, and the need for additional accommodation soon becoming apparent, a portion of the present building was opened in 1757. Not long afterwards the Governors were incorporated by Royal Charter. The West Wing was opened in 1831; the East Wing in 1842; and the Alexandra Wing in 1866.

The progress of the Hospital as a House of Refuge for the Sick Poor may be gathered from the fact, that while in the first eighteen months of its existence it received only 227 In-patients and 2,188 Out-patients, the Registers of the twelve months ended 31st Dec. 1869 embrace a total of 4,398 In-patients (exclusive of 460 remaining under treatment at the beginning of the year) and a total of 49,976 Out-patients.

The position of the London Hospital in the neighbourhood of Docks, Factories, and Workshops, renders it, probably, one of the largest Accident Hospitals in the world.

The London Hospital contains about 570 beds, varying in appropriation according to circumstances, but at present thus allotted, namely:—

For Accidents and Surgical Cases	320
For Medical Cases	155
For Diseases of Women	12
For Children under Seven Years of Age	40
For Female Syphilitic Cases	15
For Ophthalmic Cases	11
Extra Beds in various Department as required	17
Total	570

Maternity cases are attended at their own homes in numbers proportionate to the available staff of students. 677 cases were thus attended in 1869.

The large Out-patient Departments not only embrace general, medical, and surgical practice, but have the advantage of special arrangements for the treatment of patients with diseases of the eye, ear, skin, and throat, as well as dental and obstetric cases.

The London Hospital stands out prominently as one of the most active Hospitals in the capital in the onward movement of medical education.

Transactions of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, Nov. 28.

Mr. W. Spencer Watson read an

ABSTRACT OF A PAPER ON SQUINT, AND CASES OF FAILURE OF THE OPERATION OF STRABOTOMY.

The causes of failure were enumerated under the following heads:—

An Analysis of 103 *Cases of Convergent Strabismus.*

Age under thirty years, in		100
,, over ,, and under thirty-six years, in		3
Total		103
Family tendency traced in about ten cases.		
Hypermetropia in one or both eyes		69
Myopia in one eye associated with Hypermetropia in its fellow	2	5
Myopia in both eyes	3	
Amblyopia due to Intro-ocular causes as ascertained by the ophthalmoscope, or inferred from symptoms, such as Nystagmus, in	20	46
Amblyopia due to nebulæ of the cornea or leucomata	7	
Amblyopia due to unascertained causes, some probably from Astigmatism, and others from disuse of the squinting eye	19	

Analysis of Cases operated on for Convergent Strabismus.

Result of operations in 99 out of the 103 cases. The operation being deferred or declined in 4 cases.

One eye operated on in	38 cases,—Good results ..	36
Both eyes ,, at one sitting in ...	44 ,,	
Both eyes operated on, with an interval between the 1st & 2nd operations in	13 ,,	
	95	
Notes deficient as to whether one or both recti were divided in ...	4 ,,	
Total ...	99 cases.	

Successful result in	73
Partially successful result in	12
Slight improvement in	4
Divergent Squint (subsequently corrected) in ...	3
Results not known in	7
Total ...	99

An Analysis of 25 Cases of Divergent Squint.

Myopia	9	
,, with Detached Retina...	1 } in	10
*Intra-ocular Disease		2
Hypermetropia in		7
Cataract		1
,, and Conical cornea		1
Intra-ocular organic changes in		1
		22
Causes of Squint unascertained		3
Total ...		25

Results of Tenotomy good in	7
,, ,, doubtful in	2
Unknown result in	3
Not operated on in	13
Operation by restoring the position of the Internal Rectus, successful in	1
Total ...	25

1. The pathological conditions were in some cases misapprehended. It had been supposed to depend, in ordinary cases, upon mechanical obstructions to the movement of the muscles or to bands of fascia. But from the free mobility of the squinting eye when the other eye is closed, this was clearly an error. From an analysis of 103 cases of convergent squint, it was shown that in at least two-thirds, hypermetropia was one of the conditions present in squint. At the same time retinal changes (in some cases due to pressure of the optic nerve against the side of the eyeball), nebulæ of the cornea, opacities vitreous, and other causes of impairment of sight in one or both eyes had a material influence in determining the permanent character of a strabismus, which would otherwise have been only intermittent, or would have been overcome by increased exertion by the accommodative apparatus, without convergence of the axes of the eyes.

2. The operation may fail from its employment in improper cases. For instance, where there is eccentric fixation from any cause, an apparent strabismus is seen, and in such a case an operation would give rise to dyspepsia, and would not probably be any improvement in the patient's condition, unless the second eye was very much impaired in its visual power. Or, again, strabismus may be apparent in cases in which one eye is very much larger than the other, from the presence of progressive myopia in one, and a normal condition in the other. In consequence of this want of symmetry, the cornea of the smaller eye appears to be much nearer the inner canthus than that of the larger, and this appearance might mislead the surgeon in a hurried view of the case.

3. The operation may be improperly performed, either by missing the bend when passing the blunt hook, or by dividing the tendon too far away from its sclerotic insertion. Cases of various kinds of failure from improperly performed operations were adduced, and some hints given as to how such accidents might be avoided.

4. The after treatment may be improper, and so cause failure. The patient may object to a second operation when the first has been insufficient; or he may object to the use of spectacles; or the reflection not having been ascertained, the surgeon may neglect to prescribe the necessary glasses; or the eye operated on may be kept covered up too long after the operation; or sutures may be omitted when required; or proper exercise of the eye after operation may be neglected; and in all these cases imperfections or complete failure may result.

Mr. Watson then stated in what cases an operation for squint should be avoided, or deferred. In particular cases of periodic squint, cases of apparent squint, squints in very young children in whom the after-treatment by glasses cannot be effectually carried out, cases of intra-ocular tumours, cases of brain disease, and cases of paralytic squint in the early stages. He then made a few observations as to the importance of adapting the kind of operation to the size of the squint, and the advantage of using the strabismometer before operating in all cases. The strabismometer of the late Mr. Zachariah Laurence being the most convenient and effectual.

* Probably the result of progressive posterior staphyloma.

ST. ANDREW'S MEDICAL GRADUATES' ASSOCIATION.

The Annual Session was held on the 2nd and 3rd as usual, when much business was transacted, and some very interesting papers were read.

Dr. Richardson, who retires from the Presidency this year, and has been appointed President of the Council, delivered the address on

"THE FUTURE OF PHYSIC,"

of which we give an abstract:—

"Indulging one day in a luxurious day-dream by the seaside, it came to me that it would be a pleasing and useful task to devote occasional hours to the construction of a history of the science of medicine of the Victorian era . . . to write of the men who, moving actively amongst us at home and abroad, were worthy the pen of the honest historian . . . to narrate the natural history of diseases we see now around us in our daily tasks, that they who come after us may know with what we had to contend, and may compare our present practice with their own . . . that they may measure faithfully the course and progress of curative art, from this epoch to theirs. So vividly did the scope and character of the work appear before me that, even to minuteness of its detail, the plan was fixed in my mind; and since then I have found the labour of carrying it out a natural and agreeable pursuit, the which if I like to accomplish it, will perchance yield a work likely to live long when I am dead. As I have been writing on the past and present, a vista has often opened of the future of medicine, of the courses which medical science will take under the influences of changes of thought respecting the physical forces of the universe; of the new bases of the science, and of the perfections that will spring from them; of the greater knowledge of life and functions of life; and of the more certain modes of preventing and curing disease. Therefore I have been led to ask, what can we, who now exist, do for the future? What are we doing for it? Are we doing the best we can for it, or can we amend? In these contemplations I have founded the subject of the present discourse. At first sight the position of the present, from which we start, is neither assuring nor promising. A severe critic, with no intention of untruth, might say of us that we live and breathe in uncertainty; that, socially, we appear to dabble with questions of legislation without either teaching or influencing the legislator; that we appear to trust to Government protection for the right to apply our skill, and, instead of aiming to cast away the oppressive shield it loans to us at bitter interest, are ever wailing for the shield to be made stronger and heavier; that we appear to rise to prac-

tice on the paper wings of advertised emptiness, filling the sheet, not with painful touch of scientific industry and unsparing fact, but with the egotism of belief that each of us has done what others have not done and cannot do, though they religiously strive to follow our lead; that scientifically, we are incoherent and chaotic, and, like all chaoses, jarring, without reason; over proud of what we really do, and deaf to the demand that we must do more or be trusted less. . . . Be it my duty to indicate a leaf or two of the day-book of our life that may be revised wisely, a leaf or two that may be torn out wisely, or elaborated before that book passes into that unknown where it is ours no longer, either to cast, tear up, revise, or preserve. If we begin with what may be torn up, we come to a heap of mouldy leaves, supposed to contain some hidden virtue for making us powerful and respectable, but chiefly powerful, in the world. They are docketed as papers between the Profession and the State . . . papers that have cost us more trouble and more money during the present century than all our scientific and practical works since we became a profession. For the purpose of cultivating these leaves, or preparing soil for them, great voluntary organisations have been instituted during the era, which bodies, in one way or another—in eating, drinking, travelling, speaking, organising, disorganising, quarrelling, fraternising, writing, advertising, and printing—have, within Her Majesty's reign, disgorged themselves of not less than one quarter of a million of Her Majesty's portraits in sovereign gold. While another legal organisation, more compact, much more practical for itself, and much more determinate, has skilfully extracted by and for these same leaves some tens of thousands more. The leaves themselves have simply taken from us that patience of steady endeavour which trusts for the development of the most natural of sciences on the pure development of natural knowledge, and have produced amongst us separation of interests and galling unbrotherly bonds; they have drawn our men of genius for natural research from the noblest to the commonest work. . . . In suggesting the entire isolation of medicine from the trammels of bad legislation, I refer to the separation of science only. Present legislation leads to the existence and sustenance of rival boards, having rival powers and privileges, that induces us to make endless, wearing, and useless efforts to put down quacks by the power of law as against that of knowledge, and that fosters a stubborn belief in our security as a class, which crumbles to the dust whenever it comes in contact with the stern realities of life—with the sympathies, the fears, superstitions, and prejudices that make up the soul of human kind. For the future of physic, when we have a statesman born to us, he must be a statesman of the State, and not a statescraft man of our particular craft. . . . Of all professions and liberal callings, ours is the only one that has failed to produce a State Minister. . . . It is so because such of our body as have had the qualities and opportunities have trickled away in the miserable gutter of medical legislation, instead of plunging into the great politics of the nation, and studying the national in preference to the professional welfare. In the future we shall have great statesmen. We had at one time, and for many a year, a man who was as naturally strong as Bismarck, clear-sighted and light-sighted as Palmerston, eloquent as Peel, industrious and bold as Cavour, and who, but for the professional trammels by which he was held down, and the almost mortal professional fights in which he engaged, might have rivalled any of those ministers in fame—a man whose life I will depict in my history, be it only to show what human strength can do, and what ill-judged professional restraint can undo. . . . . The political, however, is only an accidental source of our power; the real source lies in the steady improvement, development, and simplification of medicine as a science and art. A William Harvey—he whose figure, by our sculptor, Durham, this year adorns the capitol of science of the capital of the nation—reformed medicine more than all the medical political preachers that ever lived; and this reference leads me to the leaves of our book that require, not excision, but revision. To begin with simple things, the first act required for the future of physic, is the simplification of the language in which we professionally communicate with ourselves and the world. . . . . Any man, or society of men, or council of many societies, that should set itself to work, in ever so small a way, to bring into use a simple and reasonable scientific language, would do a most important service to physic. . . . .

For the future of physic it is essential to revise our method of receiving and criticising what is brought to light as real or assumed novelty of knowledge. It is a marvel how physic is daily, and with infinite labour, rewritten; still more, how this is criticised. Now the popularity of the literary business, I cannot call it literary art, absorbs every man;] and sedentary force, force developed *in situ*, is, as compared with force *in motu*, all-prevailing . . . . while criticisms have become mere impulses—bastards of love and hate, boldness and fear, adulation and objurgation, industry and ignorance, flux of generosity and flux of selfish conceit. . . . . As a nation, we have a national fatuity for ignoring the history of our own country, and we are the most unpatriotic historians on the face of the earth . . . . . These errors of the Victorian age must be reformed resolutely. Giving due, and even handsome, credit to all fellow-workers wherever they may be, we must become, in England, just to ourselves. For the future of physic, it is essential that some revision be made in the system of training our sons for the work of our profession . . . . . I leave the subject with satisfaction here because of the prospect, clear in view, of two or three great central schools for physic in London, and one or two more in the provinces; with the prospect of professors vying with each other in celebrity, and living by their work; and with the further prospect of students from the remotest parts of the earth trooping to our Asclepian temples, where the light always burns with increasing lustre."

Dr. Richardson next proceeded to speak of the necessity of revising and extending our methods of medical observation by the light, for instance, of the laws of dialysis; of the need of an improved field of research in reference to the functions of the nervous system; the governing power of the sympathetic over the bloodvessels; the molecular changes in nervous structure; the directness of morbid impressions through the expanses of nerves; and of the primary origin of disease by instant change of nervous physical state, in accordance with the recent researches of Dr. Brown-Séquard. Speaking of curers and cures, Dr. Richardson observed:—

"The influence of race on vitality; the estimation of individual and natural life-values, on some more certain method than at the present time is known; the classification of disease geographically . . . are matters demanding inquiry; and as regards the actual cure of disease, what is our prospect touching the task that, between the first natural appearance of the human living thing on the earth to its last natural appearance, it shall not die from unnatural causes, nor from natural causes that come within the governance of man? It is good. It is good because we are learning definitely not to lose trust in remedies for the reason that we cannot apply them at once with accurate judgment, but to believe in them as powerful means of cure that are yet to be accurately employed. . . . Because we are seizing certain agents, and are forcing them to tell us what they perform on the body, what is their physiological action, and what antagonism of action they offer to the phenomena of disease. . . . Because we are learning, in respect to remedies, that their physical action on the process of animal natural dialysis, or action in controlling or exciting nervous systems, may be learned by methods of physical research, that wait but to be tried to be proved as true to us as other physical inquirers." . . .

"In the future of physic, as we advance in the directions I have tried to signalise, we shall stand firmer and fairer with the world. But our success shall not be perfect until yet another, and of all the mightiest, truth breaks upon us—namely, that the solemn and august secret of our power is, not in the amassment of wealth by our professional exertion,—not in the amassment of popularity by it—not even in the creation by it of that future fame and name in history which all men of noble instinct and noble nature would die to secure,—but in the accomplishment by it of one simple end, *the happiness of mankind*. In this accomplishment lies our own happiness, and with it all true and worthy power, all true and lasting glory. Meted out ever for this end, we require no other incentive for research, no other corrective for research, and no other protective against schismatic foes; nay, we require not even reward of gratitude, grateful though that may be when, spontaneously, it flows at our feet. It is a simple formula of living action this; but how potent! Is this professional desire, is this act, is this practice which we daily do, in desire, in act, in practice, is it for the happiness

of the individual, of the race? Shall the conscientious answer be Yes? Then is the act strong, unassailable, and, though it even partake of error, holy. Shall the answer be No? Then is the act weak, easily controverted, bad. This is not moral axiom, it is scientific truth. To many in all time it hath been known, medicine hath lived upon the knowledge; to many it is known now, and medicine is sustained by the knowledge; but in the future *all* must know it; it must be the perennial force hidden in our hearts; our unspoken secret, worthless were it revealed. It must be the bond between ourselves, holding us as brethren in such subtle sympathy that envy shall be an instantly detected deformity, repulsive and retreating. It must be the bond between ourselves and the world, by which the world shall hold to us neither from wonder, nor admiration, nor other doubtful quality of recognition, but from confiding, habitual, abiding trust. Above all, it must be the fountain of our inspiration from the Lord of nature, whose whole scheme and design of creation, however strange it may seem, and to feeble sight devious, is ever toward and for the perfected happiness of his worlds of life."

THE DINNER.

The members of the Association, and some visitors, dined together after the delivery of the address. The chair was occupied by Dr. Richardson. Covers were laid for sixty. Amongst those present were: Admiral Sir E. Belcher, Dr. Lyon Playfair, M.P., Mr. Marmaduke Bell, Mr. Hepworth Dixon, Mr. Prideaux, Q.C., the President of the Medical Society of London (Mr. J. Gay), Dr. Day, of Stafford, Dr. Ramsay, Dr. G. Ross, Dr. O'Connor, Dr. Cleveland, Mr. Frank Richardson, Dr. Thomas Ballard, Dr. Julius Pollock, Dr. Rugg, Dr. Paul, Mr. Dunn, Dr. Hayward, Dr. Day, Dr. Seaton, Dr. Wynn Williams, Dr. Day-Goss, Dr. M'Intyre, Dr. Semple, Mr. Ibbetson, Dr. Wyman, Dr. Bloxam, Dr. Whiteman, Dr. Watson, Mr. Hepburn, Dr. Frank Griffiths, and Dr. Gardiner Hill.

After the usual loyal and other toasts had been duly honoured,

The PRESIDENT proposed "the Houses of Parliament," associating the toast with the name of Dr. Lyon Playfair, M.P.

Dr. LYON PLAYFAIR, in responding, made the following remarks on various subjects connected with medical reform: the subject of medical reform was especially brought before the House of Commons last session. They were aware that the Government had a Bill which dealt with entrance examinations, but did not deal with the reform of the Medical Council. In consequence of this the opponents threw it out. He thought, and still thinks, that this was a mistaken policy. He got from the Government a pledge that if they took their Bill into discussion upon its merits, they would give a Select Committee this year to consider the reform of the Medical Council. Had they done so, the Government would have consented to modifications that would have rendered their Bill efficient, so that in this session they would have secured a second Bill for the reform of the Medical Council. As it is, the reform of that and of the standard for entrances is postponed *sine die*. For anyone who knows the difficulties surrounding such Bills must be convinced that it is impossible for a private member to carry any General Medical Bill through the House. The interests are too conflicting and too powerful to be battled with by anyone not possessing the power of a Government at his back. The Government hitherto have resisted popular representation on the Medical Council, because they view that body as representing the interests of the public at large, and not the interests of the profession. In one sense this is true, but it is not wholly true. If the Medical Council represented the interests of the public only, then the State should pay its expenses, which are considerable. But these are paid, not out of public money, but from a tax levied on entrants into the profession. The public interests ought to be fairly represented by Crown nominees, but surely the profession has a right to direct representation in a body supported by taxes on itself. This right appeared to him to be irresistible, and, he was sure, would have been conceded by a Select Committee. Another advantage would have resulted from this Committee, that it would have arranged the mode of election, so as to render it as little burdensome as possible to the candidates. The general medical constituency would be very large—about three times the constituency represented by himself in the Universities of Edinburgh and St. Andrews. But as experience has shown that such a limited constituency cannot have a contested election without an expenditure of one or two thousand pounds for each candidate, the possible expenditure of an appeal to the whole profession is very serious. It is no good saying that in practice it would not cost much, as a contest for a seat on such a board would not be carried on with the same spirit as for a seat in Parliament. So thought the candidates for the School Board this week, and yet there are few of them who have not spent as much, and some of them more than in a Parliamentary election. He was therefore very anxious that, in arranging the details of election to the Medical Council by a popular constituency, they should not cast an unexpected burden on the medical profession. A Select Committee might have obviated this. Whatever may be the reform of the Medical Council, it need not lose its present representative character of public bodies or of public interests, though it may be strengthened by a direct representation of the profession. He hoped that the Government might still bring in a Bill this session for dealing with the entrance examinations. He fully approved of a one-portal entrance, but thought that the door should be big enough to let in big cats as well as little kittens, and not like the philosopher cut small openings beside already existing big openings. What he meant was this—let the scheme encourage the entrance, by the same door, of giants as well as dwarfs in learning. A single entrance examination must be a minimum examination, one below which no one can enter. But if it qualifies, as it should, for the full exercise of the profession, it will have a tendency to make men aim for a minimum, and neglect a maximum of qualifications. He thought the Universities were quite reasonable in trying to prevent this evil. Why, for example, should a Bachelor of Science, who has passed an examination four or five times higher than that which would be required in the fundamental sciences on the one-portal system, be required to pass another lower examination? Repeated examinations are becoming an intolerable evil in all our educational systems, and are deteriorating real qualifications. He thought that every security should be taken on the one-portal system that no one can pass through it under its minimum, but that encouragement should be given for the acceptance of a maximum in the fundamental science. In the clinical and practical parts of the profession he would make no exception, as that forms the State security that a medical man was fit to exercise his profession. He strongly counselled those who were interested in medical reforms of such importance as the reform of the Medical Council, and the establishment of a one-portal system, to come to some understanding with the Government on these subjects, as it was entirely hopeless to bring them to a successful issue through the agency of any private member, however great might be his personal influence.

The PRESIDENT next gave "Prosperity to our old University." The toast was drunk with three times three.

To the toast of "Literature," Mr. Hepworth Dixon responded.

The remaining toasts included the President and the President for the ensuing year (Dr. Day), the Council and Vice-President, and the Press.

We learn from the report of the Council that the number of members amounted to 506, besides 24 associates, and 38 honorary members. During the year, death had carried off Dr. Uvedale West, Dr. Adamson, Dr. Eves, Dr. Armstrong (Armagh), Dr. Anderson (Glasgow), and Dr. Copland, F.R.S. The alteration proposed by the Association in the existing rule, and by which it is proposed to admit an unlimited number of candidates in each year to pass the degree of M.D., without residence, and subject to the passing of proper examinations, had been brought by the Assessor before the University Court, had been accepted by the Senatus Academicus, approved by the Chancellor, and now only awaited the sanction of Her Majesty in Council to come into force as a new statute. The new officers were elected as follows:—President: Dr. H. Day (Stafford). President of Council: Dr. Richardson, F.R.S. Vice-Presidents: Dr. Black (Chesterfield), Drs. Crisp, Cholmeley, Lockhart Robertson, Seaton, and Wynn Williams. Council in place of those who had gone out of office: Dr. G. Bird, Dr. Brewer, M.P., Dr. Butler (Winchester), Drs. Cooke, Wharton Hood, L. Hanwell, Nicholls, Semple, and Stedman.

Registered for Transmission Abroad.

THE

MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6

„ If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of

A. A. Tindall, 20, King William-street, Strand, London, W.C.

Moffat and Co., 6, D'Olier-street, Dublin.

Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—

New York—Turner and Mignard, Nassau-street.

Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 14, 1870.

THE ENGLISH MEDICAL CHARITIES SYSTEM CONTRASTED.

The English Poor-law Association contrasts the English and Irish systems of Poor-law administration with a view to prove that, were we to increase the efficiency and salaries of our Poor-law medical officers in England, we should greatly lessen the pauperism which is so threatening a phenomenon in modern English civilisation. In his recent address, the President of the Association tells us "that in Newcastle-on-Tyne, with a population of 110,968 inhabitants, there are only 8 medical officers, with a total cost of only £853 for medical relief, but a cost of no less than £43,093 for Poor-law expenditure; whilst, in Belfast, with a population of 146,529, there are no less than 18 medical men employed, at a cost of £3,700; but the total Poor-law expenditure is not half that of Newcastle, that is, it is only £22,114 12s. 5d."

Dr. Maunsell, who has paid considerable attention to Poor-law questions, states that, in England, the mean amount of paupers in receipt of out-door relief is 784,906, and of in-door paupers, 157,740. In Ireland, only 50,257 receive out-door relief, and 288,953 in-door relief. He thinks that this is owing to the fact that the vast majority of cases of out-door relief are those of sickness, which, in Ireland, come under medical charity, and, in England, are cases of out-door relief. The cost of each out-door pauper in England is £4 5s., and of the same person in Ireland is £1 per annum. The expenditure for out-door relief in Ireland on the 50,257 paupers was about forty-eight thousand pounds, and for those relieved by the medical charities about one hundred and twenty-four thousand. In England, each in-door pauper costs about £8 10s. a year, and each out-door pauper costs £4 5s.; but the latter are enormously augmented in number by the want of a Medical Charities' Act. In Ireland, the medical charity system enables budding pauperism to be arrested at a cost of only half-a-crown per head per annum; and the rates in Ireland, it seems, are about three shillings in the pound against seven shillings in the pound in England. In Ireland, the receipt of a medical order does not convert the recipient into a pauper. In England it does. In Ireland, it is called *medical relief*, costs half-a-crown a head, and does not demoralise; in England, we call it *out-door relief*, and make people paupers at a cost of £4 5s. a head. Decidedly "they manage these things better in Ireland." There is no law, too, in Ireland to prohibit out-door relief to the able-bodied more than there is in England; and it seems pretty clear that the report of the Poor-law Board recently issued is fallacious, when it states that gratuitous medical attendance would entail "great additional public burdens." The very contrary of this is shown to take place in Ireland.

It seems that, in all Ireland, there are 2,410 medical men, and of them 949, or three-eighths, are Poor-law medical officers. The number of medical men in England and Wales is 10,616. In London, there are 3,228 practitioners of medicine, or one to every thousand inhabitants; in Dublin, the proportion is greater per thousand. There are 7,000 medical men for all England and Wales, excepting London; and, if the numbers of practitioners of the large cities are again subtracted, there are, in all probability, just as few medical men in English rural districts as in Ireland. The consequence of this is, that much of the work in England is done by unqualified assistants. There are only 3,906 Poor-law medical officers in England out of the 10,616 medical men; and, in Ireland, there are 949 out of 2,410. The efficient system of Poor-law medical relief at present existing in Ireland was introduced in 1852; and in that year, according to Dr. Rogers, the gross expenditure or poor relief was £1,099,678, or 1s. 7d. in the pound, including medical relief (then only £54,289). In 1869, the total cost of poor rates was only £817,772, or 1s. 0¼d. in the pound, including medical relief, which was now no less than £124,000 on the medical charities alone.

It is stated that a very large number of cases of out-door relief are those in which the recipient has nothing more than medical relief; and many letters have been written to say that for every pauper requiring relief, the writer attends four or five requiring medical relief only. It is very common, indeed, to have an order for medical attendance on the wife or children, the husband being at work at the time, and receiving no further relief. The services of the Poor-law medical officers are not always strictly limited to the pauper class. These services are sometimes ordered and given to persons who neither require nor receive any further relief,—nay, whom the Board pronounces able to provide additional relief for themselves even in midwifery.

The Poor-law medical officer in England is greatly imposed upon. At the aggregate meeting of medical officers

in June, 1868, the late Dr. Colburne said, "Not only do nearly the whole of the rural labouring population, but labourers in the direct employ of the rich and distinguished, even Cabinet Ministers, peers of the realm, possessors of fabulous wealth, come upon us for themselves or families as patients." The facilities for medical relief to the real poor, however, are not nearly so great as they should be in England and Wales, inasmuch as they are now rendered by medical officers under a galling sense of injustice. In Ireland, the districts are fairly equalised, salaries are much larger and more uniform, all drugs are found, and the dispensary physician can rely, in the performance of his duty, on the support of the Commissioners. In England, salaries are fixed by guardians on no principle whatever, and districts are sometimes so large that no one man can attend to them. With the exception of London and a few large cities, all drugs are found by the medical officers.

Need we wonder that, with all these absurdities, the pauperism of England and Wales should be so extensive, that vaccination should be so ill-carried out, that we are threatened with an epidemic of that loathsome disease, small-pox, in London at this very moment, and that the hearts of our unfortunate brethren of the Poor-law medical service should be full of disgust and sorrow? There never was an agitation which promised more fruits towards the improvement of morality and health among the humble classes in England and Wales than that of Poor-law Medical Reform; and we feel persuaded that if the agitation be kept alive, we shall not be able much longer to say, "they manage these things better in Ireland."

Notes on Current Topics.

About the War and Wounded

We have before mentioned how the war appears to be brutalizing the Germans, who previously had in this country a reputation for gentleness, they are rapidly losing. Some of the stories of cruelty have been called in question, but the following being vouched for by Mr. Bullock, will not be questioned, and it records the murder of a medical man engaged in attending the wounded and sick. Mr. Bullock thus records the death:—"A young French doctor named Lebaude, attached to the International Ambulance at Sedan, having business which took him to Mézières, was avoiding the high road, which is occupied by the German troops, and took to the railway embankment, when a sentinel shot at him and missed. M. Lebaude at once displayed a white handkerchief, but in vain, for a second shot traversed his breast, inflicting a wound, of which he died within twenty-four hours. To a fund being raised to support the poor widow, who is temporarily left destitute, I contributed fifty francs out of a sum committed to me by Dr. Egeling, of the Hague, for the relief of distress in France."

* * *

Last week we recorded the death, from over-work, of Dr. Davis, a coloured physician, who was known to the poor people in the neighbourhood as *le bon docteur noir*, and whose memory will remain, we hope, as long as that of the suffering which developed his character. Dr. Davies was a student of St. Bartholomew's Hospital, London, where he made all his friends. He afterwards graduated at Aberdeen. The Hospital and University may both be proud of him. He was a worthy member of the most exacting profession, ever ready to do all the good he could; and he entered on the mission which put an end to his career, from sheer love to his kind, and the work. How our professional heroes contrast with the tinselled hosts of Mars.

* * *

A discussion was held on the 28th ult., in the Health Section of the Social Science Association, respecting medical organisation in war time. Colonel Lindsay, Sir J. G. Logan and others were present. We should be glad for a full discussion to take place, but we think that military surgeons are those who should chiefly speak. Their views are far more entitled to be heard than those of mere civilians, who take up the subject for a time while it is popular.

* * *

We hear that pyæmia has appeared at Orleans. This is scarcely more than might have been expected. It is also told us that disease is making considerable ravages amongst the German troops round Paris, and in other parts of France. The exposure to the trying weather would be sure to bring about this result.

Increase of Small-Pox.

At the last meeting of the West Derby (Liverpool) Guardians, the governor reported that small-pox is on the increase. There have been two deaths from that disease this week, and there are now twenty-three cases under treatment. Twelve cases of small-pox were admitted for the week ending the 29th November.

Our Glorious Constitution and the Beauties of Representative Government.

How blessed is our lot as great Britishers, and how thankful we should be that "we are not as other men are." Where is the other country where the right man or the right woman are never in the right place? Where is freedom of election so universal and where is its exercise by the happy electors so sensible and admirable? Outer barbarians may be led away by humbug and clap-trap, or meddlesome women, but *we* know better. Witness the School Board elections for Marylebone and Finsbury:—

Miss Garrett first with 47,858 votes; Professor Huxley a very bad second, with 13,494; Mr. Hepworth Dixon all but distanced with 9,031; Mr. B. Lucraft, elected. "Oh! where is wisdom to be found?" The only shop in which the really genuine article can be procured is that of Mr. John Bull, wholesale maker and mender of political constitutions.

Adulteration in New York.

It appears from a statement in the *Food Journal* that New York suffers as much from the evils of adulteration as London. This kind of fraud is largely carried on in the article of sugar-caudy, for mixture with which great quantities of kaoline, or porcelain clay, are annually sent from South Carolina. Fortunately, the imposition is easily detected, the sugar being soluble in water, while the clay remains undissolved. It is hard that the

American youngsters cannot suck their lollipops without having their insides turned into a china shop. A still worse form of adulteration prevails in the article of cream of tartar (tartrate of potash), if, indeed, it can be called adulteration at all, when there is not a trace of cream of tartar to be found in the material sold under this name, which is composed of five-sixths of plaster of Paris, and one-sixth of sulphuric acid and starch.

Co-operation between Doctors and Druggists.

There has long been more than a suspicion that, in London, a very desecrated kind of traffic is daily carried on between *practitioners of a certain grade* and druggists anxious for business, and not very particular how it is got. The mutual advantage accruing is, that the practitioner gets a second fee out of the patient in the shape of a handsome commission on the cost of dispensing his prescriptions, the druggist works his little monopoly at prices which pay both him and his doctor-patron well, and the poor patient is compelled to pay for his medicine double or treble the price for which he would get it better dispensed elsewhere.

A person of the name of Watson Bradshaw, has elaborated this principle to a nicety, and by means of a system of prescribing unheard-of preparations, makes sure that his personal druggist, and none else (but himself), will reap the benefit. His prescriptions are compounds of such *recipes* as "Ext. Nervini," "Acid Eupepiptici," "Ext. Laxative;" and respectable chemists to whom these prescriptions have been brought, have raised a legitimate outcry in the *Pharmaceutical Journal*

Dr. Watson Bradshaw (?) considers that he has a "perfect personal right" to have his prescriptions compounded by his special druggist, and that the matter is "his own private affair." Suppose we agree with him! Will he not allow us the "perfect personal right" to say that the transaction is disreputable and disgraceful to the profession. But we *don't* agree with him. A sick man who pays Dr. Bradshaw for advice gives his money and should, in honesty, get what he buys, unrestricted by any of Mr. Bradshaw's arrangements for a commission. The patient purchases intelligible information, and not unmeaning gibberish, and Dr. Bradshaw has no authority whatever to keep back what he bargains to supply, still less has he any "private personal right" to dodge the patient out of a second fee.

Supposed Impress of an Image by Lightning.

The Coroner for Sandhurst, near Melbourne, Mr. Pounds, publishes in the last number of the *Australian Medical Journal* a case of death by lightning, which appears to have been carefully and accurately observed by him. One of the observations made is very extraordinary, supported as it is by reliable evidence, and by apparent care and calmness in its record. After describing other *post-mortem* appearances he says, "having entirely removed the clothes from the body, notwithstanding the unusual *post-mortem* lividity of the neck and of the skin over the right side of the sternum, we could distinctly see the impression of a young tree of ironbark, in most parts as plainly as if photographed, and in the same sepia tint upon the white skin. Its trunk or stem was quite reversed, commencing at the neck, where the mark of the lightning from the acute angle of the lambdoidal suture at its junction of the sagittal suture, had left the distinct mark described, and extending, as I have stated, across the sternum to the left ilium, leaving upon the breast-skin the impression of the branches and leaves, although reversed, quite perfect and visible to the naked eye, even then some twenty hours after death, when it was fast fading in the increasing lividity of the parts around.

I greatly regretted that every well-informed medical man in my district had not an opportunity of seeing this case, and that I had not known of the existence of that singular phenomenon the previous evening after death, before any discolouration had set in, else I should have endeavoured to have had a photograph taken of deceased's chest. However, having quietly succeeded in taking a rough sketch, I left, and revisited the place of death; and, from the hurried outline sketch I had taken, I found the exact *fac-simile* in a young ironbark tree, growing about twenty feet high, and standing by itself on the opposite side of the road and within some sixty feet of the spot where deceased was killed, and looming as it were between the spot without any interposing objects between it and that part of the open horizon from which, south-west and by south, the storm had come the previous afternoon. I took a rough sketch there of the tree; but, upon re-visiting the place for the purpose of writing this narrative of the facts in so interesting a case, nineteen days after the occurrences, I found much of the tree's foliage had fallen off, as if it had been to such extent affected by the lightning passing above, across, or near it, as to leave its distinct impression upon the body. It remains an interesting subject for inquiry, for which I should like to find an explanation, how, through so much clothing over the body, the figure of the tree could be so mysteriously and so wonderfully impressed with its distinct and perfect form."

The same fact is testified to very unequivocally by Dr. Kieram, the surgeon who made the *post-mortem* examination of the body.

Epidemics and Endemics.

Dr. Arthur Ransome, of Manchester, says, that whilst bronchitis and catarrh, as every one knows, are most common in winter, and diarrhœa in summer, rheumatic fever is a capricious complaint, although rather more frequent in winter than in summer, the disease may come on at any time, but is commonest in autumn. As to scarlatina, it is never entirely absent, and usually is most prevalent in autumn, and least so in dry summer months. Measles is essentially a disease of winter and spring. Whooping-cough, too, is, on the whole, more prevalent in cold than in warm weather. Typhus fever is rare during the frost of winter, and the number of cases is low in early summer. There is little typhoid fever in Manchester, which is ascribed by him to good drainage and water supply.

Sulphurous Acid in Typhoid Fever.

Dr. Wilkes, of Ashford, Kent, affirms that he has had *very great success* in the treatment of typhoid fever by means of small doses of sulphurous acid. He gives the acid with syrup of oranges in water, in doses of from two

and a half to twenty minims every four hours, until the patient complains of tasting, as it were, lucifer matches. He alleges that this remedy arrests the further development of the fever-poison, and thus *exterminates* the fever. "Briefly, it is an antidote." Of 173 cases of typhoid fever treated, only two died, and these two did not take the acid.

Alcoholics Again.

Dr. Parkes has been experimenting with claret on a patient, and finds the injestion of a certain quantity, produces acceleration of the heart's action, but no marked rise of temperature. Ten ounces of the wine contained one ounce of pure alcohol. When the man took twenty ounces, he was flushed and uncomfortable and alcohol began to appear in the urine. This healthy man, Dr. Parkes says, would be better without alcohol, as it increases the heart's action too much, and might lead to alteration in its condition, or to injury to the vessels, if any degeneration in these were to take place.

Skin-Grafting.

This seems to be the pet of the hour of surgery. Dr. Gillespie, at the Royal Infirmary of Edinburgh, in order to heal a surface, the remains of a large callous ulcer, removed recently two pieces of skin about ¼″ in diameter from the upper arm, by raising them up with dressing forceps and cutting them off with scissors. These were placed on the surface of the healthy granulations and retained in position by strips of isinglass plaster. Two days afterwards the patches were found to be adherent, but one soon fell off dead. The other did well, and the ulcer cicatrised on the twenty-third day. In the Clinical Society of London, too, on Nov. 11th, Mr. I. Croft showed a patient who formerly had a sore, six inches by four, on the leg. On August 1st, a piece of skin, 1-11″ in diameter, was snipped from the thigh, and fixed on the sore. On the 22nd, an island of skin was seen, which spread rapidly, and the wound was soon nearly skinned over. Mr. Mason's own experience led him to say, that the size of the grafted pieces should be that of canary seeds. Mr. Arnott had removed the diseased structures in keloid of the neck and transplanted some pieces of cuticle. One piece slipped, but four did well. In the case of a man, who had two sloughing ulcers, which after a time improved, he transferred to one three pieces of cuticle, and left the other alone. These did well, and the sore healed, but the other did nearly as well without them. Mr. Durham mentioned the case of a boy with lupus non-exedens of the face, which he had excised, and loosening some strips of skin at the edges, he turned them in, without destroying their connexions with the cheek. All adhered, and did well, each becoming a centre of cicatrization. Small pieces, he thought, were better than large ones. Mr. Callender mentioned the case of a tertiary ulcer of the leg, on which a graft had taken root and done well.

Memoir of Sir James Simpson.

The Executors of the late Sir J. Y. Simpson are making arrangements for the preparation of a Biography, and request persons possessing interesting letters from him, or interesting information regarding him sending the same to them.

The Irish Union Apothecary.

The Irish Poor-law Commissioners have addressed a long letter on the subject, which is published in the *Journal of the Irish Medical Association*, to the Guardians of the North Dublin Union.

In declining without hesitation to withdraw the order in question, the Commissioners avail themselves of this opportunity to enter into some further explanations regarding it, in addition to what has already been stated in the Circular which accompanied the order, in a letter addressed to them by Messrs. Boileau and Boyd, from which they quote the following passages :—

"The system carried out (in making Poor-law medicine contracts) is so uncommercial and so unbusiness-like, that we feel perfectly sure that were you to be placed in the position of knowing all the facts connected with it, it could not for a moment be sanctioned."

* * * * * *

"We have always when furnishing any price list of medicines drawn special attention to quality, and made allusion to the trade artifices used in the contract system, but all our expostulations with a very few exceptions, have proved unavailing."

The Commissioners entered in 1861 into a correspondence with the Lords Commissioners of Her Majesty's Treasury, having for its object permission to appropriate a small part of the contingent funds of this department, to the appointment and remuneration of professional referees, for the examination of medicines complained of by the medical officers of unions.

At the close of the year 1866, the Commissioners received such a sanction as they could act upon, to the proposed expenditure, and immediately availed themselves of it, by establishing the form of contract now existing, which binds the contractor to take back bad medicines condemned by a professional referee, and replace them with proper ones.

In the course of the few years' experience which the Commissioners have had of the operation of this form of contract, they have obtained several valuable reports of analyses made by Dr. Apjohn of samples of medicines complained of and sent to him for examination.

These examinations have not been without result altogether, medicines condemned on analysis, have been taken back by contractors and replaced, but the punishment, if such it can be called, is wholly inadequate to the offence, and has not had, and is not likely to have, the effect of remedying the evil.

The present order therefore, has resulted from many years' experience of evils, which it has been attempted to contend with in other ways, and owes its existence to no external source, and to no motive but that of desiring to procure good and reliable medicines for the treatment of the poor.

The Commissioners felt in fact that the time had come when they ought to use every power with which they were invested by Parliament, for the remedy of so grave an evil. If the exercise of those powers should fail, they will be in a situation to apply to Parliament for further legislation on the subject.

Mr. Gohaul Chunder Roy.

This gentleman, whose name will be seen in the late lists, is the first Indian who has presented himself for examination for the Fellowship of the Royal College of Surgeons of England.

Disability of Candidates for the office of Poor-law Unions Apothecary.

It has been a subject of some debate amongst the Profession in Dublin, whether a member of the College of Physicians can be a candidate for the office of Poor-law Unions Apothecary.

It had always been understood that the College of Physicians required candidates for its licence to give up their Apothecaries Licence, if they possessed one, and to enter into an obligation not to practise as an Apothecary. We learn that, that restriction has been to a certain extent removed, and holders of its diploma are not now required to surrender their Apothecaries Licence, and, if they have already done so, they are entitled to have it returned to them whenever they claim it.

The College, however, still inhibits its Licentiates from keeping open-shop for the sale of medicines. We are anxious to see whether contracting under Government for the sale of large quantities of medicine is equally objectionable to the College with the dispensing of pills and mixtures to patients.

Snakebite Mortality in India.

The statistics of deaths by snakebite in India are given to the Profession by the *Indian Medical Gazette* in a supplement to its last issue, and they certainly establish a case for the adoption by the Indian Government of some system for the extirpation of venomous snakes. It appears that 11,416 lives were lost last year from this cause, of whom 4,146 were men of adult age. Of these deaths 2,690 are known to have been caused by bites of the cobra; and in nearly 7,000 cases the species of snake was unknown; but, from the proportion of deaths caused by the cobra, it may be assumed that, altogether, at least 5,000 deaths result from the existence of this snake alone.

This terrible mortality indicates a proportion of one death to every ten thousand of the population, and shows that snakebite is one of the most frequent causes of death in India.

The Bishop of Manchester on Female Medicine.

The Women's Rights agitators appear to have made a dangerous mistake in selecting for their Chairman the Bishop of Manchester, who would appear, from his utterances, as their president, to be a man of views too logical, and, as they would say, too antediluvian for their purpose. Instead, therefore, of singing the song set down for him in the programme, in laudation of female progress, he took an unexpected and unwelcome vein, and said as much against the extreme development of the women's rights movements as its most violent opponent could give expression to. The following is his lordship's denouncement:—

"Whilst he welcomed everything that would make the education of women sounder, more deeply cultured, ranging more over the whole of her faculties than he was convinced the education offered to them hitherto had done, he wished to keep distinct the proper functions of the woman and the man in the constitution of modern society; and he could not welcome any attempts by which women sought to intrude upon functions that did not belong to them. When he saw ladies thrusting themselves in all directions into the domains of politics and medicine, he was reminded of the Athenian Council in one of the plays of Aristophanes, where the ladies, presuming to take in hand affairs of state, found that they made a mess of them, and concluded that their duty was to attend to their own business at home. What was wanted was a strengthening of the female character on its true divine foundations. For instance, he, the other day, was in correspondence with a lady who wrote him a very admirable letter on the opening of schools of medicine to women. There were certain departments of medical practice which might with great advantage be committed to women; but if any persons thought that a school of anatomy, attended by mixed classes of male and female students, of from eighteen to twenty-five years of age, was an edifying spectacle in the midst of our modern civilisation, their notions and his were widely different."

The late Dr. Uvedale West.

Dr. Robert Uvedale West, who lately died at the age of sixty, resided of late years at Alford. He was esteemed as one of the most skilful and experienced accoucheurs. He himself attended nearly 5,000 cases of midwifery, and he had contributed to various journals several highly practical and exceedingly valuable papers in this branch of practise.

Vaccinophobia.

When the vaccinophobiacs are doing their best to increase the epidemic of small-pox amongst us, by spreading useless alarm as to the consequences of vaccination, and multiplying ignorant and false assertions, it is pleasant to see an able paper like the *Examiner* take up the subject of vaccination and small-pox in a spirit of inquiry worthy of its columns.

In a capital article last Saturday, the *Examiner* completely disposes of the allegations of the vaccinophobiacs, and if it treats them with far more consideration than they deserve, we hope they may be the more disposed to learn. We have not space at our disposal, or would cite the whole article, which sums up very well what vaccination has done for humanity. The writer says:—

"We have no objection to the matter being fairly discussed over and over again. If such were not the case, the truth of the assertions of vaccinators would soon be forgotten, even by the majority of doctors; but we earnestly maintain that Government is fully justified in compelling parents to vaccinate their children."

We are glad to find that the *Examiner* has on its staff men capable of looking at such questions, and incapable of being deceived by the constant repetition of the ridiculous fancies of fanatics.

Is any one Sane?

It has long been a saying that "one-half the world believes the other half mad," and some of our mad doctors have the credit of never being at a loss to find signs of unsoundness of mind in criminals.

We may in time get a little further, and find all the world mad if we follow the line of the *Pall Mall*, which on Saturday evening, published the following paragraph:—

"An interesting question is raised by the medical officer of Portland prison in his annual report to the Directors of Convict Prisons, which has lately been printed. After mentioning the fact that the feigning of insanity has wonderfully decreased in that prison, of which he is sincerely glad, as it demands in the detection an exercise of great care and judgment, and it is often a long time before the mind can be fully satisfied as to the real or feigned

aspect, he adds, 'it would be an abstract question for psychologists whether a man who can simulate insanity is really at the time perfectly 'mens sana in corpore sano.' This subject is one of great interest, but I could not even attempt to enter upon it within the scope of an annual report. Insanity and crime are, I have no doubt, often very closely allied; and we may hope that psychological science will at some future time be able clearly to define a line of demarcation.' It is to be hoped that psychologists, if they take up this subject, will be very careful what they are about, otherwise they may discover a line of demarcation between sanity and innocence in the ordinary acceptation of the terms. We shut up in prisons people against whom we prove guilt, and should probably shut up in a lunatic asylum any one against whom we could prove innocence; fortunately, even if we suspected a fellow-creature of being thoroughly innocent, it would be difficult to prove it against him. As society is constituted a thoroughly innocent person would, it is to be feared, be so inconvenient that we should be obliged to lock him up in self-defence; even if not violently innocent he would be utterly helpless and useless for all practical purposes. Success in any of the learned professions would be out of the question—as a mechanic he would fall a victim to some Broadhead or be starved by the action of the trade unions. It is an abstract question for psychologists whether a man who can simulate sanity is really at the time 'mens sana in corpore sano,' for there is strong ground for believing that most, if not all of us, are conscious that we are in truth only simulating sanity. We bungle sadly in the attempt as a rule; those who succeed best we call our 'great' men; and it would be satisfactory, considering the important interests with which we trust them, to know that these latter really are sane. The present condition of Europe throws some doubt on the point."

There is to be a dramatic performance at St. George's Hall on the 19th, on behalf of the Middlesex Hospital.

On Saturday the 3rd. inst., Dr. J. Broderick Barbour, was appointed resident medical officer to the Stockwell Fever Hospital by the Metropolitan Asylum Board.

Dr. Lory Marsh will preside at the next dinner of the Medical Club, which will take place on Tuesday, December 20th.

The Liverpool Corporation have requested Professor Huxley to nominate some gentleman to enquire into the causes of the towns present unhealthiness.

Dr. Brewer, M.P., has been elected a member of the Metropolitan Board of Works for the parish of St. George's, Hanover square, in the place of Col. Hogg.

Dr. Thorne Thorne has been to inquire, on behalf of the Privy Council, into the outbreak of fever at Stevington, near Bedford.

Professor Odling, M.B., F.R.S., will on December 27th, 29th, 31st, and January 3rd, 5th, 7th, deliver the customary Christmas Lectures at the Royal Institution, adapted for a juvenile audience, the subject being "On Burning and Unburning."

According to the *Western Morning News*, scarlatina, which is very epidemic in Devonport now, appeared in the *Impregnable* training-ship a short time ago, spreading rapidly amongst the boys, but the staff-surgeon has since written that it has disappeared, and that in all only sixteen boys were attacked, none of the cases being serious.

The next meeting of the Medical Society of London, on December 19, is intended to be a "Clinical Evening," and Dr. Thudichum is expected to give some of his recent clinical experience at the Seat of War.

Every effort is being made fairly to test the working of the Contagious Diseases' Act. Officers commanding at stations where it is in operation, have been directed to render weekly a return of the numbers admitted on, and discharged, from the sick list under the Act.

Several professors of medicine, of the University of Bohn, have been attending the sick and wounded in France, and Drs. Busch and Rindfleisch have obtained the Iron Cross. The number of medical students at Bohn this year is comparatively small, on account of the war.

It is said by Lord Shaftesbury, after a visit to the sick and wounded at Heidelberg, that the care taken of the poor fellows was beautiful to behold, and that the *entente cordiale* is in great force between the French and Germans, who are as cheerful as the day is long.

Dr. Doring, of Vienna, says, that he has found chloral hydrate of very great service in sea-sickness, even in long voyages. This assertion is easily tested in our "beautiful isle of the sea," and chloral hydrate is again on its trial. It has often been tried and failed in our hands in other matters.

A short time ago Mrs. Sands Cox, of Dosthill hall, Tamworth, laid the corner stone of the Church of St. Thomas-in-the-Moor, Birmingham, which is to be erected to the memory of the late eminent surgeon, Mr. Edward T. Cox, of Birmingham, and will be able to contain four hundred persons.

We hear that the Head Lectureship in Experimental Physics, Clifden College, Bristol, worth about £300 a-year, has been conferred on Mr. John Perry, of Belfast, who a short time ago won the Whitworth Scholarship for Ireland, and is also a Gold Medallist of the Queen's University of Ireland.

It has been suggested to the Newington vestry by Dr. Iliff, their medical officer of health, that some of the many railway arches in that parish, should be utilised as mortuaries, and for establishing a public disinfecting apparatus. We heartily agree with him as we consider that both of these necessaries ought to exist in every district.

According to a contemporary, Sir William Fergusson has a notion of forming a national collection of surgical instruments, in connection with the Museum of the College of Surgeons, which will illustrate the progress of Surgery in this country, and also throw light on the various improvements made at times, by which collection exact data may be provided for future comparisons and matters of priority.

The bad sanitary condition of Camelford is very properly called attention to by a correspondent of the *Western Morning News* who says, that low fever prevails to such an extent in that town, that nearly half the houses have been infected. The town-well is said to be contaminated, which is very probable if, as is said, the town drains flow close by it.

A Correspondent of the *North Wales Chronicle* put forward the suggestion, that a "Hospital Sunday" should be instituted for the benefit of the Carnarvonshire and Anglesey Infirmary. It is shown that there are fifteen hundred places of worship in the two counties, and that an average of only £1 from each would increase the infirmary funds by £1,500. We shall be glad to hear of the proposal being executed.

The general health of the troops in the Madras Presidency is considered very satisfactory by last reports. The health of the 21st regiment at Bangalore has greatly improved, as the men have shaken off the malarious fever contracted at Kurrachee. A great number have been invalided to England, and among the remainder relapses of ague are less frequent. The wing of the 76th at Thayetmyo, has also regained its health, the cholera which had infected it severely, having wholly disappeared.

Those of us who are fond of a glass of milk instead of wine or beer, have been rather terrified to hear of late, that we may easily be assailed by typhoid fever on account of our simple tastes. It is too bad that the pursuits of temperance should lead to such calamities. Nature certainly does not care much for us after all.

Dr. Robert Jolly having resigned the office of resident surgeon to Queen's Hospital, Birmingham, after having held it for five years, the students of that institution lately presented him with a handsome testimonial and an address, as a token of their high appreciation of his services and uniform kindness. He has now been appointed assistant-surgeon at the General Hospital.

A meeting of gentlemen interested in scientific education was held on Tuesday night, the 6th inst., at the Royal Institution, Liverpool, and a resolution was passed unanimously, setting forth the advisability of establishing a Science College in that town, the cost of which was estimated at about £50,000 ; and a committee was appointed to take steps with the intention of executing this object.

We are distressed to learn that a court-martial was held at Malta last month, on board H.M.S. Hibernia, to try the acting assistant-surgeon of H.M.S. Royal Oak, for remaining on shore over his leave, returning drunk, and telling a falsehood to the Commander. The first and second charges were proved ; the third was not proved. The prisoner was sentenced to be dismissed the service.

We hear that University College Hospital is about to introduce the use of hot-air and other baths into its hospital practice. This is very sensible. Rheumatism and catarrhs are admirably treated by the Turkish baths, and, although we don't believe much in mercurial and other fumigations, still, they may be tried here as well as in Paris at the hospital of St. Louis.

Dr. Basham has resigned his Lectureship in Medicine at the Medical School of the Westminster Hospital, after a term of office of twenty-two years, Dr. Anstie having been elected in his stead. Dr. Sturges will take the Lectureship in Materia Medica, left vacant by the election of Dr. Anstie ; Dr. J. Lee, of Caius College, Cambridge, will take Dr. Sturges' place, and be the new lecturer in Forensic Medicine.

A joint meeting of the Royal Zoological and Geological Societies will he held in the Museum Building of Trinity College, on Wednesday evening, 14th December, at a quarter-past eight. *Papers for the Evening :*—1. Dr. Frazer, On Primitive Mining Implements found in Iron Ochre, by Major-General Dunne, Queen's County. 2. Rev. Professor Haughton will call the attention of the meeting to the Ancient History and Habits of the Abyssinian or Yahoo Baboons, recently presented to the Zoological Gardens by Viscount Southwell. 3. Professor Traquair, M.D. On Restoration of a Lost Tail in the African Mud-fish (*Protopterus Annectens*). 4. Professor Macalister, On some Points in the Anatomy of the Chimpanzee (*Troglodytes niger*).

We observe with satisfaction that the Irish Medical Association is taking measures to encourage social intercourse and good fellowship amongst its members. At the last meeting of its Council it was resolved on the motion of Dr. Seward — "That for the purpose of making the medical men of Ireland, being members of the Irish Medical Association, more thoroughly acquainted that they should in a social manner meet each other at dinner, at least thrice a year, in addition to the annual June dinner, the charge for each dinner not to exceed ten shillings. That such member of the Irish Medical Association be admitted thereto on his having notified his intention to the Secretary, at least two days previously."

At a meeting of the Pathological Society of London, November 15th, Dr. Silver showed the supra-renal capsules of a man, aged twenty-four, who had died of Addison's disease, and whose skin had been growing dark for two years. The lungs were tolerably healthy ; but both contained masses of *obsolete* tubercle. The supra-renal capsules were adherent, and completely converted into a calcareous mass on each side. Dr. Powell showed specimens of fifteen cases of *post-mortem* examinations of false hæmoptysis. In some specimens, small sacculated aneurisms of the pulmonary artery were found. In one case, there was a thin walled cavity, in a state of active ulceration. Of the fifteen cases of fatal hæmoptysis, twelve had occurred from rupture of the pulmonary artery in a cavity ; preceded in eleven, by dilatation, and in one, by ulcerative erosion. Dr. Murchison and other Fellows related cases of rupture of the stomach occurring from railway accidents, &c. Dr. Whipman showed a morbid specimen of diseased tricuspid valves. The patient had showed symptoms of pneumonia and hæmoptysis. The tricuspid valve was ulcerated, and one of its *cordiæ tendinæ* torn. Dr. Kelly showed the heart of a child, aged three months, which had suffered from cyanosis. The pulmonary artery arose from the left ventricle, and the aorta from the right. The only communication was through the patent foramen ovale. The diretus arterious was closed. The child was not cyanotic until five weeks after birth ; it then became rather livid, and a loud systolic bruit could be heard nearly over the thorax, most distinctly at the apex. In another case, shown by the same gentleman, from a child aged six, who died in hospital, of renal dropsy, after scarlatina, there had been only a systolic bruit heard during life between base and apex of the heart. The septum between the ventricles was here defective above, so there was an oval communication between right auricle and the two ventricles. Mr.

J. D. Hill showed a specimen of a tumour he had just removed, which was adherent to the under surface and costa of the scapula of a patent in the Royal Free Hospital.

SCOTLAND.

UNIVERSITY OF EDINBURGH.—It is understood that Government intends giving an annual grant of £200 towards the endowment of a Chair of Geology. This, in addition to the endowment made by Sir Roderick Murchison, will yield, it is estimated, about £700 a year.

MEDICO-CHIRURGICAL SOCIETY.—Office-bearers for the ensuing year :—President—Professor Bennett. Vice-Presidents :—Dr. Thomas Keith, Dr. Matthews Duncan, Prof. Lister. Councillors :—Dr. Thomas R. Fraser, Dr. J. D. Brakenridge, Dr. A. G. Miller, Dr. Angus Macdonald, Dr. James Fraser, Dr. Chiene, Dr. C. H. Groves, Dr. Wyllie. Treasurer :—Dr. George W. Balfour. Secretaries :—Dr. Argyll Robertson, 48 Queen street ; Dr. Claud Muirhead, 7 Heriot row.

ROYAL SOCIETY OF EDINBURGH.

SIMPSON AND SYME.

AT the opening of the Session 1870-71, M. D. Milne-Home LL.D. Vice-president, delivered an able address, in the course of which he noticed the deaths of Fellows of the Society in the past year, dwelling naturally upon those of Professors Simpson and Syme.

Professor CHRISTISON, in proposing a vote of thanks to Mr. Milne-Home for his address, alluded to the notice that had been given of Sir James Simpson. As to the discovery of chloroform, he said the history of that had never yet been fully given. When fully given, it would constitute one of the most curious instances he knew of the gradual progress of discovery. There was one link which he thought, in justice to Sir William Lawrence, he should supply, as he could do it authoritatively. Sir William Lawrence, in the summer of 1847—the same year in the November of which Sir James Simpson made his great discovery—did repeatedly employ a solution of chloroform in rectified spirit as an anæsthetic in his surgical practice, and ascertained that it was a superior agent to sulphuric ether. Had Sir William possessed that knowledge of chemistry which Sir James Simpson very properly held that every medical man should possess, he thought there was a strong probability that he would have anticipated Sir James in his great discovery. But the article had come to him recommended by the very absurd name of chloric ether. He (Dr. Christison) rather believed there was no such thing as chloric ether known ; nevertheless there was an article which had been so called. It was recommended to Sir W. Lawrence under that name ; it was tried under that name ; and he was informed that both Sir William and his assistant saw that something more concentrated was wanted, and that they were busy considering how they might concentrate it when suddenly the discovery of Sir James Simpson came forth and put an end to their enquiries. Had they been aware that the substance in their hands was nothing else than a solution of chloroform in rectified spirit, the solution of their problem would have been very simple indeed. In giving some reminiscences of Professor Syme, Dr. Christison said that the reason why that eminent man returned from London was not disappointment in regard to practice. His practice during the short time he was in London was a great success. His reason for returning was, that he found himself uncomfortably circumstanced in several respects, particularly as a teacher in University College. He was finally determined to leave the metropolis by his having been present when two of his colleagues were grossly insulted by the students at a great public meeting, and not the slightest attempt made by the Council then present, with Lord Brougham, their Chancellor, at their head, to defend those professors from the insolence to which they were subjected.

Lord NEAVES, in seconding the motion, gave some of his early recollections of Professor Syme. One was a reminiscence of the High School, where they were schoolfellows. The question was put one day, what was the meaning of *puto* a verb which in the ordinary sense meant "to think." Young Syme seemed to be the only lad who knew that in a primary sense *puto* meant "to lop," and he illustrated that meaning by citing the derivative *amputo*, which might perhaps be supposed to indicate the bent of his mind, even at that early age, towards surgical pursuits.

SPECIAL CORRESPONDENCE.

MEDICAL MATTERS AT ROME.

(FROM OUR SPECIAL CORRESPONDENT.)

ROME, *Nov. 30th.*

Do not reproach me, my dear Editor, that I have not fulfilled for so long a time my promise to write for the MEDICAL PRESS. Since I had the pleasure of such long conversations with you in this Italy, of which our Rome is now the capital, I have been so occupied that you can scarcely imagine what my life has been. Fatigues—work—excitement. Fatigues—work—excitement. The great events that have consummated our freedom have left me no time for food and sleep, and all my private affairs are neglected now. Still, I turn back to the thought of the days when we predicted all things—when I hoped for my country, and you expressed a livelier love for Rome than your phlegmatic countrymen generally do. So few of them will take the trouble to learn our beautiful Italian. Why do you not inspire them with your zeal ? We are moving now, and medical science will not be behind, since we have freedom and all we want.

Politically, things go on as well as one can wish. The Pope will not go away, and time will do everything for us. Some think he is not free. It is false. We take no advantage. I can assure you he is as free as you are in London itself. His letters are free to come to the Vatican and go to where he likes. But our finances are our only difficulty, and of course you know our populations are not educated to public life, and that is a curse for us enlightened people. But *pazienza*. We will educate them all.

The hospitals of Rome are placed under the direction of Dr. de Pantaleoni. You must remember he was exiled from Rome by the Pope, and practised, then, some years at Nice, always waiting his opportunity to return. As soon as Rome became our capital, he returned, and the Ministry made him Inspector of the hospitals, where he has been working with his Roman zeal and patriotism, and will soon have everything in order. He will make the great, old hospital, you remember so well, of Santo Spirito the chief, and all the others dependencies. Perhaps, San Rono will retain more privileges than some. The Lunatic Asylum will be distinct. I will send you, my dear editor, and old friend, more letters for your esteemed PRESS AND CIRCULAR, to tell you what we shall do with the Medical School, the University, &c., and what is being done in practice.

You should have heard our *confrère*, Pantaleoni, address the Romans. It would have pleased such an Englishman —lover of Italy and most of all of Rome. But I should tell you, now, that he will not give up medical practice on account of official work and political excitement. He has already taken a house, and sees patients regularly. You know how well he speaks English, as well as German and French—so that Italians as well as English, like you, are linguists too. He has already many patients, and his old English clients are sure to come back to him, now that Rome will be more safe than so many winter stations. I hope to report a good season here, notwithstanding the fright of foreigners at first. But confidence now returns.

AUSTRIAN MEDICINE.

(FROM OUR OWN CORRESPONDENT.)

VIENNA, *November*, 1870.

YESTERDAY, there was a rumour everywhere that the Counsellor of the Court, Professor Skoda, will resign his post ; alas, this rumour was confirmed after inquiries.

The state of his health, his advanced age—he is to-day sixty-five years old—are the motives which compelled this star of first rank on the brilliant horizon of the University of Vienna to this resolution. The fatigues, caused by teaching and examining, are too great for the man who has already enough painful days on account of his chronic rheumatism; and if Skoda, also, will no longer be a Professor, he remains, as long as he lives, the light for medical life in Austria—one of the founders of the medical school of Vienna—one of its pre-eminent talents.

Not a very long time ago, the Turkish Government begged the Austrian Ministry to send a great quantity of military physicians, who will receive from 300 to 500 francs a month and the rank of major. Because they desire a large quantity it seems they will make a total reform of the sanitary system; also general civilisation and humanity will get a great profit. The first transport of Austrian military physicians has already reached Constantinople.

Studies and Experiences on the Function of the Prostate. By Dr. B. Krauss.

This author concludes that—1. The seminal fluid is colourless and odourless, and similar to fresh honey (like we find in the cellules of the wax), *as long as* this liquid is contained in *the testicles* and all the ducts; the reaction is alkaline.

2. It is only on the road, after its leaving the duct, that it receives the white colour and the peculiar smell.

3. *During its passing through the prostatic part of the urethra*, the prostate gives away its fluid, colours the semen white, and causes its coagulability in open air. Its reaction is alkaline. The semen extracted from the vesiculæ seminales does not coagulate in open air, but remains clear and without colour and smell.

4. The spermatic animalcules *do not* live without prostatic fluid in the mucous membrane of the uterus of mammalia; but with the prostatic fluid they live a long time in the mucous of the uterus, sometimes more than thirty-six hours.

Conclusion.—The succus prostaticus exercises a positive influence on the faculty of life of the spermatic animalcules, and keeps it up; if by the mucus, excreted by the membrane of the uterus, the faculty of life of the spermatic animalcules is in danger.

All these experiments have been made with the greatest precaution, but only on animals, which have prostates. Next Dr. Krauss proposes to proceed to the genera of animals without prostates.

Summary of Pharmacy.

By Chas. R. C. TICHBORNE, F.C.S., M.R.I.A.,
Mem. Counc. Royal Geological Society of Ireland, Chemist to the Apothecaries' Hall of Ireland, &c.

SYRUP OF IODIDE OF CALCIUM.

M. Ottsmar Eberbach in a communication published in the *American Journal of Pharmacy*, draws attention to the fact, that what is sold in America under the name of iodide of lime, is but a mechanical mixture of iodine and quicklime, containing iodide of calcium, iodate of calcium "iodate of oxide of calcium." He gives a formula for the preparation of pure iodide of calcium, which does not differ from the usual method of preparing iodides of the alkalies and alkaline earths, and which, as it is not likely to give a stable salt, is not necessary to give here.

He then gives a formula for the preparation of the syrup, which may be of use to the pharmacist, and is probably the only method by which iodide of calcium could be made available for internal administration.

It is as follows,

Take of Iodine, 4 oz.;
Iron-wire, 7½ drams.;
Distilled water, 9·8.;
Milk of lime (fresh), a sufficient quantity.;
Sugar, 28 oz.;
Simple syrup, a sufficient quantity.

Mix three ounces of the iodine with the iron, and four ounces of water, in a thin flask with a long neck, shake occasionally, until the reaction has ceased, and the solution assumes a pale green colour, filter the solution, and add the remainder of the iodine, heat to the boiling point, and add milk of lime, until all the iron is precipitated, filter and wash the precipitate with hot water, until all the iodide is washed out, then bring the whole to the measure of twenty ounces, and add the sugar, dissolve by a gentle heat, and add to the solution enough simple syrup to make it measure forty ounces, mix thoroughly and fill into two-ounce bottles well corked. The syrup is a transparent, colourless liquid, which does not tinge starch paper blue. From the directions given to fill into two-ounce bottles, we presume that the author has found that there is a limit as regards its keeping properties, and probably the use of a slight excess of lime water would add to its stability. Some of these easily decomposed iodides of the alkaline earths, might be found more active than the alkaline iodides.

ON THE ADULTERATION OF SAFFRON.

Mr. Daniel Hanbury in a paper on Saffon, published in the *Pharmaceutical Journal*, says that there is no method of testing saffron more effectual than that of scattering a very small pinch on the surface of a glass of warm water. The stigma of the saffron crocus immediately expands, and exhibits a form so characteristic, that it cannot be confounded with the florets of safflower, marygold or arnica, or with the stamens of crocus; saffron is frequently adulterated with carbonate of lime. The method of testing for earthy adulterations, is to place upon a watch glass about a grain of the saffron, and drop upon it eight or ten drops of water, lightly touch the saffron with the tip of the finger, so as to cause the water to wet it. If the drug is free from earthy matter, a clear bright yellow solution will be immediately obtained. If adulterated, a white powder will instantly separate, causing the water to appear turbid.

SYRUP OF IPECACUANHA.

The *Chicago Pharmacist* contains the following formula by Mr. Sale. The author says that this syrup will keep.

℞ Fluid Ext. of Ipecacuanha (U.S.), f. ℥xviijs.;
Sugar, ℥xxxij.;
Water, f. xij.

Pour the fluid extract on the sugar in a shallow evaporating vessel, and set aside in a warm place to dry, when dry add the water, dissolve the sugar with the aid of a gentle heat, and strain. The following, we find, is the formula for the syrup given in the United States "Pharmacopœia." The syrup is said by Parrish to be the most useful and popular expectorant in use in Philadelphia, although it is not a strong preparation. Take of ipecacuanha in coarse powder an ounce; diluted alcohol, a pint; sugar, 2½ pounds; macerate the root in the alcohol for fourteen days, and filter, evaporate the filtered liquor to six fluid ounces, again filter, and add sufficient water to make the liquor measure a pint. Lastly, add the sugar and proceed in the usual manner.

PRESERVATION OF MEDICINES LIABLE TO DETERIORATION.

The *American Journal of Pharmacy* mentions a method of preserving preparations, which is more ingenious, than it is likely to become useful. The aqueous extract it is wished to preserve, is evaporated to a syrupy consistence, and this is absorbed by a previously washed and dried sand, and the whole is exsiccated at a gentle heat. By weighing the dry mass, the proper proportion and quantity, corresponding to each ounce of tincture, may be easily ascertained. From this the tincture or infusion can be readily extracted, by stirring the required weight with a corresponding quantity of water and by decanting, or filtering, if necessary.

THE ETHYLATES AS CAUSTICS.

When one atom of the hydrogen of alcohol is replaced by an atom of potassium, or sodium, the respective ethylates are obtained as crystalline compounds. When placed in contact with the body, they gradually pick up moisture from the tissues, and caustic potash, or soda, as the case may be, is formed from the decomposition of the ethylate. Dr. Richardson proposes these ethylates as local caustics. The ethylates may be dissolved in alcohol without decomposition, and may be applied with a glass brush, or injected by a needle. The ethylate of potassium is the most active. Dr. Richardson says "they will be useful in cancer," or "in cases of mucous and other simple growths, they will be invaluable."

DICHLORACETIC ACID AS A CAUSTIC.

THIS acid is produced by the direct action of chlorine upon glacial acetic acid. It has the composition $C_2 HB^2 \left\{ \begin{matrix} O \\ H \end{matrix} \right\} O$. It is said to be the best cautery for warts known. It is applied on the point of a stopper made for the purpose, and great caution must be observed not to use too much, as it will eat a deep hole into the flesh. One application is frequently sufficient to draw away a wart.

HOFFMAN'S TEST FOR CHLOROFORM.

THIS test, says the foreign correspondent of the *Chemical News* is based upon the fact, that when chloroform is mixed with aniline, and an alcoholic solution of caustic soda, a very strong reaction takes place, and isonitrite is generated, which is readily recognized by its peculiar characteristic smell. This reaction is so delicate that when one part of chloroform is mixed with from 500 to 600 parts of alcohol, the first named substance is readily detected.

Literature.

MAURIAC'S COMMENTS ON WEST. *

It is the fashion among a good number of our fraternity in London to speak slightingly of the French School of Medicine in Paris. It is alleged that there is a want of erudition in the works of the modern French physicians and surgeons, and that they scarcely ever read any work in medicine published in any foreign language. Such criticisms are, of course, shallow in the extreme. The recent works of Lancereaux on syphilis; of Hérard and Cornil on consumption; and many others we could cite are a clear proof how industrious our French brethren are in collecting materials from all sides. But the work before us is of itself quite a sufficient proof that it is not in Germany alone that there are patient and learned physicians, ready and willing to correct their own national acquisitions, by borrowing from every foreign source the glorious lights of science. We cannot help at the very outset of our criticism of this splendidly edited volume, bearing testimony to the immense labour and profound research which the author, Dr. Mauriac, must have brought to task before him, in translating the work of the obstetrician of St. Bartholomew's Hospital. Take it in its entirety, we do not think that any work on the diseases of our sister-sex can for a long time, at any rate, venture to compete with this translation of Dr. West's work; and for this reason—We believe that that work is the soundest treatise on this subject in the English language, and this translation before us contains numerous and admirably lucid treatises on numerous points which, added to the text of this work itself, almost exhaust the subject, and render it difficult for any future writer to discover many new truths.

In the preface to the work, we find it truly stated that the art of obstetrics and the subject of diseases of women have had a good deal to contend against in England, from the "dignity" absurdities of the College of Physicians and Surgeons in London. The translation assures us that such intolerance has happily had no parallel example in France. It seems that every one was astonished when the College of Physicians of London confided to a physician accoucheur of St. Bartholomew's the task of delivering the Croonian Lectures in 1856. At this epoch, in England, as Dr. de Mauriac truly says, and even in France, ideas upon female disease were ruled over by the doctrine which Dr. H. Bennet had made his own, by propagating and defending it with ardour and talent. "At Paris, where he had been an interne des hopitaux, Dr. Bennet had become permeated by the ideas of Broussais." But the inflammatory process did not generalize itself, according to Dr. Bennet, through all the constituent parts of the genital apparatus in women. It did not attack, according to the innumerable pathogenic conditions which engender diseases of the uterus, at one time the body of womb, at another the peritoneum, at another the ovaries of the F. tubes. No, it always concentrated itself in the neck of the womb. The os tincæ, the cervical mucous membrane, became a kind of morbid focus, whence everything radiated. Ulceration of the orifice, general or partial, hypertrophies of the uterine tissue, displacements, the fluxes, the sympathetic disorders of the functions far off, &c., all had all their starting point in inflammation of the neck of the womb. Exclusiveness as to the process, and as to the localization, constituted the double error in Dr. Benuet's doctrine.

This doctrine and its consequences were assailed by Dr. West in his Croonian Lectures, and Dr. Mauriac thinks that the position maintained by Dr. Bennet was broken down, and has not since been able to raise itself again. "But (he observes) we must remark the method of cauterization of the neck of the womb, which resulted from the theory, has resisted longer than the purely speculative side of the question. The theory has vanished, and yet persons have not the less continued burning, without distinction, all ulcerations of the uterine neck, and often with very energetic caustics. It is not to be doubted that by this method, blindly applied, many practitioners create diseases of the womb in persons who were free from any such, and aggravate, or perpetuate indefinitely, insignificant lesions which would have got well if let alone." Dr. Mauriac thinks that the neck of the uterus has had much to suffer from the discovery of the speculum. For instance, Lisfranc, it seems, used to amputate annually about fifteen uterine necks, at the height of his fame. Afterwards he relented in his surgical ardours. To this succeeded the *regimé* of cautery, and few patients escaped the caustic potash, or red hot cautery, or, at any rate, the nitrate of silver. Dr. West's work has contributed to change all of this "heroism." Aran, the respected master of Dr. Mauriac, never ceased to assert that disease of the uterus ought not to leave the domain of medicine. In order to avoid causing patients undergoing great danger, it was necessary, he maintained, to reduce surgical intervention to the most simple and elementary proportions. Dr. Bernutz, as well as Dr. Aran, contributed to this progress, by counselling abstention from all violent therapeutics in a great number of uterine affections.

Another admirable part of Dr. West's lectures is that in which he combats the tendency towards considering displacement of the uterus as the cause of most of the morbid phenomena of the organ. "France (says Dr. Mauriac), I regret to say, accepted more freely than our neighbours across the channel the disastrous therapeutic consequences of the doctrine of uterine displacements. We might have imagined ourselves to exist in the palmy days of iatromechanics. There was nothing thought of but redressors, levers, sounds, pessaries, and engines of all kinds and shape. They treated the uterus with as little consideration as if it were an inert body."

Then, again, "The American Gynæcological School, recently imported amongst us, appears to push us into the path of adventurous experiments. It might take the word *auda city* as its motto. But audacity does not always succeed: it does not, besides, justify, above all, certain practices which will never be acclimatized, I hope, in France, spite of the favours which is there sometimes accorded to strange notions. I allude to certain new therapeutic methods, and, to give an example, to the treatment of dysmenorrhœa by Dr. Marion Sims. According to him, *all* dysmenorrhœas are mechanical, that is, they arrive after some morbid process which results in obstruction of the cervical canal. Such a way of looking at the question, conducts us logically to a surgical treatment. Now, we must not suppose that such treatment is a slight affair. No less is contemplated than incising extensively the neck of the womb in its whole thickness, in order that it may

* Leçons sur les Maladies des Femmes, par le Dr. Ch. West, traduites de l'Anglais, sur la troisième édition, et considerablement annotées, par Charles Mauriac, Médecin de l'Hôpital du Midi, Paris. F. Savy, Libraire-editeur. 1870. Pp. 857.

give free passage to menstruation, and to the spermatazooids. For many reasons, which it would be superfluous to develop here, I blame this operation. I believe that it rarely indicated, always uncertain, and often dangerous. I have chosen it in order to point out whether false or exclusive pathological doctrines may lead us. Well, in the work of Dr. Marion Sims, where there are excellent ideas and the reading of which is very interesting, I have seen with regret a formed determination to treat all uterine diseases by surgical procedures. I hope such a school may make but a few converts amongst us. Let us take from him what is good, but let us not depart from the grand tradition of pathogenesis and therapeutics of French gynæcology."

These excellent remarks by the translator will be perhaps the best proof to English readers how sound the other views held by Dr. Mauriac on diseases of women are likely to be. We might, indeed, expect much from that gentleman when we consider the immense opportunities for clinical observation he has had at his command. For years attached as assistant to Dr. Aran, and then as physician to a special hospital in Paris for women, and now physician to the famous Hôpital du Midi of Paris, Dr. Mauriac would, indeed, have neglected his opportunities, had he failed to become well acquainted with the subject matter on which he writes in Dr. West's book. This work is no mere translation of Dr. West's work. The translator has wished to annotate with the greatest care the *Lectures on the Diseases of Women*. All the points of internal pathology, which seemed obscure or controverted, have been, on the part of Dr. Mauriac, the object of an attentive study, and he has devoted to them detailed notes, some of which are of the nature of memoirs. He has placed under contribution many original doctrines published on diseases of women, not only in France, but in other countries, since the publication of the third edition of Dr. West's work. It results from this considerable labour of the translator, that the *Leçons* form a volume in which the element which is personal to the translator amounts at least to one-third of the whole in extent. Thus, at page 49, there is an admirable essay on the influence of climate and race on menstruation. At page 131 we have the following note: —"According to Aran, persons have much exaggerated the pathogenetic effect of sexual relations in uterine affections. In fact, it results from his statistical researches, that, except in cases of pregnancy or childbirth, affections of the womb are not very common in the first years of marriage, and that we should not estimate at more than one per cent. the cypher of the diseases produced directly by sexual relations, relatively to the total number of diseases of the womb or its surroundings met with in practice. Nothing appeared to Aran to justify what has been said as to the injurious influence of these sexual approaches, which the fear of having children renders incomplete. Persons have also exaggerated the injurious effect of sexual relations practised during the menstrual times. It is the same with masturbation. 'I recently saw perish (said Arran) of acute phthisis, a beautiful young girl, after frightful excesses of this habit. Almost on her death bed, she gave herself up with fury to this horrible tendency, and yet her uterus, as well as the attached organs, were very slightly developed, perfectly healthy, excepting a little catarrh on the neck.' But, if sexual relations only act slightly as producers of uterine affections, when the latter are once produced, they aggravate them, make them relapse, or prolong them indefinitely. Lastly, they may arrest or retard uterine involution, if they take place at an epoch too near the child-birth."

At page 183 there is an admirable note on hyperæmia of the uterus; and, at page 198, a lucid description of venereal ulcers of the neck of the womb. Again, at page 471, there is a complete treatise, headed *On Epithelial Tumours of the Womb*, giving the latest facts on the pathology of uterine cancer. Then comes in page 555 an excellent memoir on inflammation of the ovary and tubes and on pelvic peritonitis up to the last moment, as a scientific treatise. There is then an excellent classification of ovarian cysts, and at page 705 a most complete analysis of the success from operations in removing ovarian cysts. Two of the best notes on this work are upon *Syphilis in Women*, and on leucorrhœa and gonorrhœa in the female. Both of these should be studied by all who take an interest, and who does not, in obscure points in virulent diseases. In conclusion, we think that all who see this shapely volume will thank the publisher, M. Savy, for the extreme care he has taken in the choice of the paper, quite English in its character, and of the types. The printing is excellent, and the whole work does credit to the medical school of Paris, and to the printers and publishers of that paragon among modern cities.

Gleanings.

Amputation by the Combination Plan.

(*With Diagrams.*)

In the last number of the *Boston Medical and Surgical Journal*, Dr. A. T. Hudson gives some very interesting details of this operation as performed by him during the civil war in America, which possess peculiar interest at the present time. In order, therefore, that our readers may the better follow the operation, we present them with the diagrams which were drawn and engraved specially for this purpose.

The author asks, is not the "method of cutting" one prominent question to be discussed? How shall we know when we have enough, and not too much, except by some "method of cutting?" We answer, a definite rule to secure this end, without mistake or failure, is reached by the combination plan. This plan fell to me to work out while in the United States service, a few years ago, and only now fully described.

The amputations made in the First Division of the Fifteenth Army Corps, following the assault on Vicksburg, and the taking of Arkansas Post, were by the circular, by transfixion, and antero-posterior flaps, as generally made. The results, thereof, were often so troublesome, vexatious, and unsatisfactory, we resolved on a new method. Erichsen gave a hint to compromise between the circular and that of transfixion, wherein is combined the advantages of both, without their defects.

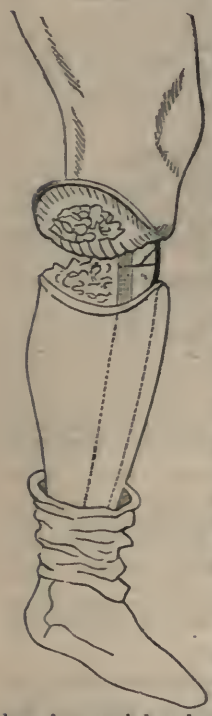
The first case operated on by the combination method, was a soldier in the Fourth Iowa Volunteers, in December, 1863, at the foot of Lookout Mountain, near Chattanooga, Tenn. Amputation below the knee as follows:—

With a scalpel or cartilage knife, an incision is commenced at the posterior side of the leg, and carried in a downward semi-circular sweep, to the crest of the tibia, just through the integument. The lowest deflection of the sweep is nearer the posterior leg. The same cut, beginning and terminating as before on the opposite side, completed, the skin is then retracted as in the circular operation, which lays bare the muscles for the space of an inch. (See Fig. 1). Then transfix the inner side and cut outward, as in other flap operations, dividing the muscles an inch shorter than the retracted integument. The scalpel or cartilage knife is used to divide the muscles on the fibular side. The saw is now applied at an angle of forty-five degrees, and a diagonal cut

Fig. 1.

made three-fourths of an inch deep; when the direction of the saw is changed, and the bones and wedge-shape chip are severed together by a transverse cut. (See Fig. 2).

Fig 2.



Removal of the wedge shape chip from the spine of tibia stump, also removes an old objection, viz., the danger of the sharp bone cutting through the thin integument by ulceration. The flaps thus obtained make a fine, smooth and conical stump, without any crowding or stretching, and without redundance. They are of equal size. The surgeon is not puzzled with the task of trying to fit a four-inch flap to a six or eight-inch fellow. This plan presents many advantages over every other "method of cutting the flaps.'

1. The avoidance of all after-trimming.

2. Quicker and more certain union by first intention.

3. Drainage is complete, and pockets of ichor and pus avoided.

4. The stump presents no puckering or pouting corners.

The operation proved so superior and satisfactory in the above case that it was adopted by several surgeons in our division of the army thereafter, for all amputations of leg, thigh and arm.

In all cases the stump is traversed by the cicatrix. Dr. Smith, and others, object to this result on the ground that it is "not firm and resisting, and not adapted to take direct support." This is a groundless fear, and has been long a bugbear, and innocent obstacle to the work of the surgeon; for direct pressure on the stump is never borne and never allowed. All successful leg makers permit no floor for the stump to touch or rest on; but support the entire weight of the body by the sides of stump, the condyles of the knee, and the tuberosity of the ischium.

In a cavalry boy at Kenesaw Mountain, Ga., in January 1864, whose leg was amputated by the above method in the lower third of the femur, it became necessary to reopen the stump to secure a bleeding artery, twenty-four hours after the operation. It was gratifying to witness how promptly the flaps had become glued together in initiatory union, requiring considerable force to separate them.

Sir. Wm. Fergusson speaks of a similar operation, as the "compromise," and thinks it appropriate for the thigh and arm. But he *transfixes* the integument and cuts the deeper parts by the circular sweep. He therefore does not describe or follow our plan, which we believe suited to nearly all amputations; and when below the knee, it is infinitely superior to all others.

Action of Thebaia.

Professor C. Falk has communicated in ("Deutsche Klinik," 1869-70) the results of his experiments with this alkaloid. Doses of one grain and a-half proved fatal to dogs and cats when injected subcutaneously. The symptoms resembled very much those produced by strychnine and brucia. In strength it was about equal to the latter.

Medical News.

Royal College of Physicians of London.—On the 6th inst., the following gentleman passed the first professional examination:— John Bartholomew Giles Gidley Moore, St. George's Hospital, S.W.

Royal College of Surgeons of England.—At a meeting of the Council held on Thursday last, the following members, having passed the required examinations on the 23rd, 24th, and 25th of November, were duly admitted Fellows of the Royal College of Surgeons of England, viz.:—Edward Mason Wrench, L.S.A., of Baslow, near Chesterfield, diploma of membership dated July, 1854; Frederic Edward Manby, L.S.A., of King street, Wolverhampton, January, 1866; William Stanger, L.S.A., of Nottingham, January 1867; William Bartlett Delby, M.B. Cantab., of Sackville street, May 1867; James Ryall Rouch, L.R.C.P., London, of Norfolk street, Strand, May, 1868; Edward Nettleship, L.S.A., of Finsbury pavement, November 1868; and Gopaul Chunder Roy, licentiate in medicine and surgery, Calcutta, of Calcutta, May, 1870. Four other candidates were examined, but not approved.—The following members were admitted fellows of the college by election, on the 8th inst., viz.:—Peter Marshall, L.S.A., of Bedford square, and John Emilius Mayer, of Her Majesty's Indian army.

University of Cambridge.—At a court of examination held on Thursday last, the following gentlemen obtained the degree of *Bachelors of Medicine*.—Francis Edward Image, Trinity; Charles Edward Underhill, Caius; Lyttleton Stewart Winslow, Downing.

University of London.—The following is a list of candidates who passed at the recent examination for the M.D.—Bryan Holme Allen, University College; Evan Buchanan Baxter, King's College; John De Liefde, Guy's Hospital; Ethelrid Dessé, University College; William Richard Gowers (Gold Medal), University College; John Grimes, B.Sc., King's College; John Harward Hooper, M.S., St. Thomas's Hospital; Henry Franklin Parsons, St. Mary's Hospital; Edwin Rayner, B.A., University College, and Paris; Frederick Thomas Roberts, B.Sc., University College; Frederick Taylor, Guy's Hospital.

The cultivation of Cinchona in Java.—Prof. Hasskarl reports that the weather, on the whole, has been favourable, and the growth of the plants leaves nothing to be desired. The number of plants grown from seeds and layers is upwards of one and a half millions, by far the greater number belonging to the species *C. calisaya*, a good many to *C. officinalis* and *succirubra*, and a very few to *C. lancifolia* and *micrantha*. In addition to these, 870,000 plants have been transplanted, and the whole shows an increase of nearly 200,000 plants since the commencement of the year. 460 kilogrammes of the dry bark were sent to Holland in December,, 1869, and sold at from two to three florins per kil.; 900 kilogrammes have since been exported, and more than 1,000 were ready at the date of the despatch. *Nature* says Prof. Hasskarl reckons the total produce of 1870 at no less than 4,000 kilogrammes of dry bark for exportation, besides some hundreds for home use in the island. An important branch of industry in the colony is now formed by the stripping, cutting, drying, sorting, and packing of the Cinchona.

Bequests to Medical Charities.—By the will of the late Thomas Thornton, Esq., of Brixton, each of the following Institutions receive the sum of £200. London Orthopædic Hospital. Hospital for Incurables, Hospital for Diseases of the Chest, Victoria Park, City Truss Society, and the Brixton, Tulse Hill, and Herne Hill Dispensaries, all free of legacy duty

A Novel Sewage Method.—The Bingley local board of health have been placed in a peculiar position by the Home Office. The board experienced some difficulty in providing for the drainage of the town, and brought their difficulties under the notice of the authorities in London. A memorial was prepared, and in it a suggestion was made that it was desirable to hold a local inquiry in order to reconcile certain differences of the parties interested. The Home Secretary sent down Mr. Robert Morgan in September last; and he has reported to Mr. Bruce that sewers should be constructed throughout a good part of the town at a sufficient depth to prevent all sewage matter from entering the streams or watercourses, such sewers to convey all sewage matter to land suitable for its utilisation by irrigation. The Bingley local board have decided to carry out the scheme.—*Bradford Daily Times*.

Death of Mr. Toogood, F.R.C.S.—The death of Mr. Jonathan Toogood is announced at the age of eighty-seven. The deceased was the founder, and for many years surgeon, to the Bridgwater Infirmary, Mr. Toogood was the senior fellow of the Royal College of Surgeons of England. His diploma bears date May 4, 1804.

Extraordinary Number of Sudden Deaths.—During the past week Dr. Lankester, coroner for Central Middlesex, has held no fewer than forty-three inquests. Of these a no less number than twenty-seven were cases of sudden death, and of these twenty-seven five were inmates of St. Pancras Workhouse. In the course of the inquiries the coroner remarked that the first week or two of cold weather at the commencement of each winter produced more cases of sudden death than any other period of the year,

The Medical Society of the College of Physicians, Ireland, will hold its third meeting, on Wednesday, 14th December, when the following communications will be read:—1.—Dr. Cameron—"Is the flesh of diseased animals unwholesome food." 2.—Dr. H. Kennedy—"On the views of Niemeyer regarding Phthisis." 3.—Professor Moore—"On Stimulation in Fever."

NOTICES TO CORRESPONDENTS.

☞ Correspondents requiring a reply in this column, are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Out of thousands of such persons it may cause enquiries so signed, on very various subjects much confusion.

We have read the "Chemist's and Druggist's Almanack and Diary for 1871," which seems to be full of information that is sure to be useful to those for whom it is designed. Professor Attfield gives an introductory article entitled, "Pharmaceutical Chemistry, 1870;" Mr. Tilden adds one on the "Gravimetric Tests of the Pharmacopœia;" and there is also a full account of the "Chemical Tests for Medicinal Substances," by Mr. Sydney Rich. It will be very useful to lie on the dispensing counter.

An article on "The New Rules for the Government of Irish Lunatic Asylums" is in type, but is unavoidably held over.

Dr. Tucker, Sligo, must surely be aware that the Irish Medical Association is bound to disclaim personal support of any candidate. The letter was printed from your own copy. If there are errors in it, they shall be corrected on your pointing them out to the Editor.

Dr. Atkinson, Athlone.—The degrees are not the least use as qualifying to register or hold any public appointment. They confer no right to practise, but a person holding them can evade the law and practise at the risk of prosecution just as a person with no degree whatever may do. Except that they give the holder a couple of letters to attach to his name, which he would probably be better without, these degrees are not the least use.

A Dublin Correspondent complains to us that the British Medical Association has billed him for subscription for three years—our correspondent represents that, like many other practitioners in Dublin, he joined the Association in the year when its meeting was held in that city in order that he might be entitled to attend the meetings. For that year he received the "Journal of the Association," but, at its termination, it ceased to come to him, and he has not since then been aware that he has been considered a member. He finds, however, that his name appears on the published list of last year, though he was unconscious that he enjoyed such privilege. It does seem rather a one-sided method of business to demand payment while withholding the only real value for the money.

L.S.A.—By all means take the college diploma. It is more difficult to read up later, and you will always feel the want of a double qualification.

Auctor.—The book has not been received. Your publisher should be instructed to send it, if you wish it reviewed.

AN AMERICAN VIEW OF OUR NEW POSTAL ACT.

"Our English and Irish exchanges come to us (*Boston Med. Journ.*) this week in a state nearly approaching disorganization, that we are led to investigate the cause. We find that the retaining thread which has hitherto bound together the various sheets of the foreign periodicals has been cut by an *absurd* order from the British Postal Department, a species of red-tapeism which is, to say the least, a matter of inconvenience to the readers of the Journals. In future, all stitched periodicals are excluded from the mail rates provided for newspapers, and our contemporaries are forced to incommode their patrons or else subject them to an exorbitant postage rate." Our readers will, we are sure, fully endorse this opinion, for a more absurd restriction was never imposed.

THE COST OF DIMPLES.

Can any of our readers kindly inform us what connection there exists, or is supposed to exist, between dimples and the supply of Hambro' sherry, and other wines? Last week a contemporary indulged its readers with an article upon the supply "after the Spanish model," of wines to the sick and wounded, and the public generally, with the above extraordinary heading. But what we wish particularly to draw the attention of the writer to is, a new rule in arithmetic which he has for the first time to our knowledge, introduced; he says, "six imperial quarts do fairly make up a gallon." Our boyhood "Weights and Measures Table" taught us that "four quarts make one gallon." Perhaps our contemporary the *Brit. Med. Journ.* will kindly set us right with the above queries as we are anxious to keep ourselves *au courant* with "things new and important."

BOARDS OF GUARDIANS.

It appears that the annotation upon this subject, which appeared in our issue for Nov. 30th, has raised the ire of the Worcester Board to such a pitch that a resolution was passed on Thursday on the motion of Mr. Minchall, "That the clerk be requested to write to the *Medical Observer* (a new name by the way, for the Medical Press and Circular), to ascertain whether the observations where the Editor's own remarks, or whether they were suggested by any correspondent, and, if so, who?" We would have written, and, "if so, by whom." However, as a knowledge of "Lindley Murray" is not usually considered a necessary qualification for parochial Boards, and the foregoing motion had not reached us at the time of going to press, we may state, for the edification of the Board, that the article in question was written by a member of our staff, and the opinions founded upon reports which appeared in the Worcester journals. Mr. Minchall objected to the term "mercenary" as applied to the body of which he was a member, when "their *most important* duty was to take care of the rates." We would take the liberty of reminding this gentleman in the most friendly way possible, that the care of the poor *should be* the chief aim of Guardians, and that those who wilfully neglect their duty in this respect, by tying the hands of their medical officers, or disregarding the wants of the sick and destitute, simply for the purpose of "taking care of the rates," are guilty of a most flagrant and cruel breach of trust. In the course of our former article, we remarked that the Worcester Board "had lately made a public bid for this distinction"—(*i.e.*, mercenary). We did not say it attained to that degree of notoriety, as the good sense of some of its members, rescued it from such an unenviable position, upon which non-homogeneous character, we did and do now congratulate the Board. Our remarks were written purely in the interests of the profession and the public, and we have nothing more to, add to or withdraw from, our previous comments.

Accepted Original Communications, Letters, &c. received:—"On Contagious Diseases, and the Mediums through which they are so rendered." By William F. West. "On Some Difficulties which present themselves to the Opponents of the Contagious Diseases Act." By John Elliott, A.M., M.B. "Detection of Methylated Spirits." "Hydrate of Chloral, its Position in Medicine." By R. Uniacke Ronayne, L.R.C.S. Clinical Memoranda—"Subcutaneous Injection of Morphia." By J. W. Martin, M.D. "On the Transmission of Lunatics." By W. Waugh Leeper, M.D.

MEETINGS OF THE LONDON SOCIETIES.

Wednesday, Dec. 14th.

Hunterian.—7½ p.m. Meeting of Council.—8 p.m. Adjourned Discussion on Mr. Hovell's paper on "Hysteria." Dr. Phillips: "Cases of Puerperal Convulsions, with Remarks on Treatment"

Royal Microscopical.—8 p.m. Mr. B. T. Lowne, "On the Anatomy of Ascaris Lumbricoides." Dr. Maddock: "Observations on the Aëroscope."

Epidemiological.—8 p.m. Dr. Christie, of Zanzibar, "On Cholera in East Africa."

Thursday, the 15th.

Harveian.—8 p.m. Mr. Fairlie Clarke, "On Surgical Dressings."

Monday, the 19th.

Medical.—8 p.m. Ordinary.

Tuesday, the 20th.

Pathological.—8 p.m. Ordinary.

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

Dr. Scoresby Jackson's Note Book of Materia Medica. Second Edition. Edinburgh: Maclachlan and Stewart.

The Harveian Oration, 1870. By Wm. Gull, M.D London: Churchills.

Pocket Diagrams and Notes of Valvular Heart Disease. Edited by Professor Harvey, M.D. Edinburgh: Maclachlan and Stewart.

On Excision of the Knee-joint. By Edward Sand, F.R.C.S. Manchester: J. E. Cornish.

Lessons in Elementary Physics. By Balfour Stewart, F.R.S. London: Macmillan and Co.

Method and Medicine. By Dr. Balthazar Foster. London: Churchills.

Boston Medical Journal; La Presse Médicale Belge; Homœopathic Review; The Practitioner.

VACANCIES.

Castlebar Union.—Medical Officer for the Dispensary District No. 2. Salary £110, exclusive of fees. (See Advt).

Dublin Fever Hospital (Cork Street).—Temporary Physician. (See Advt).

Liverpool Dispensaries.—Assistant Resident House-Surgeon. Salary £103.

Preston Royal Infirmary.—Senior House-Surgeon at £80 per annum, and a Junior House-Surgeon at £60 each, with board and residence.

West Kent Hospital Maidstone.—Resident House-Surgeon. Salary, first year, £100, second year, £125.

St. Pancras, Middlesex.—Medical Officers for each of Districts 1 to 8. The Salaries for Districts 1, 2, 6 and 7, are £100 each per annum. District 3, £120. Districts 4 and 5, £110 each. District 8, £130 per annum. Drugs and medicines are provided by the Guardians. Election the 15th.

St. Marylebone, Middlesex.—Public Vaccinator. Average fees per annum £165.

County Down Dispensary and Fever Hospital.—Registrar and Surgeon's Assistant. Salary 60 guineas, with board and residence. (See Advt.)

APPOINTMENTS.

Barbour, J. B., M.D., L.R.C.S.Ed., Resident Medical Officer at the Stockwell Fever Hospital.

Bloxam, Professor, has been elected Professor of Chemistry at King's College, London, vice Dr. W. A. Miller, deceased.

Debus, Dr., F.R.S., Examiner in Chemistry at the University of Lond. vice Dr. Matthiessen, F.R.S., deceased.

Drake, Mr. A. J., House-Surgeon to St. Thomas's Hospital.

Franklin, Mr. G. C., House-Surgeon to St. Thomas's Hospital.

Goss, T. B., M.R.C.S., Medical Officer to H.M.'s Post-office, Bath.

Gordon, Mr. J., House-Surgeon to Gray's Hospital, Elgin.

Green, Mr. J., House-Surgeon to the Ophthalmic Wards of the Royal Infirmary, Edinburgh.

Hardino, T. H. G., L.D.S.R.C S.E, Dental Surgeon to the Dental Hospital of London.

Hughes, R., F.R.C.S., Consulting-Surgeon to the Staffordshire General Infirmary, Stafford, on resigning as Surgeon.

Jolly, R., F.R.C.S., Surgeon to the General Hospital, Birmingham.

Lomax, H. T. M.R.C.S., Surgeon to the General Infirmary Stafford.

Macdonald, John E L., Haswell Colliery, Poor-law Medical Officer and Public Vaccinator, Thornley District of the Easington Union.

M'Cann, C., M.R.C.S., Resident Medical Officer to the Stockwell Small-pox Hospital.

O'Reilly, R., L.K Q.C.P.I., Medical Officer for the Ballyduff Dispensary District of the Lismore Union, Co., Waterford.

Osborn, Mr. Samuel, Resident Accoucheur to St. Thomas's Hospital.

Owen, O. E., L.R.C.P.Ed., Medical Officer for the Llanidan District of the Carnarvon Union.

Pinder, G. H., M.R.C.S., Senior House-Surgeon to the Ardwick and Ancoats Dispensary, Manchester.

Rickards, E., B.A., F.R.C S., Resident Registrar and Pathologist at the General Hospital, Birmingham.

Ross, J., M.D., Medical Officer to the Elgin District Lunatic Asylum.

Steven, Mr., Dental House-Surgeon to the Dental Hospital of London.

Turner, H. G., M.R.C.S., House-Surgeon to the Brighton Dispensary.

Wade, W. S., L.R C.P.Ed., Medical Officer for the Sandal Magna, Walton, and Chevet Districts of the Wakefield Union.

Way, J. P, M.R C.S., Medical Officer for the Laudport District of the Portsea Island Union.

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 21, 1870.

CONTENTS.

Original Communications.

HYDRATE OF CHLORAL.—ITS POSITION IN MEDICINE.

By Robert Uniacke Ronayne, L.R.C.S.I., &c.,

Youghal Infirmary.

It is a vice to be deplored, yet not exclusive in our age, that almost every new agent which refined chemical research calls into existence, or extended botanical investigation reveals to our knowledge, is eagerly hailed as likely to prove an almost universal panacea, and supply in medicine the place the philosopher's stone was hoped to fill in alchemy. For a time it runs a brilliant and seemingly successful career; then follows a short period of flickering distrust and neglect, and then the new meteor which has dazzled the medical sky out of its propriety, and casts some of the steady old fixed stars into shadow, dies obscurely out, and we are not a whit better lighted than before its advent. This moth and candle mode of seeking an exit from our darkness, by dashing frantically after the first bright novelty that crosses our path, does an incalculable amount of mischief to our young practitioners, many of whom after meeting frequent and vexatious disappointments in the trial of new remedies, run the risk of becoming slovenly routinists by discarding real improvements, and holding too tenaciously to what they have found good in the old ways. On the other hand, very many useful drugs which, if introduced to notice with modest impartiality, might have retained a third or fourth rate permanent position, have sunk into comparative disuse by the reaction produced on their falling short of realizing the bombastic expectations which heralded their appearance. I am led to these considerations by noticing a tendency lately in certain professional circles to question the right of the hydrate of chloral to a standard position, since it has failed to attain results, the accomplishment of which would simply make it an "elixir of life," and because many disappointments in the trial of new medicines caused me at first to view its introduction with little interest, therefore, as I know that some of my brethren who are still similarily apathetic, I think it right to make record of the change which careful observations of the drug have wrought in my views; and, as my experience of its powers are derived from having prescribed it over five hundred times, I am able to speak with confidence of many of its benefits, peculiarities, and shortcomings.

Chloral is an artificial organic chemical compound composed of C_2 HCL_3 O, it combines with water and is soluble in the same element, both hot and cold, but insoluble in dilute sulphuric acid. It was discovered by Liebig in 1832, but was not utilized in medicine until very lately, when Liebreich, of Berlin, pronounced it to possess anæsthetic and hypnotic properties in no ordinary degree. M. Bouchut's investigations soon followed, and resulted in his declaring it a sedative to both motor and sensitive nerves; and since then the observations of many British and foreign physiologists have confirmed these reports. The manner in which chloral achieves its medicinal action is peculiar. According to Liebreich, Personne, Bussy, and Richardson, its narcotic effects are due to chloroform, which is slowly evolved in the system—the chloral being acted on by the alkalies of the blood and chloroform with formate of these alkalies being the products. This hypothesis has been verified by numerous experiments on animals. In therapeutic doses chloral is spoken of as possessing two marked properties, namely:—anæsthesia and narcosis; but I hope to be able to show that it is also capable of instituting other and important actions in the system. As an anæsthetic its power is very restricted, and from the prolonged nature of its sleep, together with the absence of complete insensibility to inflicted pain and the presence of the power easily to awaken the patient, unless where toxic doses are had recourse to, it seems never likely to be much employed; yet Bouchut speaks of drawing teeth and applying Vienna paste painlessly under its influence. As a hypnotic, on the contrary, there seems no limit to the extent or variety of its uses. In this capacity, it possesses great energy, power, and safety of action—rivalling opium in its pain-relieving and

rest-giving qualities, whilst it shows marked advantages over that drug in celerity of result, simplicity of physiological effect, and freedom from after ill sequences. The rest it affords, which sets in a few minutes after its administration, is not a dull heavy torpor with congested brain and laboured breathing, such as that effected by opium, but a light, calm, easy slumber, free from cerebral or pulmonary oppression, from which the patient is easily waked, and which leaves no after sting on waking, to detract from the comfort it confers.

Thus, then, the characteristic peculiarities of the hypnotic action of chloral seems to be rapidity of access, and length of duration, absence of congestive influence, non-arrest of natural secretion, and non-inducement of after-unpleasant effects; and it is the possession of all these which gives it in my judgment the great advantage over opium and other allied medicines. The rapidity with which the chloral sleep sets in is very remarkable; ten minutes is about the limit of the stage of incubation, before the recipient of a moderate dose drops into slumber; but it is generally much shorter, and in some cases the patient is off before the nurse has well left the bedside; in fact, it is the speediest of all narcotics, and this quickness of affording relief from pain, renders it a most grateful and popular remedy. A special feature in the chloral sleep is the ability to cast off its influence for the time under the pressure of internal or external circumstances. A patient under its control wakes to the call of nature, or the irritation of severe cough, or he can be easily aroused by his attendant to receive such nutriment or medicine as his state may require, and after the disturbing excitement is removed he relapses into a calm repose again. Although in the sleep of chloral, the pupil is contracted, as in natural sleep, it instantly dilates on waking, and the concentration of intelligence on being roused returns as quickly as after ordinary slumber—leaving no drowsy, besotting effect like its half-sister, opium—and the sleep is more prolonged and quieter than that of the last named anodyne. Some assert, however, that it is disturbed by frightful dreams; this has never come under my notice, and, if it be so in some instances, it is hard to charge the medicine with the visions which a mind over wrought by illness and anxiety is capable of conjuring up. Further, should the dose of chloral prove inert as an hypnotic, no mischief is done, and no terrible unrest effected such as that which awaits the partaker of a stimulating dose of opium. It has been asserted by some writers that there is a transitory stage of excitement before the complete action of chloral takes place, and that unless the patient sleeps there is no relief from pain manifest. Careful observations have satisfied me that the first is only the case where the drug is given in doses too small to procure immediate slumber, or where surrounding circumstances, such as excess of light, or noise, tend to oppose its invasion; then the patient may find it getting into his head, but even this slight action requires some constitutional peculiarity to aid it, as I have not seen it present in more than five per cent. of my cases. And, with regard to the second, I have verified the contrary in a very large number of instances where severe neuralgic or inflammatory pain has been almost instantly removed by fifteen or twenty grains of chloral, and kept in check—in some cases driven completely off by similar repeated doses, without sleep resulting as an immediate effect. The total absence of any tendency to congestion of the brain, or lungs, during the sleep of chloral, is perhaps its most important attribute, as this property enables us to use it in a number of inflammatory and organic affections of the brain, spinal cord, lungs, and heart, where opium is especially contraindicated, although its soothing influence is often sorely needed. On this point, Sir James Simpson says—"I am not aware of any special contraindications to the employment of chloral when used for somniferous purposes, even in head and chest affections, where I should have been chary of having recourse to opium as an hypnotic, I have employed chloral with perfect success." In this respect, chloral supplies a want which the scientific treatment of disease has long deplored, and in it we find a safe and certain friend to aid us, where before we had dubious or treacherous ones; and in numerous cases where a dose of opium means little less than death or recovery, chloral is certain safety. In no state is this more clearly displayed than in the sleeplessness of typhus; rest is the sufferer's salvation, yet we are comparatively powerless to induce it. Opium is much too risky an agent to be employed, except by those who are very heroic practitioners indeed. The douche, hyosciamus, ether, leeching, and bromide of potassium often fail, and we are driven to see our patient die, or to the unwilling use of opium; here chloral is a safe and comparatively sure remedy. It has been successful in a few such cases in which I have employed it; and Dr. James B. Russell says, that it was successful in almost every form of cerebral excitement incidental to febrile disease with remarkable uniformity and rapidity. It is well to remark, however, that the extreme alkalinity of the blood in fever render the patients easily acted on by even small doses of chloral. In combating functional or organic disturbances of the brain and nervous centres, chloral appears to develop its most valuable resources; its hypnotic and general soothing properties, together with its freedom from congestive tendencies, confirm to make it peculiarly adapted to this purpose. It has been resorted to in acute mania, chorea, spasm of the portio dura, epilepsy, delirium tremens, puerperal mania, melancholia, sleeplessness, convulsions, and insanity, and over all these it asserts a highly beneficial agency; its calmative effect on the excited brain being often remarkable and readily produced. On this point, Dr. A. M. Adams observes—"That chloral will almost instantly induce sleep where the brain is functionally or organically disturbed; but acts with great uncertainty on a sound brain where pain is the exciting cause of sleeplessness." With the latter part of this remark, however, I cannot completely agree, as I have found it, with a very few exceptions, exercise a despotic power in expelling pain, whether sleep be produced or not, and in neuralgic affections, in which Dr. Adams states, he found it "rather uncertain." I have, happily, experienced the opposite result. It is not necessary to detail the effects recorded of it in all the above affections, and of them I have, as yet, only treated chorea, epilepsy, and melancholia with it, but in these I have found it undeniably useful. The medicinal introduction of chloral seems to open up an entirely new era in the treatment of *delirium tremens*, and now opium is no longer likely to goad the watchful and exhausted patient to further frenzy, or run the case between the Scylla and Charybdis of sleep and effusion on the brain, but with the bromides of ammonium and potassium and chloral we may fearlessly face the monster, keeping the old drug in reserve as a forlorn hope should they fail.

(To be continued.)

DR. CHARLES MAURIAC ON BLENNORRHAGIA IN WOMEN.

By Charles R. Drysdale, M.D., M.R.C.P.L., F.R.C.S.E.,

Physician to North London Hospital for Diseases of the Chest, Hampstead, &c.

(*Continued from page* 477.)

With regard to *virulent vaginitis*, there are cases when the vaginitis at once extends to the whole surface of the vaginal canal; others which are local from the outset, or when the first fire of inflammation has died out. Most generally the process goes on from before backwards, from the vulva towards the deep parts of the canal; but it may take place in an inverse order, that is, from the cervical

portion of the vagina towards the vulva. This last fact is rare. When vaginitis is anterior or vulvar, it provokes, if violent, an inflammation, or rather a sympathetic engorgement of the inguinal glands. These glands may even suppurate, but the pus they furnish is not inoculable like that which is developed in the case of soft chancres, and the blennorrhagic bubo nerves spontaneously become chancrous. The vaginitis, or the deep parts, of the canal does not affect the inguinal glands. We find the explanation of this fact in the distribution of the lymphatic vessels: those of the posterior half of the vagina go to the glands of the pubis; those of the anterior half to the internal glands of the inguinal region. When vaginitis passes into the chronic stage, it is rare that it confines itself in the vaginal *cul-de-sac*. It is then habitually complicated with blennorrhagic inflammation of the neck of the uterus and cervical cavity. These two affections, acting one on the other by contact and reciprocal contagion, are perpetuated indefinitely. They may coexist in the sub-acute stage, with a healthy condition of all the other parts of the genital mucous membrane. Frequently, they are not suspected, but because a woman who believed herself healthy gives a clap, and they are only discovered by means of a minute exploration of the *cul-de-sac*. The speculum in such a case, after undoing the folds of the anterior and middle part of the vagina, falls into a kind of cloaca filled with purulent viscous mucosity, in the midst of which the uterus is bathed. These mucosities are constituted by a more or less intimate combination of the pus which belongs to the blennorrhagia and of the viscous, stringy, limpy liquid, which is the usual product of uterine cervical catarrh. When the neck is wiped clean, we perceive on its surface, and on the *cul-de-sac*, the following lesions which may make us suspect the existence of a blennorrhagic affection, but which, however, have nothing characteristic. In the *cul-de-sac* the mucous membrane is thickened, and of a dusky red colour; in places the epithelium is absent, and there are very superficial erosions. These bleed easily, and secrete muco-pus. These alterations are almost always much more marked in the posterior *cul-de-sac* than in the anterior one; and for this simple reason it is into the posterior *cul-de-sac* that these fall continually, the mass of vitreous mucus, striated with yellowish purulent streaks arising in the cavity of the neck, which is specifically inflamed. The mucous membrane covering the neck is congested, erythematous, of a cherry-red, violet, or wine-colour, according to the chronicity of the disease. Its papillæ are prominent, turgescent, bristling, and give it a velvety appearance. The whole organ is congested and elastic to the touch. There exists almost always on the mucous membrane ulcerations occupying the whole of the circle of the orifice or posterior lip of the os tincæ. Sometimes these are disseminated upon the whole external surface of the neck, and become united to those which exist in the vaginal *cul-de-sac*. The ulcerations which leave bare the superficial layer of the mucous derma are caused solely by loss of the epithelium. They are multiple, irregular, festooned, and sometimes not distinguishable from the surrounding parts, except by the deeper colour they possess, and especially by a dull want of polish, easily remarked when the viscous mucus covering them is rubbed off. In some cases their surface is covered by a thin, pseudo-membranous layer of one kind of false membrane of the same kind as all febrinous exudations. As these ulcerations get old, they become salient, unequal, and mammilated, because the little wrinkle of the surface of the mucous membrane despoiled of their mucous membrane are converted into true fleshy granulations.

Amidst these lesions we sometimes see, here and there, rounded prominences, about the size of a pea, of a more or less dusky hue, formed by the follicles of the cervical mucuous, which secrete and retain some blennorrhagic muco-pus. This is the blennorrhagic folliculites of the neck. As we have seen, the preceding alterations do not much differ from those we find in certain catarrhs of the neck, which have no blennorrhagic origin. Thus, Dr. Mauriac maintaining that the diagnosis of specificity without the effects of contagion is impossible. But *à propos* to these kind of cervico-vaginitis, the question always occurs: Is it impossible that a woman exempt from all blennorrhagic contamination, and nevertheless presenting, as may happen, the lesions just described, should communicate a discharge by connection? If you answer that she may, but that this discharge has nothing to do with true blennorrhagia, and that it cannot be transmitted, &c., you are a well convinced specificist. But your conviction will not prevent another person from believing that you would have been wiser if you remained in a methodic doubt, until very positive and irrefutable experiences had been made.

As to granular vaginitis, if it is sometimes the effect of blennorrhagic contagion, we must also recognise that it is often developed under the influences of other causes, among which we must mention, first of all, pregnancy, then catarrhal affections of the uterus and cervix, which keep up a continual condition of hyperæmia in the vaginal mucous membrane. Some have remarked it in women with abundant leucorrhœa, and who yet have not communicated any contagion. These granulations are often met with on the neck in specific cervico-vaginitis. They have the form of a hemisphere and volume of a grain of millet; their colour is rather dusky red. They give a raspberry look to the parts they occupy, when they are confluent. Blennorrhagic inflammation, when concentrated in the vaginal *cul-de-sac* and in the neck, is a cause of cervico-uterine catarrh. But, in its turn, secondary cervico-uterine catarrh, by provoking a more considerable afflux of blood towards the diseased parts, and irritating by contact of its products the ulcerated surfaces, prevents the specific inflammation from subsiding.

In vaginitis, as in urethritis and vulvitis, we must have recourse to antiphlogistic treatment by baths, emollient injections, sothing drinks, repose, moderate diet, and slight purgation, when the inflammatory phenomena are very violent. When the acute period, which is generally but of short duration, has passed away, we ought to have recourse to truly heroic remedies, among which Guerin places among the first of all a plug of lint filled with powdered alum. As to injections, we may use a table spoonful of alum in a quart of water, or a solution of a drachm of sulphate of zinc to the pint of water. As to nitrate of silver, we should apply dressings on the whole of the walls of the vagina, without omitting any point. The solution ordinarily used is fifteen grains to the ounce.

Blennorrhagia relapses with greater facility in women than in men perhaps, because there remains either in the folds of the vagina, or in the muciparous follicles, or more frequently again in the cavity of the neck, points of specific inflammation, which have escaped the action of the agents employed. These localised inflammations remain sometimes latent for a long time and as if unoffensive; then, under the influence of unaccustomed excitation, they awaken, extend, and bring on a true blennorrhagia, which is taken always for an ordinary catarrh, because the specific catarrh is supposed to be cured a long time. The blennorrhagia has the same complications of rheumatism and ophthalmia in women as it has in men. The vaginal inflammation is propagated to the neck and body of the womb as it attacks the pustule. It attains by means of continuity the ovaries, and attacks them by a kind of metastasis, precisely as it does the testis. Lastly, the Fallopian tube, the analogies of the vas deferens, may become indurated, voluminous, and rigid and painful, absolutely like the chord in male blennorrhagia. If the bladder and kidneys are more often spared in women than in men, in revenge, the pelvic peritoneum is more frequently affected. This admirable summary of modern researches on blennorrhagia in women, by Dr. Mauriac, seems to me to be of much practical importance to all practitioners, and to be, perhaps, the most complete statement of the nature of the disease as it occurs in women, yet written.

CLINICAL MEMORANDA.

SUBCUTANEOUS INJECTION OF MORPHIA.

Reported by JOHN W. MARTIN, M.D., Assistant-Surgeon Mayfield Factory Dispensary, &c.

(*Concluded.*)

CASE 7.—*Incipient Symptoms of Pneumonia.* — Mrs. Deasey, æt. twenty-five; notes taken, August 28th, 1870. Had always been a strong, healthy subject. On the Wednesday preceding my visit, August 24th, 1870, she had had a severe headache, pains in the bones, and general feverishness, the result of a chill, which she had got the previous evening whilst out walking.

Symptoms at time of visit.—Four o'clock, Sunday, 28th August, 1870.—Pain in the region of the apex of the heart, the action of the latter being greatly excited. First. Sound exaggerated and roughened; dyspnœa, the respiration being greatly hurried; headache; pains in the legs, and weariness of the body; face flushed; respiration, 36; pulse, 120; temperature, 104 4-fifths. The skin dry, hot, and *very pungent* to the touch; tongue clean and well protruded; no abdominal pain, or uneasiness; bowels acting freely. A deep inspiration induces a smart attack of pain on the left side; slight dulness and tubular breathing, apparent on the left side, in the middle lobe; no rusty sputa or cough.

Treatment.—Turpentine stupes, followed by poultices applied to the left side. A mixture, containing aq. acetatis ammoniæ and nitrate of potash, given every fourth hour. On visiting her at nine o'clock, she felt lighter, skin moist and perspiring; pulse, 120; respiration, 28; temperature, 102 2-fifths. Pain about the apex of the breast easier. She felt very restless and disinclined to sleep, so I injected one-quarter grain of solution of morphia into the arm. No change took place in the temperature after the operation, as shown by the thermometer.

Monday, August 29th, 1870.—About twenty minutes after my leaving her, on the preceding evening, she fell asleep and had a pleasant night's rest. To day, skin cool and moist; face losing the flushed appearance it had; all pain about the heart gone; heart's action quiet, both sounds distinct, no murmur; appetite returning; temperature, 98 2-tenths; respiration, 20, tranquil; pulse, 72; the bowels constipated, and the tongue somewhat dirty; ordered a dose of castor oil.

Tuesday, August 30th, 1870.—Bowels well acted upon by the oil. Tranquil; slept well; tongue clean, and well protruded; appetite improved; pulse, 80; respiration, 20; temperature, 98 2-tenths. Ordered quinine mixture; convalescent.

The foregoing cases illustrate, I think, in a marked degree, the usefulness of this method of administering remedies, especially those by which we seek to relieve pain, where immediate action is the great desideratum. In addition to the above, I have used it largely in cases of colic, of rheumatism where ordinary anodynes failed to procure rest, of sciatica, and in one case of well marked coxalgia, in all with good effect. In the case of coxalgia, however, I only used it as a palliative; as such it proved most beneficial, giving the patient lengthened intervals of rest from pain, after all other remedies had failed to procure such. A word as to the method I observe in administering it, I use a solution of gr. ij. of muriate of morphia in ℥ 40 of warm water, *using no acid* to assist in its solution. Having charged the syringe with six minims of the solution, I generally select as the place for injection the insertion of the deltoid, pinching up a fold of the skin in the long axis of the limb; I introduce the needle from above downwards rapidly and steadily to the full length of the canula, then, withdrawing slightly, I gradually throw in the required quantity. After taking the instrument out, I secure the opening by a small bit of adhesive plaster. *Up to the present I have never seen any bad result follow the puncture;* on the contrary, in every case in which I have used the hypodermic syringe the patients have invariably experienced *immediate and decided benefit* from the morphia so administered. *In no case have I seen sloughing or inflammation follow the operation.*

NOTES ON SPERMATORRHŒA.

By ABBOTTS SMITH, M.D., M.R.C.P. Lond., M.R.C.S.,

Physician to the Finsbury Dispensary; late Physician to the North London Consumption Hospital; Physician to the Metropolitan Free Hospital, and to the City Dispensary, &c.

FOR many years past, I have had extensive opportunities of observing, at the various institutions with which I have been connected, as well as in private practice, the frequency of cases of spermatorrhœa, and I have been especially struck by two facts, namely,—1. The remarkably helpless and dejected state of patients suffering from this affection, and 2. The relative facility of cure, as compared with numerous other disorders of the genito-urinary organs, if the patients remained under treatment for a reasonable period, and if they, at the same time, relinquished the bad habit which, in a certain proportion of the cases had brought on, or tended to perpetuate the ailment.

A third feature presented itself with almost uniform regularity, and this was that in most of the cases (at any rate, in something like two-thirds of the whole number under observation), the patients had, before applying for hospital advice, foolishly placed themselves in the hands of ignorant, unscrupulous quacks, who, acting on the principle of the old highwayman's maxim "your money or your life," had rapaciously extorted as much as they could of the former, while their victims ran no small risk of also losing the latter. To a certain extent, some of the sufferers could scarcely be blamed for their apparent want of discrimination in going to such men, as they had, in the first instance resorted to medical practitioners, who had told them, either that their disorder was imaginary, or, rushing into the opposite extreme, that it was incurable, or only to be removed by the progress of time.

It is not a little singular that the medical profession should have assumed such an apathetic or indifferent position, as regards this disorder. There can be no doubt of the existence of spermatorrhœa in a large number of patients, and, in fact, it would be found to be much more common than it even appears to be, if it were more generally recognised as a distinct affection. Many of the cases which now fall into the hands of empirical pretenders, would then come within the range of observation of qualified practitioners. And this must, sooner or later, be the case when the false delicacy which is at present allowed to surround the subject of spermatorrhœa is removed. It is the conscientious duty of medical men, standing as they do in the position of guardians of the public health, to grapple resolutely with this, as with every other phase of disease, instead of leaving unfortunate sufferers exposed to any charlatans who may happen to seize upon it as a fertile field for deception and extortion. I write thus earnestly, because many instances have been published in the medical journals of patients—often of superior education, intelligence, and social position—who have suffered severely at the hands of quacks, partly through their complaint having been treated too lightly by medical practitioners, to whom they had previously applied for advice, partly through the *mauvaise honte* which induced them, misled by the specious promises held out, to fall into the traps set by quacks. "*Omne ignotum pro magnifico*" is an old and true axiom concerning the credulity of sick people, who, like drowning men, readily snatch at any proffered assistance without waiting to form an opinion as to whether it is worthless or sound. With regard to the almost culpable distaste for dealing fully with the subject, I am of the same opinion with that which

was recently expressed to me by the editor of a medical journal, that there can be no more real reason for ignoring the functional disorders of the male, than those of the female sex, upon which so much has been written and said of late years.

The general symptoms of spermatorrhœa need not be dwelt upon, and I shall purposely pass over the minutely detailed and grossly exaggerated symptoms, which the quacks carefully and persistently parade before their victims' imaginations, such as, "involuntary blushings," "loss of vigour," "gradual decay of nature," and the like.

Suffice it to say, that the general symptoms are similar to those which are present in all cases of disease where the patient is subjected to the effects of continuous exhaustion of the system. He becomes languid, weak, and unfit for any sustained physical or mental exertion, disposed rather to brood in solitude over his misfortunes, than to join in social conversation and amusements, thin, pale, and anæmic in appearance.

In the majority of cases, especially of those which are connected with masturbation, the patient is unwilling to speak of his ailment, and is particularly reticent concerning its causes and nature. To this peculiarity may be attributed, in great measure, the uncertainty and difficulty of treatment. A physician may go on for a long time, treating a case of this kind by general measures, but unless he should eventually suspect its real character, and satisfy himself, by closer questioning, of the accuracy of his suspicions, no improvement will be manifest in the condition of the patient. In fact, the patient will be further off from a cure than ever; the physician, unconscious of the "*fons et origo mali*," will get baffled and disheartened at the continuous want of success, while the patient, becoming more reticent, and it may be more addicted to the bad habit, will fall into an almost hopelessly chronic state of illness and despair. How much better would it be for the patient's health and happiness, if he could face the matter boldly, and at once disclose the nature of his case to his medical adviser. "Half-confidences are bad," remarked one of our most distinguished judges, Lord St. Leonards, with reference to legal consultations; what then, must half-confidences be in a medical consultation where the real nature and origin of the case are known only to the patient himself?

If the patient gives a fair history of his ailment, the physician will usually be enabled to mark out a definite course of successful treatment.

In all instances, however, where any doubt exists, or where the physician suspects the patient of reserve in stating the facts of the case, the microscope will be found a most valuable assistance towards the formation of a proper diagnosis. A mere ocular inspection of the urine, or submitting it to the ordinary chemical tests, will not furnish so certain a means of diagnosis in spermatorrhœa as in most other disorders of the genito-urinary organs. For instance, when only a small proportion of spermatic fluid is present in the urine, it may, upon superficial examination, be mistaken for mucus, and thus escape detection. In some cases, chemistry may be sufficient to demonstrate the nature of the disorder. "If," wrote my learned predecessor at the Finsbury Dispensary, Dr. Golding Bird, "we have a specimen of urine passed by a man, which is cloudy and opalescent, reddens litmus paper, and does not become clear on the application of heat or of nitric acid, the presence of spermatic fluid may be at least suspected. Should a larger quantity of this secretion be present, it subsides to the bottom of the vessel, and may be recognised by its physical character." But, it is only in extreme cases, that spermatozoa can be thus detected, and it is better in any circumstances, to have recourse to microscopical investigation.

For this purpose the urine should be permitted to stand for some hours in a conical-shaped glass, so that the spermatozoa may be separated from the fluid, and settle with the mucus at the bottom of the glass. The upper portion of the fluid should be then carefully poured off, and two or three drops of the sediment be placed upon a slip of glass, covered with another slip of glass, and afterwards put under the microscope. The little thready spermatozoa and the spermatic granules can then be recognised. When they are recent, the spermatozoa have a spherical form, with a well-defined tapering tail, resembling very minute tadpoles, and are capable of spontaneous motion. If the urine is very acid or alkaline, they soon lose their movements, and undergo a change of form, owing to the rolling up of the tail part towards the body of the animalcule.

Urine which contains spermatozoa soon becomes alkaline. Octahedral crystals of oxalate of lime are often found in company with spermatozoa; in fact, according to some writers, the appearance of these crystals in the urine of the male subject, affords strong presumptive evidence of the co-existence of spermatozoa.

The causes of the admixture of spermatozoa with the urine are various. They may remain in the urine after emission, and be subsequently discharged with the urine. They may also be present, owing to an irritable condition of the vesiculæ seminales, in connection with sexual excesses or onanism, with paraplegia, and some other disorders of the nervous system, diabetes, inflammation of the bladder, stricture, constipation, and hæmorrhoids.

An affection to which the name of spermatorrhœa is sometimes, but improperly, applied, is a discharge which takes place from the urethra, when the patient is at the closet, particularly if the bowels are much confined. This discharge, which gives rise to great alarm in the mind of the patient, may not be seminal, or be only slightly so, and consists principally, or entirely, of a mucous secretion from the vesiculæ seminales. It is the result, usually, of over-excitation of these organs, or is produced by urethritis and epididymitis, so that it is then a kind of gleet. A similar discharge may take place under the effects of mental excitement arising from impure thoughts, or reading lascivious books.

Another phase of the affection, which is often very difficult to treat, and produces the most disastrous consequences upon the patient's health and spirits, has an existence chiefly in the mind of the sufferer, who fancies himself to be rendered impotent, and thereby disqualified for marriage: sometimes a patient of this class will brood over his sufferings until he becomes a monomaniac.

The treatment of spermatorrhœa will consist—1. In the administration of such general remedies as will improve the patient's general health; 2. In preventing the continuance of the involuntary discharges; and 3. In promoting a higher moral tone.

As most of the patients who suffer from this exhausting disorder are in a low, anæmic condition, tonics are especially indicated. Foremost amongst these are the preparations of iron and zinc, and quinine. The tincture of the perchloride of iron may be given in doses of fifteen to thirty minims; in cases where this preparation is badly borne by the stomach, and produces indigestion and nausea, the compound iron mixture or pill, the *Ferrum reductum* of the "British Pharmacopœia," or the ammonio-citrate of iron may be substituted for the perchloride.

Zinc may be administered in the form of either the sulphate in doses of one to three grains, or the valerianate in half-grain to two-grain doses. The best mode of giving these salts, is by making them into a pill, with extract of anthemis or hyoscyamus.

When quinine is indicated, the tincture is the preparation which I consider preferable. As is also the rule during the administration of ferruginous remedies, aperients must be given occasionally to prevent the headache, &c., which are apt to occur if the patient's bowels should be confined during its employment.

If the nervous depression is strongly marked, and especially in patients of cachectic constitution, phosphorus, or its compounds, may be resorted to. Pills containing phosphorus may be made according to the following formula (*vide* "Druitt's Surgical Vade Mecum"):—Take of crumbs of bread, a drachm; of distilled water, as much as may be

sufficient to render the mass of a proper consistence, then add one grain of phosphorus. Mix the mass well together, and divide into twenty pills, of which one may be given three or four times daily. A more convenient method of administering phosphorus is either in the form of an ethereal tincture, composed of four parts of phosphorus, dissolved in two hundred parts of ether; or of phosphuretted oil, consisting of ten grains of phosphorus, dissolved in an ounce of almond oil. The dose of these preparations is from five to ten drops, given in emulsion. With regard to the chemical compounds of phosphorus, I have found the hypophosphites of soda and lime very serviceable, in doses of ten to fifteen grains, given in some bitter infusion.

In other cases, again, particularly where the emaciation has been excessive, considerable benefit may be obtained by the administration of cod-liver oil, with equal parts of lime-water. I may here remark that I have frequently seen amongst the male patients at the Consumption Hostal, cases of supposed phthisis occurring in youths between fifteen and twenty-five years of age. Not having been able to discover any positive signs of consumption, I have been induced to make further inquiry, and have learned that the emaciation and debility were due to the spermatorrhœa, which in these cases generally arose from self-abuse. It is in this class of cases that I have observed the most decided benefit from the administration of cod-liver oil, with lime-water, and of the hypophosphites.

When the appetite is bad, and the tongue furred, and the patient suffers from occasional profuse perspiration, the dilute mineral acids are indicated, or the aromatic spirits of ammonia, with the compound infusion of gentian. It is in similar cases that the affection is most commonly associated with oxaluria, so that I give the preference over other mineral acids to dilute nitro-hydrochloric acid, owing to its valuable power in diminishing the quantity of oxalate of lime in the urine.

In spermatorrhœa the bowels are usually confined, and their regular action should therefore be insured by the administration of some mild aperient, the disorder being always aggravated by any tendency to constipation. Podophyllin, in small repeated doses, fulfils this indication better than most remedies of this class. Aloes and colocynth should be avoided, in consequence of their irritating effects upon the lower portion of the intestines.

Sedatives are necessary, in order to allay the excessive nervousness of the patient, and the local spasmodic irritability. Amongst these I place the most reliance in the bromide of potassium, given in full doses. When the unhappy sufferer is in a low, desponding state of mind, when he is a prey to irritable brooding over his troubles, or when he is attacked by vertigo or epileptiform convulsions, no remedy appears so readily to calm the nervous system, and to effect such speedy improvement in the patient's health and spirits, as the bromide of potassium.

The preparations of opium have been favourably mentioned by some writers on this subject, but they are apt to disappoint the expectations of the physician through their tendency to produce disturbed dreams during sleep, as well as by the constipation to which they often give rise. The *liquor opii sedativus*, and the salts of morphia, are less liable to these drawbacks than other opiate preparations. The same objections do not hold with respect to conium and cannabis Indica. The compound conium pill, given every night, in five or ten grain doses, either alone or combined with camphor, is a very useful remedy. The hydrate of chloral has also been productive of very good results in cases for which I have prescribed it.

If there should be any degree of scalding when the patient passes water, or if there should be frequent micturition, with an irritable condition of the bladder, and scanty, high-coloured urine, uva ursi, buchu, or pareira may be given, in combination with carbonate of soda or potash, and tincture of hyoscyamus, bromide of potassium being substituted for them as soon as the urine becomes more copious, and less highly coloured.

Instrumental interference is always attended with risk, and often with positive injury to the patient, notwithstanding the assurance to the contrary which is made by those who advocate the treatment of spermatorrhœa by the application of caustic to the urethra, or by powerfully astringent injections.

The employment of elastic, or non-elastic rings, by means of which pressure is exercised upon the course of the urethra, with the idea of mechanically restraining the discharge of spermatic fluid, is still more to be deprecated. Such appliances cannot cure, nor can they even check the progress of the disorder, while the constant irritation which they keep up is, of course, very injurious to the patient.

It not seldom happens, where the affection has been brought on by masturbation, that the patient unfortunately remains so much enslaved by this body-and-soul-destroying habit, that, despite of all curative measures, the progress towards health is seriously retarded. In such cases the application of a small quantity of blistering fluid to the penis, so as to form a ring around it, is an excellent adjunct to other treatment, by its rendering that organ tender to the touch, and consequently seconding the efforts made by the patient to discontinue the injurious practice.

The diet should consist of plain, wholesome food, easy of digestion. Spiced or salted dishes should be avoided, as should also the excessive use of alcoholic stimulants. The dinner-hour should be early, not later than three or four p.m. A glass or two of good beer may be taken with this meal, and the patient may also have a couple of glasses of port wine after dinner. Late suppers are objectionable. At breakfast and tea-time, the best beverages are cocoa and milk, neither tea nor coffee being advisable. The patient should retire at an early hour to bed, and rise proportionately early in the morning.

A moderate amount of out-door exercise should be taken daily. Walking is the best form of exercise; riding on horseback is inadmissible in most cases, owing to the tendency to increase the local irritability.

Bathing can scarcely be spoken too well of. The patient should, if not previously accustomed to the regular habit of daily bathing, commence by sponging the whole body every morning in tepid water, gradually decreasing the proportion of warm water, until at last cold water is alone used for this purpose. Cold bathing is beneficial by its improving the action of the skin, invigorating the body generally, and astringing the relaxed local structures.

Lastly, the patient's mind should be agreeably occupied, in order to divert his thoughts as much as possible from his ailments. In many instances, if a more healthy tone of mind can be established, a more healthy state of body soon follows, and a speedy cure may not unfrequently be obtained.

THE SEWAGE QUESTION.

SPECIAL REPORT.

(Prepared expressly for the MEDICAL PRESS.)

No. XVII.

PRECIPITATION OF SEWAGE WITH THE SALTS OF ALUMINA AND IRON.

CHLORIDE of iron and lime were formerly employed as precipitating agents for the sewage of Northampton, and when the process was conducted in a proper manner the results were highly satisfactory. At the time of our first visit to the place, in 1862, the sewage was only about 400,000 gallons a day, the town being but partially drained, and it flowed by gravitation to the works, which are upon the banks of the River Nene, about half-a-mile from the town. As it entered the works it received a dose

of lime and chloride of iron from two small tanks, which were charged in the following manner:—Each tank contained its own material in a solid form, and it was supplied with water from a small tap that was constantly running. The solution and suspension of the materials in the water were effected by means of revolving stirrers moved by a boy, and the overflowing water carried the solutions into a common pipe, which discharged them into the sewage. The solutions, therefore, became mixed, and were decomposed before they reached the sewage. There was no contrivance for agitating the sewage after the chemicals had been added to it, but it flowed onwards to the first subsiding tank, which was 40 feet long and 30 feet wide, and from this it passed through the openings of a cross wall into a second subsiding tank 60 feet long and 30 feet wide, from which it escaped by a weir a little under the surface of the liquid, into an outfall channel nearly a mile long, which conveyed it to the River Nene. The subsiding tanks had an average depth of five feet, but the bottoms of them sloped from the sides to the centre, where there was a gutter with an Archimedian screw for driving forward the precipitate to a central well, from which it was lifted by an endless chain of buckets. Each set of tanks worked a fortnight before the sludge was removed, and it was conveyed into properly prepared pits, where it was consolidated by mixing it with the town refuse. In this manner about 7,000 tons of manure were annually produced, and sold for 1s. 9d. per load. The quantity of chemicals daily used were from 60 to 70 lbs. of solid chloride of iron, and from 10 to 12 bushels of lime. Dr. Letheby investigated the process for the Town Commissioners, and we gather from his published report that he recommended an entirely different method of working. "The chloride of iron," he said, "should be dissolved in the water and allowed to run by a graduated stream into the sewage before it reaches the lime. A contrivance should also be used for effecting a perfect mixture of the iron solution with the sewage. This having been accomplished, the sewage should then receive its dose of lime-liquor, and be again well agitated, so as to be thoroughly mixed. In this manner a heavy clotty precipitate will be produced which will rapidly fall in the subsiding tanks, and leave the supernatant liquor perfectly clear and inoffensive. The proportions of chloride of iron and lime should be about 4·5 grains of the former, and from 14 to 15 grains of the latter per gallon of sewage, and the quantities should be so regulated as that the supernatant liquor at the outfall shall be clear, colourless, and but faintly alkaline." This improvement of the process was adopted by the Commissioners, and after it had been in operation for about a year the engineer of the works reported that the results were satisfactory, and that a manure was produced at a cost of 1s. a ton, which was readily saleable at 4s., and which by chemical analysis was valued at 15s.; for, according to Mr. Harris, the analytical chemist of Northampton, it contained 12·1 per cent. of organic matter (with 0·916 nitrogen = 1·112 ammonia), and 0·454 of phosphate of lime. At a later date, in consequence of the difficulty of procuring chloride of iron, the salt was manufactured on the works from native oxide of iron, at a cost of £6 a ton; and it contained about 9,400 grains of the mixed chlorides of iron per gallon. It was used in the proportion of six gallons to a million gallons of sewage, to which about 12 bushels of lime had been previously added. These are in the proportion of only 0·006 of a grain of chloride of iron, and 5·88 grains of lime per gallon, quantities which are manifestly insufficient for the perfect defæcation of the sewage. Nevertheless, at the time the works were visited by the Royal Rivers' Pollution Commissioners, they reported that "the effluent sewage, after a flow of a mile and a-half through a culvert, in which it becomes mixed with about one-sixth of its volume of spring water, is discharged into the River *Nen*, in a nearly clear and apparently innocuous condition. We examined the stream for about one-third of a mile below the outfall, and could perceive no sewer fungus or other sign of sewage pollution." In their opinion, however, the decomposition was merely delayed, as the effluent sewage water contained about 1·245 grains of organic nitrogen. At a subsequent visit to the works, in the month of April of the present year, we found that the sewage was treated in the following manner:—The present population of Northampton is about 40,000, and the sewage amounts to about a million gallons a-day. Instead of being precipitated with chloride of iron and lime it is defæcated with crude sulphate of alumina and iron made from a ferruginous clay and sulphuric acid. Two tons of clay are mixed with three cwt. of crude sulphuric acid, of chamber strength. The mixture is effected in wooden troughs, and as there are six of these troughs, one being almost entirely used out daily, the materials stand in chemical contact for about a week. It is then fit for use, and is diluted with water by placing it in another trough, set upon an incline, and having two cross breaks for checking the flow of the water, which runs into it at the rate of five or six gallons a minute. The dilution is effected by hand labour assisted by a shovel, and the crude chemicals are carried forward into the sewage as it enters the works. There is no contrivance for agitating the sewage before it enters the subsiding tanks, and hence there is but an imperfect flocculation of the suspended matters; besides which, the acid of the chemicals acts upon the carbonates of the sewage and produces a notable effervescence, thereby causing the suspended matters to rise and form a thick scum. This accumulates to a large extent in the first subsiding tank, and is kept back by cross walls with floating planks. From this tank it passes over a weir into the second subsiding tank, already described, and which has alternating cross walls that reach nearly to the end. By this means the sewage is made to take a circuitous route before it passes over the weir into the covered outfall channel, which carries it for rather more than a mile, and then discharges it into the river. At the time of our visit about 15 cwt. of the sulphated ferruginous compound were used to the million gallons of sewage per day, and it was evident that it eventually defæcated the sewage very effectually, for the effluent water was remarkably clear and inoffensive, and gave the following chemical results:—

Constituents per gallon.	Raw sewage	Effluent water from 1st Tank.	Effluent water from Outfall.
	Grains.	Grains.	Grains.
Solid matter in solution -	73·60	70·16	70·65
Chloride of sodium -	18·39	17·78	17·32
Organic matter - -	18·16	15·62	12·81
Ammonia - - -	4·980	4·190	3·247
Ditto organic - -	0·313	0·233	0·200
Oxygen required to oxydise - -	2·265	1·980	1·243
Matter in suspension -	13·85	4·97	1·74
Organic matter - -	8·48	2·91	1·11
Mineral ditto - -	5·37	2·06	0·63

These samples were taken continuously over a period of twenty-four hours; and the examination of the river below the outfall showed that the results must have been generally very effective, for the bed of the stream was quite free from sewage matters, the aquatic vegetation was clean and healthy, and the fish were abundant. It is possible, however, that occasionally, as the process is entirely managed by hand labour, the sewage might not be thoroughly disinfected, and therefore it was considered advisable to improve the works by a more perfect system of machinery. At present, about 400 tons of solid matter are removed from the subsiding tanks every week, and these, with about 48 tons of sifted ashes, and 20 tons of the burnt refuse called soft core, are made into a compost which sells for 3s. a ton, thereby realising about £600 a-year.

At Stroud, in Gloucestershire, the sewage is treated with crude sulphate of alumina and iron obtained by adding 120 lbs. of sulphuric acid to 6 cwt. of powdered clay, and allowing the mixture to stand for several days. The process is known as Dr. Bird's, and the sewage works are managed by a private company. The population of the place is about 37,000, but only from 150,000 to 200,000 gallons of sewage are dealt with by the Company daily, and these are mixed with the above-mentioned quantity of sulphated clay, the proportion being from 28 to 37 grains per gallon, and this is regulated in its delivery by two small water-wheels, which are turned by the sewage itself. The material falls into the sewage immediately before it enters the settling tanks, and the effluent water is filtered through three coke filters before it is discharged from the works. In this manner the whole of the suspended matters are removed from the sewage as well as a large portion of the dissolved organic matter. The precipitate is dried and then mixed with sulphate of ammonia and phosphate of lime, by which means a valuable manure is obtained.

Dr. Anderson, of Coventry, has lately recommended crude sulphate of alumina with lime for the precipitation of the sewage of that city. He produces the sulphate by adding one part of common sulphuric acid to two parts of ordinary clay, and then mixing it with its own bulk of water. The materials are allowed to stand in a warm place until they appear white upon the surface, which is the sign of proper chemical combination. They are then used in the proportion of one pound of the sulphated mixture to every one hundred gallons of sewage, and, after being well agitated, they are precipitated with a quarter of a pound of lime, previously slaked and diluted with water. Instead of working the depositing tanks in the usual manner, by a constant flow of sewage, he recommends that the tanks should be sufficiently large to hold a day's sewage, and that when the precipitating agents have been added, and the sewage has been well stirred, it should remain at rest for twenty-four hours, in order that the precipitate may entirely subside. He then draws off the clear supernatant water, and removes the precipitate. In our own experiments with the material, we found that it defecated the sewage in a very satisfactory manner, and yielded a good precipitate. The process has been recently tried on a large scale at Coventry by Dr. Anderson, who has made use of one of the tanks at the sewage works of the town. The tank contained 100,000 gallons of sewage on each occasion, and these were treated with nine and a-half hundredweight of the sulphated material, which, after thorough agitation, was precipitated with one and three-quarters of a hundredweight of lime, previously slaked. The mixture was allowed to stand for twenty-four hours, when it yielded a clear supernatant liquid, which was analysed for the corporation by Dr. Odling. He found that a large portion of the dissolved organic matter, especially that which is rich in nitrogen was removed. The following, in fact, were the chief constituents of the raw sewage and the effluent water:—

Constituents per gallon.	Raw sewage.	Effluent water.
	Grains.	Grains.
Solid matter in solution . .	42·77	56·28
Chloride of sodium . .	7·58	5·95
Organic matter . . .	8·33	6·30
Ammonia	0·77	0·84
Ditto organic . . .	4·00	0·77
Matters in suspension . .	89·74	1·61
Organic matter . . .	51·66	0·91
Mineral ditto . . .	38·08	0·70

In another experiment the effluent water was analysed by Dr. Voelcker, who found that it contained 62·51 grains of soluble matter per gallon, and of this quantity 9·31 were combustible (organic, &c.) Besides which, it contained 1·74 grains of suspended matter, 0·3 of which was organic matter. Dr. Voelcker says of it that, "It is so thoroughly deprived of obnoxious impurities, that, in my opinion, it may be discharged into a running stream or water course without risk of creating a nuisance."

Dr. Anderson calculates, from his experiments on the night and day sewage of Coventry, that about twenty-two tons of dry manure will be obtained from every million gallons of sewage. The manure has been carefully analysed by both Dr. Voelcker and Dr. Odling, and the following was its composition on three occasions:—

Constituents per cent.	Dr. Voelcker.		Dr. Odling.
Moisture	12·01	15·70	20·16
Organic matter . . .	26·89	31·86	22·98
Bone phosphate . .	2·60	2·55	2·20
Other mineral salts . .	6·61	10·33	16·47
Siliceous matter and clay .	51·89	39·56	38·19
Total . . .	100·00	100·00	100·00
Ammonia from Organic matter . .	1·39	1·22	1·41

According to Dr. Voelcker, the two samples have practically the same commercial value, and "will probably find a steady sale at about 30s. a ton." Dr. Anderson has gone very fully into the subject of cost in working his process, and he says that the total expense of producing a ton of manure from the sewage is eleven shillings—7s. 6d. being for the chemicals, and 3s. 6d. for labour, &c.; and for the sewage of Coventry, which amounts to about 1,500,000 gallons a day, the sum required for the erection of works would be about £7,000.

Transactions of Societies.

MEDICAL SOCIETY OF LONDON.

DECEMBER 5TH, 1870.

JOHN GAY, Esq., President.

INCONTINENCE OF URINE, TREATED BY BELLADONNA.

MR. STREETER related a case of "Nocturnal Incontinence of Urine in a young lady, aged seventeen years, which had existed for four years," and which had been arrested by tincture of belladonna in five drop doses, three times daily; the dose was subsequently reduced to two drops, and Mr. Streeter believes the cure to be now complete.

MR. DE MERIC could testify to the value of tincture of belladonna in the incontinence of urine in children; he gave this remedy in as small a dose as possible, as he did not like giving such powerful medicine to young children. In one family, of four children, every one was affected with nocturnal incontinence, here belladonna was found a good remedy.

In reply to the PRESIDENT, Mr. STREETER could not say how many drops of the tincture would be equal to a grain of the extract, the tincture he used had been kept for seven years. He did not think there was paralysis of the neck of the bladder in these cases, the affection often occurred in strumous children, and Mr. Streeter had found iodine set free from iodide of potassium by a feeble acid, as for example by the slight excess of acid in the spiritus ether is nitrosi, a useful remedy, some vinum ferri might be given with this form of iodine.

MR. HENRY SMITH showed a specimen of a lobulated tumour removed by him two days previously from the back of a healthy man, aged forty-five years. The point of interest was, that three years ago Mr. Smith had removed a simple fatty tumour from the same part of the same patient. In eighteen months' time the tumour returned in the cicatrix, and when removed, was found to be a fibro-fatty tumour, and now the one that had been removed recently, presented all the characters of recurrent fibroid growth.

The PRESIDENT remembered a case where he removed a sebaceous tumour from near the spine of a young man; a small portion, being firmly adherent to the vertebræ, escaped excision. The wound would not heal, and though this remaining portion was afterwards completely excised, the wound still remained open, and was presently filled by a true malignant growth which increased both outwardly and inwardly, and eventually the man died paralysed.

MR. PETER MARSHALL asked for the experience of the Fellows concerning chloral in the treatment of after-pains of labour, his own had not been favourable.

DR. BRUNTON could confirm Mr. Marshall's experiences as to the inutility of chloral in after-pains. In false pains he had found it a very valuable medicine, but in after-pains he would not give ten drops of opium tincture for all the chloral in the world.

DR. BRUNTON then read the paper of the evening,

ON PROLAPSE OF THE FUNIS UMBILICALIS, AND ITS TREATMENT BY THE POSTURAL METHOD.

The Author reviewed the method of treatment advocated in obstetric works, and showed that all of them were deficient in applicability, and in good results when compared with the postural method. He reviewed the difficulties that stood in the way of the ordinary method, and showed how absurd it was to think of carrying about an instrument for the reduction of the prolapse, when that accident occurred about once in 276 confinements. He showed how the postural method was, in accordance with the principles of common sense, always applicable, the hand was the only instrument required, there was no danger to the mother, as in version, and out of ten cases thus treated by him, eight were born alive, of the two that were dead, one died before he arrived, and in the other case there was an extensive disease of the placenta. The operation consists in altering the direction of the uterine axis or plane, which is downwards and backwards, when the mother lies on her back, and nearly level when she is in the usual obstetric position, by placing the mother on her hands and knees in the attitude of an Eastern worshipper, the axis is made to pass upwards and backwards, then the cord can be returned by the hand during the intervals of pain or by its own weight, it slips up beyond the head—the fingers are made to irritate the os uteri by rotation till pain comes on, then the lower segment of the uterus clutches the head or presenting part firmly and no prolapse occurs. The difficulty being thus overcome, the patient can now assume the usual obstetric position. Dr. Brunton showed some of the instruments usually employed for the reduction of the cord. He illustrated his subject by drawings, and suggested a modification of the postural method by applying the same principle, the action of gravity, in the usual obstetric position, when the uterine plane had been altered by propping up the pelvis by pillows, so as to give the uterine plane an inclination by which the cord might slip up. Dr. Brunton had not seen the postural method described in the manuals of obstetrics, except cursorily, as the knee-elbow position was the method more generally known, and followed infant mortality in cases of prolapsus funis would be reduced to a minimum.

DR. ROUTH said he believed that it was at one of the meetings of the British Medical Association, that he heard the late Sir James Simpson say that the treatment of prolapsed funis by the postural method originated with Dr. Hamilton, of Edinboro'. Dr. Routh was content to use merely the postural method without any aid from the fingers, and had been uniformly successful. In one case the patient had convulsions, and these were brought on by the slightest touch of the hand in the vagina, here on placing the patient on the knees and elbows, not only did the funis return, but the convulsions also ceased.

THE MEDICAL SOCIETY OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

WEDNESDAY, DEC. 14TH.

Dr. CHARLES A. CAMERON, Professor of Hygiene in the Royal College of Surgeons, and Analyst to the City of Dublin, read a paper

ON THE DISEASES OF ANIMALS USED AS FOOD, THE MALADIES IN MAN OCCASIONED BY THE USE OF DISEASED MEAT, AND THE SYSTEM OF MEAT INSPECTION ORGANIZED IN DUBLIN.

In Ireland the epizootic which is most prevalent, is contagious pleuro-pneumonia, or lung distemper. About eight or ten per cent. of the dairy stock of Dublin, are annually carried off by this disease. Professor Cameron described at considerable length the symptoms of this disease, and the *post-mortem* appearances. In healthy oxen, the lungs weigh only about eleven or twelve pounds, but in lung distemper they attain weights varying from twenty to seventy pounds. In one case Dr. Cameron found them to amount to one hundred pounds. A specimen was exhibited weighing above seventy pounds. The whole of one lung and a large portion of the other, were hepatized, and presented an appearance like sienna marble. Enormous amounts of purulent matter occur sometimes in the lungs; on many occasions, about one gallon of it was found in those of a cow. Dairymen cannot be convinced of the contagious nature of this disease, and it is only under compulsion that they can be induced to disinfect their premises, after infected animals have been removed from them. The insanitary conditions of dairy yards, were also forcibly pointed out. Amongst other contagious diseases affecting Irish live stock, Dr. Cameron describes that termed the soldier in pigs, which closely resembles scarlatina. The poison of anthrax affects all the farm animals. It is the cause of the so-called splenic apoplexy (the *maladie de sang*) of the French veterinary; the "black leg," or "quarter evil" of calves, and young cattle, the glass-anthrax of swine, the "broxy" of sheep, the carbuncular cynanche, or anthracoid angina, the hæmorrhoidal anthrax and the gangrenous erysipelas of pigs. Panzootic apthæ affects pigs, sheep, and swine. Eczema, epizootica, or foot and mouth disease, was prevalent last year in Dublin, but assumed a mild type. Variolous diseases affect sheep and oxen, but not swine. Dr. Cameron gave an account of his experience of the effect upon man produced by the use of diseased meat. After quoting various writers who affirmed, or denied the dangerous properties of the flesh of diseased animals, he described a number of cases of disease, and which came under his own observation, and which were undoubtedly due to the use of flesh, which was not putrid, but which had the appearances of being diseased. Choleraic diarrhœa was the common symptom present in all these cases. Attention was drawn to the very greatly increased mortality from phlegmons in these countries since the introduction of pleuro-pneumonia in 1841; and stress

was laid upon Dr. Livingstone's statement, that in South Africa the use of the flesh of oxen affected with pleuro-pneumonia produced fatal carbuncular maladies. Dr. Cameron explained the machinery which, under his directions, restricts the traffic in unsound flesh, fish, and vegetables in Dublin. Four policemen are employed as animal-food Inspectors under the directions of a "Deputy Clerk of the Markets." The five officers are commissioned as Inspectors of Nuisances under the Sanitary Act of 1866, and they are all paid by the corporation. Eight "Sanitary Sergeants" also assist in this matter, and the whole force (numbering 1,100 men) have general directions to aid in the detection of sick cattle, unsound fruit, or fish, &c. During the present year, nearly 50,000 pounds of diseased and unsound meat have been condemned monthly, and several persons connected with the ownership of it, have been imprisoned and fined. All doubtful cases of disease, are referred to Dr. Cameron, and the prosecutions are undertaken upon his certificates.

Registered for Transmission Abroad.

THE

MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

Post Free to Annual Subscribers £1 2 6
,, If Paid in Advance 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of
A. A. Tindall, 20, King William-street, Strand, London, W.C.
Moffat and Co., 6, D'Olier-street, Dublin.
Maclachlan and Stewart, South Bridge, Edinburgh.

Agents for the United States—
New York—Turner and Mignard, Nassau-street.
Baltimore—Kelly, Piet, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 21, 1870.

SMALL-POX IN LONDON.

Last week this subject occupied the attention of the Epidemiological Society, at which Dr. Seaton made some important statements. He considered the present epidemic might have been expected, as London generally suffered from an outbreak every third year. There had been epidemics of small-pox in London in the years 1851-2, 1855-6, 1859-60, 1863-4, 1866-7, and this of 1869-70. In other large towns an interval of four or five years might occur; but in London, the accumulation of susceptible individuals was so rapid, that the outbreaks occurred more frequently.

The present outbreak is chiefly confined to the East End, because there vaccination has been neglected.

Some unions have been undergoing reconstruction, or the process of amalgamation has been going on, and thus the permanent arrangements for carrying out the Vaccination Act have been postponed. Further, there have been difficulties about the fund to which the expenses were to be made chargeable. And so it comes to pass that two precious years have been in some districts wasted. The worst unions seem to be Bethnal Green and Mile End Old Town, and in these some of the Guardians have abetted the fanatical opponents of Jenner's beneficent discovery. Nearly half the mortality from the small-pox epidemic has fallen upon these two parishes,—an awful lesson to the Guardians who have neglected their duty and encouraged the people to resist the law.

Dr. Seaton told the Society that out of 281 deaths in nine weeks from the small-pox, 135 had taken place in those two unhappy parishes. When an inspector was appointed, he received a list of 4,000 children about whom no return had been made. It was then publicly asserted that the parents of that number objected to have the operation performed; but such an assertion is most unreasonable. Neglect, not resistance, is to be seen here, and the public will consider the Guardians to blame. For our part, we think some machinery might be devised to instruct parents on the importance of the subject. It would be far better to vaccinate the thousands whose parents would not object if the object were explained properly, than to prosecute the half dozen vaccina-phobiacs who are unable to reason on the matter.

Having mentioned the worst unions, we may also name the best,—again on Dr. Seaton's authority. He predicted to the Epidemiological Society that, when the epidemic is over, Poplar, St. Luke's, and the Clerkenwell division, Holborn, will be found to have reaped the benefit of their prudence.

In former epidemics, Poplar has suffered severely. In this it has only contributed 11 deaths to the 281. In St. Luke's, the mortality has been also small, though formerly it suffered in the highest degree.

Dr. Seaton also referred to Paris, which he visited just before the siege, and he attributed the epidemic of this year to an "appalling" neglect of vaccination. For twenty years London had not had in a quarter as many deaths from small-pox as Paris was said to have had per week.

Before leaving this subject, we may advert to the rapid filling up of the temporary hospital provided at Hampstead by the Asylums Board, and the enlargement now taking place. Sixty more beds will be ready in three weeks, making a total of 190; and the permanent hospitals at Homerton and Stockwell are being pushed forward as fast as possible.

There have been nine deaths in the Hampstead Hospital; seven certainly unvaccinated, and the other two could not be certainly ascertained. It is to be hoped the increasing mortality will rouse the public to the importance of vaccination, and that we shall hear no more of the foolish fanatics who seem to have no care for the lives lost through neglect of a trifling operation, from which they fancy some injury has now and then arisen. Well would it be if their credulity were manifested in some more sensible way.

Notes on Current Topics.

About the War and Wounded

The following are the German arrangements for treating the wounded :—There is a staff at head-quarters of medical officers, with assistants. Every army *corps* has three sanitary detachments, and when a division goes into action, one of these sets out immediately. On an average—some being greater and some less—each detachment is composed of about 120 soldiers to carry the wounded, and 16 orderlies, who act as dressers sometimes. Half-a-dozen waggons, with stretchers and straw inside, accompany it to the field. As well as its own sanitary detachment, a division can have the use of either or both of the two others attached to the same *corps*. They bring in any wounded man who can be reached in the heat of the battle. Four orderlies, with a stretcher, proceed to the ground, one of them having a bag round his neck, containing tourniquets, bandages, plaister, and other appliances, if it was necessary to staunch the wound temporarily before removing the patient to the dressing-place, where, on his arrival, if immediate treatment was indispensible, he was treated on the spot ; if not, he was removed in a waggon to one of the field lazarettes, or hospitals. In addition to the above arrangements, every field lazarette has the use of ten ambulance carriages.

* * *

It must be very difficult to form an estimate of the numbers of the wounded lately either round Paris or on the Loire. The condition of the interior of Paris is still less known, and the contradictions to be daily met with in the papers only illustrate how wide the guesses are. It seems certain, however, that the numbers have been very great ; and when thousands are put *hors de combat*, there must be hundreds whose wounds are serious. As to the food supplies of Paris, still less can be actually known, and we shall therefore make no attempt to reconcile the opposing statements, for we place no confidence in any. A good many editors must possess strong notions as to the gullibility of their readers, seeing the exact information they profess to have obtained by *ballon monté*.

* * *

The Septuagenarian Ricord has carried high the banner of the Profession. An eye-witness says, that in the sortie of the 30th ult., he amazed everybody by his prolonged exertions and his "ubiquity." The same praise may be paid, and will be, to many others of our *confrères*.

* * *

Dr. Heyfelder, of St. Petersburgh, has, at Nieuweid, 150 German wounded under his care in huts and tents.

* * *

While so many are rivalling each other in doing good, it is idle to deny that the Geneva Convention has not succeeded so well as was expected, and the outcry for its revision will probably grow louder and louder. It is easy enough now-a-days to declare treaties void. Will it be as easy to amend the one effort to ameliorate the sufferings caused by war ?

* * *

We have already spoken of the numerous deaths of surgeons who are freely expending their lives to aid the sick and wounded. The untimely death of Dr. Davis—*le bon docteur noir* as the poor starving peasants called him—is but an incident constantly repeated, and of which many more will be told.

In the same week died Dr. Thomas at Sedan, exhausted by the toil to which he had given himself up.

The infamous murder of Dr. Debaudre has also been chronicled in these columns. The chief physician of the Sedan ambulances, Dr. Duplessy, delivered the following address over his grave :—

"Citizens,—A youth of twenty-five years—Dr. Debaudre, of the International Association, bearing our inviolable badge—whilst fulfilling a medical duty, has been murdered ! It is our painful duty to bury the victim of this infamous action. What a cruel irony of the Lord of Hosts, whom tyrants invoke ! This victim was for ever ready to comfort, to heal, even the man who deliberately, in a dastardly manner, has killed him, without caring for the signal of this poor physician, who was waving his handkerchief, without looking at his pass—without taking the trouble to observe our badge ! The murderer has fired on the Red Cross. I protest, as a physician, as the delegate of the International Red Cross Association of Brussels, against this barbarous deed, which will find a painful echo in every heart. Do we not suffer enough, then, already—far from our families, far from our friends, far from our children ? Do we not die quickly enough then—of typhus, of infection, of hospital gangrene, as is proved by our lamented colleague, Thomas, and by so many others, whose martyrology would be too long ? Must we whilst fulfilling our duties as volunteers of benevolence, whilst carrying our help far and near, have to fear to be shot as are shot wild beasts ? If the Geneva Convention is a dead letter let it be told openly ! Then we shall arm ourselves—we also, we who now carry the weapon which heals those who are wounded by weapons ! It would ill become us to speak of vengeance over a grave, for we are men of peace, and already there are but too many victims in this dreadful war, against which every man who has a heart protests. We hope that justice will be done. Whoever the murderer is, he will have to bear the penalty of a crime against humanity. His conscience, if it be accessible to remorse, will cry out to him, 'Murderer, your bullet has struck an inoffensive man ! Murderer, you have taken aim against a neutral ! Murderer, you have killed, pointblank, a physician, an inviolable man, a benevolent man, who was without means of defence, whose mission it was to brave death in order to bring life to you !' And you, unfortunate colleague, had you not suffered enough in prison, exile for a sacred cause, under a cursed government ? Was it our destiny, when you left us, full of life, to meet your wife in tears, near your corpse bathed in blood ? Farewell, my colleague ! Farewell!"

The Medical Administration of the Turkish Army.

Doctors of the Imperial School of Medicine for the Army are divided into three groups, and have the titles of chief doctor, doctor, aud assistant doctor (*médicins-en-chef*, *médicins*, and *aide-médicins*).

Médicins-en-chef form two classes, with the rank of Colonel for the former, and Lieutenant-Colonel for the latter.

The *Médicins* form three classes, the first having the rank of Major, the second that of Lieutenant-Major, and the third that of Sub-Lieutenant-Major. The *aides-médicin* have the rank of Captain.

There are besides two classes of medical inspectors having the rank of *Général de brigade* in the first class, and of *Colonels* in the second, Each of these classes consist of three members.

Apothecaries from the Imperial School of Medicine are divided into three groups, with the titles of Apothecary-in-chief, Apothecary, and Assistant Apothecary.

There are two classes of Apothecaries-in-chief :—1st. Apothecaries-in-chief of the first class, having the rank of

Lieutenant-Colonel; 2nd. Apothecaries-in-chief of the second class, having the rank of Major.

The Apothecaries are divided into three classes, and have respectively the ranks of Lieutenant-Major; 2nd, Sous-Lieutenant-Major; 3rd. Captain. The Assistant Apothecaries have the rank of Lieutenant.

Leicester.

It is proposed to establish an hospital for small-pox and scarlet fever at Leicester, as these diseases are not admissible into the existing institutions, and they are quite epidemic. Scarlet fever is said, at present, to be prevalent in a very malignant form; and the sanitary condition of the town generally is described as very bad.

Detection of Methylated Spirit.

In the course of a paper recently presented to the Royal Society of London by Dr. I. Emerson Reynolds, Analyst to the Royal Dublin Society, an easy mode of detecting acetone, is described as resulting from some researches "on a new class of colloid bodies—mercuric compounds of certain retones." Acetone being invariably present in considerable proportion in the wood spirit of commerce, the reaction below described becomes virtually a test for the presence of pyroxilic spirit in any mixture. The ordinary "methylated spirit" of commerce is such a mixture with pure alcohol; we are, therefore, now in a position to detect the presence of this methylated spirit, by means of the following characteristic reactions of its invariable constituent acetone. 400 c. c. of the suspected spirit are to be placed in a retort, and rapidly distilled until 100 c. c. have passed over. The distillate should be diluted with its own volume of distilled water, and the mixture very gently warmed with addition of a few cubic centimetres of caustic potash solution. On cautious addition of solution of mercuric chloride, the mercuric oxide at first thrown down is quickly redissolved, if acetone be present. Any excess of the mercury salt must be carefully avoided, as a white insoluble compound is then formed. The alkaline liquid containing mercury, must now be filtered clear, and then divided into two portions. One part is to be violently boiled for some time, a yellowish-white gelatinous precipitate will suddenly make its appearance if the resolution of oxide of mercury in the first instance was due to the presence of acetone. In the second portion dilute acetic acid, when added in slight excess, should produce a bulky gelatinous white precipitate, containing, when carefully washed and dried, between 78 and 79 per cent. of mercury. Though acetic aldehyde combines with mercury, it does not yield a solution possessing the above character. In examining medicinal tinctures by the new method, it is absolutely necessary to test the suspected sample against a specimen of the particular kind of tincture of known purity. Certain volatile oils extracted by spirit from plants pass over during distillation, of course tincturing, and by their action on the mercuric oxide, in presence of caustic alkali, might mislead an inexperienced operator. Contrast of the pure tincture with a suspected sample guards against the source of error.

Professor Bloxam, as recorded in our last issue, succeeds the late lamented Professor Miller in the Chair of Chemistry at King's College.

Persistent Delusions in Small-Pox.

An interesting case communicated by Dr. Mathew, appears in the last issue of the *Indian Medical Gazette*, of the occurrence of hallucinations as a persistent symptom of small-pox.

"During the primary stage of eruption, the patient, as not unusually happens, without being actually delirious, was troubled with delusions of various kinds. Outside his hallucination, the patient answered all questions intelligently and sensibly. The chief among my patient's delusions was, that a photographic amateur, who had previously lodged in the room immediately above this, had spent a whole day photographing him through the ceiling. Another was, that a sore throat, from which he suffered, was the result of some magnetic machination of a band of spiritualists. After a few days he ceased to allude to these delusions; the disease ran through its regular stages favourably, and in due time he became perfectly convalescent. Then, to my great surprise, on my chancing to mention his early fancies, he declared that it would be his first business on getting out of doors, to hunt up the spiritualists and punish the photographer. Some days later, when able to sit up, he acknowledged that he might have been mistaken as to the former, but not as to the latter, though he could not explain how a photograph could be taken through the ceiling. The delusion ultimately passed away, but not before he was so far recovered as to be able to walk in the verandah. He must have been very tired at the time, for he told me, that having failed to stop the operation by covering his face with a handkerchief, he wrote, as a last resource, the following appeal to his tormentor on a page in his note-book, and held it up for the photographer's perusal:—

"Will you please understand that I had no sleep for forty-eight hours, and very little nourishment; so I am unable to sustain the present species of entertainment for the present."

Brighton Museum.

The valuable museum at Brighton is being utilised by the delivery of conversational lectures in the geological, entomological, antiquarian, economical, and sanitary departments. The object is to explain the specimens, and we learn from the *Brighton Examiner* that the plan has been well carried out and has proved very attractive.

The Edinburgh Female Medicals.

The London evening newspapers—the most interesting organ of its party, the *Globe*—writes as follows on this subject:—

"The students attending the Surgeons' Hall at Edinburgh who wish to exclude the ladies have, at length, dropped rowdy demonstrations and addressed their complaint in sober language to the heads of the college. Their main grievance is that 'the presence of women at the classes of anatomy and surgery and in the dissecting-room of the College, gives rise to various feelings which tend to distract the attention of the students.' This is quite a fair argument; and had it been properly conveyed at the beginning of the session, we have little doubt that arrangements would have been adopted for the instruction of male and female students in separate class-rooms. But see what comes of rowdyism! Who will listen to the petitioners' invocation of 'delicacy' after the riot of the 18th of November, in which four 'gentlemen' were

arrested as ringleaders, and for which they have since done penance? With what consistency can they appeal to the 'sense of decorum' after their disgraceful conduct towards the lady students? If any one in those 'mixed classes,' of which the petitioners complain, should feel the awkwardness of the position, it should be the lecturer himself. But that functionary makes no such avowal: nay, rather, he thinks the presence of ladies should put 'gentlemen' on the point of honour to attend to nothing but the purely scientific aspect of the subject in hand. *Mundis omnia munda!* Neither ladies nor lecturers are conscious of 'indelicacy' or 'breach of decorum.' Can it be that the unruly students are 'nice' only upon Dean Swift's principle, because they are 'nasty.'"

Medical Reform.

Dr. Rumsey has written a letter in the *Journal of the British Association*, which has been answered by Dr. Waters, of Chester, who was furnished with proofs for the purpose. Ditto with the rejoinder. Dr. Waters, with all his advantage as an official of the Association is, of course, just nowhere against such a State Mediciner as Rumsey, who, however, lets off the Chairman of the Direct Representation Committee very easily. The Chairman asserts that the votes of the general meetings represent the Association. Everyone knows better, and we have repeatedly pointed out that the only time a vote was fairly taken the Chairman and his Committee were thrown overboard. But the next day the wire-pullers got a rider added in a thinly attended meeting of their own clique, when no one but those whipped-up for the occasion dreamed that the subject would be resumed. This is a blot on the whole Association which suffered itself to be thus degraded, and Dr. Rumsey might very well have burnt it into the memory of those who will read his letters when they pass over others.

Dr. Waters took offence at the expression of "trade-union" as applied to the Association. Dr. Rumsey did not apply it to the Association, and explains this, even calling the notion a "monstrous" one, and saying he neither holds nor has even intimated it.

What a queer turn for the controversy to take. If the Association is not a "trade-union," and if it does not exhibit "trade-union proclivities," will Dr. Waters kindly tell us what it is? and what "proclivities" are concealed under its striking resemblance to a weak "trade-union?"

The Epizootic at the Cattle Show.

The outbreak of foot and mouth disease at the Agricultural Hall is a calamity that might have been, to some degree, expected. We were glad to note the active measures adopted by the Privy Council, and we hope the relaxation of the restrictions at first imposed may not be followed by any spread of the disease. The relaxations in question seem to have gone no further than is reasonable; and certainly the country had a right to expect that the powers with which the Privy Council is armed should be used on such an occasion. With the disease so common in London dairies, it might have been well to consider whether no means could have been adopted to prevent the infection being conveyed by persons connected with them likely to visit the show.

Dr. Russell has been appointed to the Chemical Chair at St. Bartholomew's Hospital. Leaving St. Mary's for this appointment, he thus follows the career of the late Dr. Matthiessen, whom he succeeded at St. Mary's.

Science in Liverpool.

A conference of gentleman interested in scientific education was held in the Royal Institution, Liverpool, on Tuesday, the 6th inst., and passed unanimously a resolution declaring the advisability of establishing a Science College in that town, the cost of which was estimated at about £50,000. A committee was appointed to take steps with a view of carrying out the object.

English Medical Students.

From the returns which have just been completed for the Government Inspectors of Anatomical Schools in the metropolis and in the provinces it appears that at the eleven recognised hospitals in London there are at the present time 1,324 gentlemen pursuing their professional studies, all of whom, in pursuance of the regulations of the London College of Surgeons and other examining bodies, have passed a preliminary examination in arts, &c., and many add to their other qualifications "B.A." and "M.A." Oxon., Cantab., Lond., &c At the eight recognized provincial schools there are 378 gentlemen pursuing their anatomical studies, making, with those in London, a total of 1,702, being an increase over the corresponding period last year of 141. For the preliminary examination in arts, &c., for the diplomas of Fellowship and Membership of the London College of Surgeons, commencing on the 20th inst., and which is conducted by the staff of the College of Preceptors, there are already 350 candidates.

A Hint for Mr. Mill and the Small Family Party.

The record of vital statistics of the State of Massachusetts for the past year, developes some interesting facts. There were twice as many American marriages as foreign ones. There were double the number of births to foreigners, that there were to natives. In Boston the proportion was seven births to the former and three to the latter. It is not hard we think to tell the cause for this.

The Suggestions of the Conference of Irish Licensing Bodies.

We understand that these suggestions, which we printed at length in our last issue have been under the consideration of the Council of the Royal College of Surgeons and of the Fellows of the College of Physicians. The Council of the College of Surgeons have expressed their opinion that a measure founded on the suggested principles would not be likely to prove satisfactory. The College of Physicians, on the other hand, has adopted and approved of them.

Diaries.

The appearance of diaries, almanacs, and pocket books for 1871, reminds us how soon the present year will have passed away, and brings before us numerous candidates for favour; for professional men really need a good diary, and it is time to choose. We have been using this year Letts's Medical Diary, and have been so satisfied with it, that we intend to employ the same pocket book for 1871. It contains a large number of most useful memoranda to which any practitioner may be glad to turn. One of our colleagues prefers Letts's Appointment Diary, as it provides an hourly arrangement by which punctuality is ensured.

It is just the thing for those who do not care for so large a pocket book as the *medical* one, or do not wish for a regular visiting list, but to keep daily appointments, or lay out their day's work beforehand. For carrying instruments, Letts's Instrument Wallet is most useful, and combines the Diary with it. In one of Letts's Medical Diaries for 1871, already out, we observe spaces for a Diagnostic Record, that in some cases must be very convenient. Altogether, Messrs. Letts, Son and Co., seem to have provided a variety that cannot fail to suit every professional man.

The Irish Unions Apothecary.

Three new candidates have taken the field in the competition for the Irish Apothecary nest-egg, viz.:—Dr. Moore, Member of the Court of Examiners, Apothecaries' Hall, and Medical Officer, South City Dispensary; Dr. Henry Fisher, for the past ten years Proprietor and Manager of the firm of McMahon and Co., Chemists, Limerick; and Dr. Wheeler, of Carrickmacross.

Birmininghham Water.

On the occasion of the visit of the British Association to Birmingham, Dr. Hill read a very able paper on the characteristics of the waters used in the town. The *Food Journal* says, that the revelations then made as to the qualities of the shallow well-waters are such as to shock the feelings of any thoughtful man. The table is too long to quote in full, but a few facts from it will suffice. The total solid impurities per gallon figure in enormous amounts, such as 256, 380, and even 507 grains per gallon; while the organic contamination runs through a rising scale till it reaches the almost incredible figure of 48·16 grains per gallon, in the very water holding 507·92 grains of solid matter in each gallon!

Health of Dublin.

In the Dublin Registration District the births registered during the week ending December 10th amounted to 137. The average number in the corresponding week of the years 1864 to 1869 inclusive, was 153.

The deaths registered during the week were 147. The average number in the corresponding week of the previous six years was 161.

Five deaths from fever were registered, viz.:—1 from typhoid, and 4 from simple continued fever.

Five deaths resulted from whooping-cough and 1 from measles.

Scarlet fever caused 13 deaths, 6 of which occurred in No. 4 South City District.

Six deaths were attributed to diarrhœa.

Bronchitis proved fatal in 33 instances, and pneumonia, or inflammation of the lungs in 7.

Three deaths were ascribed to apoplexy, 2 to paralysis, and 1 to epilepsy.

Seven children died from convulsions.

Four deaths were referred to heart disease.

Three deaths were attributed to liver disease, and 3 to kidney disease.

Eleven deaths resulted from phthisis, or pulmonary consumption and 4 from mesenteric disease.

Two accidental deaths—1 from fractures and 1 from burns—were registered.

London School Board.

The Board has opened its work in a manner to cheer every one. By thirty-two to fourteen, it decided that the chairman shall have no salary. Thus, London is not to make a great job of education. There will never lack men who will be ready to take so honourable a post even if require hard work, and we therefore rejoice that there is a chance for disinterested patriotism open. It is such a fashion to cry out for pay that honour seems likely to go a begging. What nobler thing can a well qualified man, with means do, than give his time to his country? The next business was the election of a chairman. Lord Lawrence was elected, and his administrative abilities and success promise well for the choice. We congratulate his lordship on obtaining the suffrages of his fellow-members of the Board, and on accepting the post without a salary.

Railway Accidents.

Public attention has been so engrossed with the horrors of the war, that there is some danger that the numbers of railway accidents may not be so closely scrutinised as at other times. Not only the several terrible ones that have startled people with their sudden horror, but many minor ones have lately occurred, and will, no doubt, crop up in the law courts in course of time.

Why is not the block system absolutely adopted? It is quite certain that the worst accident of all could not have occurred had it been in operation on that line. It is time to indict for manslaughter directors who refuse to interfere to prevent death by such a simple regulation. To convict a traffic manager and a chairman of a company and send both off to the cells, might effect what remonstrance will not.

Explosions.

Birmingham has seen another explosion. The General Hospital has presented a scene that can only be equalled in these terrible catastrophes, or in those brought about in war. This scene, indeed frankly may be attributed to war, for it was in the preparation of cartridges it took place. Severe burns of various kinds occurred—of course, mostly about the exposed parts of the body. The eyes were, in many cases, destroyed. Falling beams caused fractures and other injuries. The list of dead is probably not yet even complete. Of course, the whole staff of the hospital rendered every assistance possible to the helpless sufferers. Beds had to be placed in the chapel, and cases nearly convalescent were sent away to make room for the sufferers.

Pepsine.

Messrs. M'Master and Hodgson have introduced a preparation under the name of Vinum Pepsinæ Porci, which possesses agreeable qualities, and appears well suited for general use. We have also examined some from the laboratory of Messrs. Bullock and Reynolds, which is of very fine quality. Pepsine may be prepared from the stomach of various animals, but the Pepsinæ Porci is said to be five times stronger than that made by Boudault. Since the introduction of pepsine into Britain by Mr. Squire in 1855, it has held its place in medical practice, and, within the last few years, has been rather extensively used.

The favour it has met with is one instance out of many of the constructive and restorative tendencies of the medicine of the present day.

The National Hospital for the Paralysed and Epileptic has received £1,000 from "W. X."

"R. G. Y." has given a second £1,000 to the Royal Hospital for Incurables, and "B," £500.

"W. R. T." has given a second £1,000 to the Westminster Ophthalmic Hospital.

The Children's Hospital, Birmingham, becomes entitled to £300, under the will of Mr. A. S. Evans.

The next Quarterly Examination of the Royal College of Surgeons in Ireland, will be held on Tuesday, the 10th, and Tuesday, the 24th January, 1871, at Three o'clock, P.M.

Alexis St. Martin, the Canadian who was shot through the stomach, and upon whom Dr. Beaumont experimented, is still living at Dutonsville, Vermont. He is married and has a family.

The poisonous dose of hydrate of chloral has been accidentally tested recently in a London hospital, A patient received in mistake 160 grains of the agent, and recovered with little other effect than a very prolonged sleep.

Sir William Fergusson's proposal for the formation of a collection of surgical instruments and appliances, both ancient and modern, to be added to the Museum of the College of Surgeons has been submitted to the Council by the President and approved.

Dr. Stein, of Dresden, when lecturing lately on the preservation of food, opened a tin canister of meat which had been preserved by him by Apert's method in 1851, and the meat, on examination, was found to be as fresh as when placed in the canister nineteen years ago.

Mr. Thomas Thornton has bequeathed £200 to each of the following institutions,—namely, the Asylum for Idiots, Earlswood; the Orthopædic Hospital; the Royal Hospital for Incurables, Putney; the Hospital for Diseases of the Chest, Victoria Park; and the Brixton, Streatham Hill, &c., Dispensary.

Mr. E. Backhouse, Mr. James Hartley, Mr. G. Spark, Messrs. Backhouse and Co., Messrs. Lambton and Co., Messrs. Woods and Co., and Messrs. Wilson, Bros., have each given £100 to the Sunderland Infirmary Building Fund, and thus cleared off the debt.

The Irish Court of Bankruptcy has been called upon to give judgment as to whether a dentist making sets of artificial teeth for his own patients is or is not a trader. The question arose as to whether a dentist, thus managing his business, came within the provisions of the Bankruptcy Act, or was simply an insolvent.

The Court delivered an elaborate judgment to the effect that a dental surgeon, under the circumstances, is a trader, and liable to the provisions of the Act.

The level of morality and decency, to which a certain class of the American Press has fallen in their attitude towards medical swindling, is painfully illustrated by an account published by the *New York Star*, of the gastronomic bribery to which the Yankee editors unblushingly confess. One of the fed informs us that :—

"*The renowned* Dr. Helmbold last night paid a felicitous compliment to the agency through which his wonderful medicines have been heralded to the world, by giving a dinner to the Press. Amongst those present were the representatives of the New York *Standard;* Associated Press; Press Association; *Journal of Commerce;* New York *Post; Sunday Herald; Sunday Gazette;* Boston *Journal; Republican;* New York *World;* Philadelphia *Ledger; Alta Californian; Commercial Advertiser; Chronicle; Star*, and others.

"The dinner was worthy of the man who can afford the luxury of a six-in-hand team, and who has palatial residences at all the watering places, and a winter palace in New York City. The invincible doctor was then and there put in the field as the candidate of the press for the Presidency, and it was stoutly maintained that a man who had the brains to make a fortune by the use of printers' ink was the man of all others for them to sustain. It was all very well to talk about generals and statesmen, but give us the man who can invigorate a whole nation by his bracing medicines.

"After brilliant speeches, the company adjourned, with three cheers for Dr. Helmbold, and with the hope that the strength of his wonderful Buchu may never grow less."

LONDON EPIDEMICS.

A meeting of the Association of Medical Officers of Health was held at the Scottish Corporation Hall, Crane court, Fleet street, on Saturday the 17th inst., at 7.30 P.M. Dr. Stevenson made some observations on the "Properties of Chloralum." Dr. C. J. B. Aldis read a short paper on "Scarlet Fever for Ten Years in the Parish of St. George, Hanover square." A paper entitled "The Milk-Supply for Towns," was read by Prof. John Gamgee. Dr. Ballard read "Notes of a Case of Pemphigus, following upon inoculation from an eruption upon Milch Cows."

Referring to the epidemics, Mr. Liddell thought that it was of no use to check those diseases by means of disinfectants, as long as the bodies of persons who had died were allowed to remain for days in rooms and houses in which many poor people had to live. This dangerous habit was often practised. There were at present several cases of small-pox in the London Hospital among persons who were first taken in on account of accidents. At a recent meeting of the London Hospital Board he had suggested that there should be also in readiness a shed for the reception of such cases, and he had reason to believe that that suggestion would be carried out.—Dr. Aldis stated that small-pox was extending very much in the district with which he was connected, namely, St. George's, Hanover-square. He thought it was of immense importance that some energetic steps should be taken to provide for the reception of cases of this shocking disease as they occur among the poor, and hoped that the Medical Profession and the public generally would quickly see to it.—Dr. Gibbon considered the suggestion made by Mr. Liddell respecting the permanent erection of sheds in connection with our hospitals very valuable, and hoped that it would

be generally put into practice. Dr. Aldis read a paper on "Scarlet Fever for Ten years in the Parish of St. George, Hanover square," with the view of creating a discussion on the subject rather than advancing anything new respecting it. He considered that every district should have carriages specially fitted up for the conveyance of fever patients to the hospitals, and that the authorities should provide the people with full facilities for disinfecting. He believed that at the present moment much sickness was spread through fever cases being carried in cabs from their homes to the hospital. Isolation was the great secret for the prevention of the spread of either small-pox or scarlatina. Dr. Tripe said that it could not be made too well known that isolation could be very effectually accomplished in a room. The system of isolation in a room he had adopted was to hang sheets, saturated with carbolic acid, across the room, and he found it to be a very good precaution.

SCOTLAND.

EDINBURGH.—The subject of mixed classes has again been raised in connection with a memorial presented to the President of the Royal College of Surgeons by sixty-six students attending the extra-academical lecturers, requesting his influence to procure the removal of the following grievances :—

Firstly—That several of the lecturers at the Royal College of Surgeons have admitted women into their classes without the least endeavour to ascertain the opinion of the male students, and, as now appears, directly contrary to their desire.

Secondly—That the presence of women at the classes of anatomy and surgery, and in the dissecting room of the College, gives rise to various feelings which tend to distract the attention of the students from important subjects of study.

Thirdly—That as the institution of mixed classes had not been determined upon when many of the present students attached themselves to this school of medicine, we are of opinion that those gentlemen who commenced their studies under the old system have suffered a certain breach of contract, inasmuch as a new element has been introduced which would have demanded consideration in their choice of classes.

Fourthly—That the presence of women in the classes of the Royal College of Surgeons has produced and cherished a feeling of discord which threatens to lead to very serious consequences.

The following is the President's reply :—

GENTLEMEN,—I have brought your petition under the notice of the Royal College of Surgeons, and have been instructed to reply that the College is not a teaching body, and though it recognises, and is interested in the success of, all the extra academical classes, it has no direct control over them, and is not responsible for the decisions of the lecturers.

The College, therefore, with every disposition at all times to promote the interests of the students of the Medical School of Edinburgh, cannot interfere with the teachers who have adopted mixed classes ; it can only indicate that the proper quarter to which the petitioners should apply is the Association of Lecturers, who occupy the premises at Surgeons' Hall, and are merely tenants of the College.—I am, your obedient servant, JAMES D. GILLESPIE, M.D.,
President R.C.S.E.

The Royal College will hold a special meeting on an early date to consider a motion, proposed by Dr. Andrew Wood, condemnatory of medical teaching in mixed classes.

THE prevalence of fever in Edinburgh has induced the Town Council to purchase the Canongate old Poor-house for a fever hospital. Fortunately, little or no alterations require to be made in the wards, so that patients will be admitted at once. Without any overcrowding, 120 cases can be easily accommodated. The want of accommodation in the University Buildings, especially felt by the Professors of Anatomy and Chemistry, will soon, it is hoped, be obviated. The sale of the Infirmary Buildings to the University authorities, though not formally ratified, may be regarded as virtually concluded. The purchase price is over £20,000.

Literature.

ST. THOMAS'S HOSPITAL REPORTS.*

THE first article in this volume is from the pen of Dr. W. H. Stone, and contains a short but interesting account of Old St. Thomas's from its foundation, in the year 1215, up to the modern days of the Coopers, Green, Travers, and South. We are treated to some of the formulæ of the old pharmacopœia of the hospital, and learn how the aqua limacum or snail-water might be economically prepared for hospital use.

Earthworms enter largely into this water, and we would commend it to the consideration of homœopaths as likely to prove a valuable vermifuge in their hands.

Modern St. Thomas's appears to great advantage in Dr. Peacock's able remarks on the different kinds of Pulmonary Consumption. Acute constitutional phthisis is well described, and then illustrated by well selected cases. In Case I. the symptoms appeared first on May 14th, and on June 1st, the young lady died. Both lungs were found infiltrated with miliary tubercles. This case was fatal by by apnœa ; another case also of a female, aged twenty-four, was fatal in about the same period of time as the first, from capillary bronchitis, and both lungs contained a copious deposit of small miliary tubercles. The article concludes with valuable practical remarks on the treatment of phthisis by climate, diet, and medicine. Among the numerous other contributions to the volume of reports, may be mentioned the two papers of Dr. J. S. Bristowe, the first "On the Mechanism of Articulate Speech," the other "On Disease of the Skin, due to the Growth of Vegetable Parasites."

Mr. Barwell contributes an essay "on Infantile Paralysis" and draws a parallel between this kind of paralysis and that due to spinal congestion. The points of difference are pointed out between infantile paralysis and the paralysis of spinal congestion in two parallel columns. Mr. Barwell has met with good success, in treating infantile paralysis by the injection of a solution of strychnine, having frequently injected in quite young children, in fact in babies, five and even seven half minims of strychnia solution of which each half-minim contains 1-100th of a grain of the alkaloid. In several cases the action of the strychnine was aided by the use of the constant current. It appears that if a few fibrillæ can be got to respond to the current, others join in, and, becoming themselves regenerated, propagate the influence still further. Mr. Barwell is strong against temporizing and delay in these cases of paralysis in children, a spontaneous cure may come, but if it does not, then hopeless lameness may be the result of delay and inaction.

Dr. Clapton, in his paper "On the Action of Quinine," explains the curative action of this body in ague, on the highly probable hypothesis, that it replaces the animal quinodine which has been destroyed by the ague poison ; the withdrawal of this animal quinodine is the cause of the ague, and not its substitution by some materies morbi generated in the blood. In epilepsy, quinine has been found valuable in averting the fits, given during the period of mental aberration and "fidgetiness" which may precede the epileptic fit. A list of seventy cases is given, illustrating the treatment of epilepsy, by quinine, arsenic, and bromide of potassium.

Among the surgical contributions, we have a paper "On Cases of Lumbar Colotomy" by Mr. Allingham. The results attained in relieving the distress and pain attendant on cancerous affections of the rectum seem remarkably good, life was prolonged, and the patients were unceasingly grateful for the relief afforded by the operation. In one case where the operation was performed for a stricture of the rectum, the patient is able to attend to his business, and suffers very little inconvenience from

* St Thomas's Hospital Reports. New Series. Vol. I. 1870. John Churchill and Sons.

the artificial anus in the loin. It is remarkable that in this case No. 5, a portion of the gut, apparently sigmoid flexure, of the length of five inches, came away as a slough from the wound.

Mr. Allingham's paper is followed by one by Mr. Spencer Wells "On Operations for the Cure of Vaginal Fistulæ"; here the reader has much of Mr. Well's valuable experience, and the various procedures are fully illustrated by well executed woodcuts.

The contribution of Dr. Barnes "On the Pathology of Effusions of Blood in the Peritoneum," with special reference to the so-called retro-uterine hæmatocele, is a most important and instructive paper, after reading which, much light may be gained by most men on cases that may sometimes have rather perplexed them.

The very excellent and practical paper by Mr. Carr Jackson "On Lithotomy." Mr. Jackson aims at safe lithotomy, rather than at brilliant style of operating, he prefers the use of a probe-pointed knife for the section of the prostate, using the pointed knife only for the first incision and section of the urethra as far as the apex of the prostate. Mr. Jackson uses a large staff with bold sweeping curve, and deeply grooved on its posterior aspect.

The Surgical Treatment of Diseases of the Joints is ably dealt with by Mr. Sydney Jones, and Mr. W. W. Wagstaffe furnishes a carefully compiled paper "On the Temperature of Shock in Surgical Cases." The record of the obstetric department of St. Thomas's, by Dr. Gervis, and also those of the medical and surgical cases entered at the hospital, appear to be prepared with great labour and care. Space permits us to notice, that among other contributors of good work to this really excellent volume, are found Dr. Carpenter, of Croydon, who writes "On the Causation of Epidemic Disease." Mr. J. Croft, Dr. L. Sedgwick, Mr. Rainey, Mr. West, Dr. Barker, Dr. F. Churchill and Dr. Ord, who contribute papers "on Surgical, Obstetrical, Physiological, Chemical, and Medical Subjects."

Mr. Solly and Dr. J. Lockhart Clarke, give a very complete account of "a Case of Locomotor Ataxy." The *post-mortem* microscopical appearance in the cord, being described and illustrated.

Correspondence.

"A VAN FOR TRANSMISSION OF LUNATICS."

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In these days every part of the public service is being critically examined. At one time, a defect is discovered in the military and naval systems of the country, and the heads of these departments are held up to vituperation and all sorts of abuse; at another time, the Civil Service, in its multiform parts, is mentioned as requiring reform; and in this sad country we are accused of all sorts of inconsistencies, and told at one time that religious strife is the cause of all our woes, and at another that political contention keeps us in perpetual broils—thus wasting our energies, and leading us to neglect our social improvement. I believe there is truth in both statements, and confess that I think almost every part of the public service in Ireland is marred in efficiency by party strife. Take a Board of Guardians—are not most of the appointments made from a purely political point of view. A schoolmaster, or master, or clerk to a workhouse is to be selected, and in nine cases out of ten the appointment is made from political bias, and not from the merits of the candidate; and so, also, with reference to the appointment of the medical officer under the Poor-law. Even here—where it is so important a proper choice should be made in the interests of the sick poor—the man goes in whose political sentiments are in unison with the majority. No matter how distinguished at college, no matter how intimate his knowledge of his profession—all this is nothing to them; but it is everything whether he goes with priest or Orangeman!

Every abuse, however, is *not* due to political and social causes. Sometimes in departments, where it is least to be expected, defects are found to exist, and remain unredressed (I think partly from oversight). I am certain it will be conceded that a manifest and grave defect exists in the last Act relating to lunatics in Ireland. It is there enacted that the medical officer of any dispensary district in Ireland shall go, examine, and certify before two magistrates as to the state of mind of any person supposed to be of unsound mind; and *thereupon* the deranged person (if a poor person) is to be removed in custody of the *police* to the Lunatic Asylum of the County, if the friends are unable or unwilling to do it. There is no provision as to the *mode* of transmission of the lunatic, and here is the great *defect*.

What is the effect as the law now stands? A pauper lunatic is brought before magistrates, probably in Petty Sessions—the medical officer attends, examines, and certifies; and there and then the constabulary have the custody of the patient, and forthwith are, as best they can, obliged to have him conveyed to the asylum. The police are utterly unsuited to such a duty. No one respects that force more than I do; but how can a couple of young constables know how to treat an afflicted lunatic or a violent maniac?

I have seen how! By binding the hands together, then the feet; then strapping the poor sufferers on the top of an outside car, if not quiet enough to walk, and then starting off a distance of twelve or twenty miles to the County Asylum!

Is this proper? Is this humane? And yet the constables do the best they can in fulfilling a painful and trying duty. This is no exaggeration. I have seen a poor lunatic female strapped on an open car in the manner I have described—poorly clad, and the rain falling in torrents, and hurried away in this miserable plight to the asylum. I think there is a remedy for this. Let each asylum in Ireland be provided with a "van," built expressly for removal of lunatic patients. Let two experienced attendants or asylum servants be sent out with this van for every certified lunatic to the residence of the patient, if the relatives cannot accompany the transmission, who, on receiving the medical certificate and the magistrates' order, are to be responsible for the safety and removal of the lunatic. This course would do away with all those disgusting exhibitions through the country districts, and along public roads which are now occasionally witnessed on the transmission of pauper lunatics—not only this, but it would avoid the cruel injuries sometimes unavoidably inflicted upon the wrists of the more violent. These experienced officials should be well chosen for this special work, and should go out provided with all the safe means of restraint, such as a straight-waistcoat, so that the poor afflicted maniac would be removed to hospital in a perfectly safe way.

"*The van*" should have no side windows, but should be lighted from *above*.

I have spoken to several medical gentlemen connected with asylums in Ireland, and they all agreed with me that the present mode of transmission of lunatics is very objectionable. It may, by some, be wondered that the Government Inspectors have not yet recommended a change in the law such as I have now proposed; but, I am satisfied their not having done so is explained by the probability that they have never been made aware of the exposures, indelicacies, and cruel hardships attending the present mode of removal of pauper lunatics. Now that Government will be supplied with large sums of money from the Church Act, and have intimated their intention to apply some part to the benefit of idiots and lunatics, I propose that each asylum in Ireland be supplied out of these or other funds with a covered van,* properly constructed and properly officered, to be used for the purposes mentioned in this letter.

I am yours, &c.,

WILLIAM WAUGH LEEPER, M.D.

Loughgall, Dec. 1870.

CAIRO AS A WINTER CLIMATE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Mrs. Appleton, a lady whose name is now familiar to many of us, from the energy she has shown in carrying out her plans of assisting those suffering from chest diseases to winter in Cairo, has kindly sent me the following description of her location there, which may prove interesting to some of your readers:—

"New Hotel, Cairo,

"November 25th, 1870.

"I arrived here safely on the 16th, and found everything very satisfactory. The rooms large, well furnished, and fitted

* Hired horses are always to be had.

with grates; the table good, and the servants Europeans and attentive. The weather is like June in England; the roads are good, and well shaded with trees. We had a very comfortable journey hitherto, *viâ* Liverpool, for which we paid £16 16s. The rail from Alexandria to Cairo is £1 1s. Those with me are already much better, and seemed charmed with the result; and when we think of the winter you now, no doubt, have at home, it is a subject for thankfulness that invalids can find such winter quarters as these. The bath rooms are beautifully arranged, and everything is very clean—a great attraction in this country."

It seems to me that very few winter resorts could prove so agreeable to invalids as Cairo. I know Malaga and Spain well; but the climate of Cairo is far better in bronchitis than Spain is or France. In asthma and in incipient consumption, too, it is an excellent resort.

I am, &c.,

Charles R. Drysdale, M.D.,

Physician to North London Hospital for Consumption.

THE CONTAGIOUS DISEASES PREVENTION ACT.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Disclaiming any present intention of discussing the merits and demerits of the Contagious Diseases Prevention Act, I would request space in your columns for the consideration of some difficulties and objections which I think present themselves in carrying into effect the views and measures which some of the opponents of that Act propose as a substitute for it.

Desiring not only to get rid of this enactment, in their opinion so objectionable, but also hoping to strike at the root of an evil which continues to exist in defiance of all checks and remedies, religious, moral, or social, as at present administered; they propose to supplement if not to supersede them by two very comprehensive expedients: (1) Universal marriage, with limitation of the number of children to two; (2) Increased facilities for divorce.

The first of these must have its necessity and justification in the supposition that all, or at least the vast majority of, men are under the yoke of an imperative and inexorable law of incontinence, the behests of which they are unable to resist. If resistance be out of the question, an immediate or early satisfaction of sexual appetite in a *quasi* lawful, and regular manner, plainly affords the only escape from the evils of unregulated and unlawful incontinence. In order, however, adequately to suit the remedy to the necessities of the case, it is necessary that we should keep in view the period when that appetite awakes and becomes imperative. In many males (for I confine my remarks to my own sex) sexual passion, even without undue stimulation, discloses itself at 13 or 14 years of age; in a still greater number at 15 or 16; and in most healthy males it is in full activity at the age of 18. Between the ages of 18 and 24 or 25 it is generally more importunate than at any subsequent period, so that if it were possible for a man to contain till 25, he would be able fully to master the passion afterwards. Now, if the existence and predominance of sexual craving is to be the one determining condition and reason for marriage, all men should marry at 18 years of age, if not sooner, for discretion is then weak, and passion is strong. The advocates of marriage, so conditioned, may be ready and able to obviate the objections social, domestic, economic, and even moral to which it is obnoxious; but to me they appear insuperable.

It is true they propose to obviate one, and I think by no means the greatest of these objections, by limiting the number of children to two. Such a restriction, however, appears to me utterly inconsistent with the presumed necessity which has compelled the marriage. If it be true that under the existing relations between the sexes, the great majority of men and boys will rush into the unlawful gratification of sexual appetite, regardless of the checks interposed by religion, morals, prudence, and due regard for character and health, can we expect, when in condescension to such frailty, provision has been made for the lawful gratification of that appetite, that mere conjugal discretion will limit conjugal indulgence? I have a very high opinion indeed of the beneficial change in feelings and habits which well-assorted matrimony is capable of producing, but I do not expect it to work such a moral and physical miracle as this would imply, though rating a man's powers of self-restraint more highly than the advocates of universal marriage do.

We have, indeed, heard of certain unnatural precautions, which render conjugal indulgence consistent with the defeat of its natural results; but as I do not believe they have found advocates in the course of this discussion, I merely glance at and pass them by.

As the dreadful effects of prostitution, and of its attendant disease on our soldiers, have forcibly arrested and excited both official and public attention, the necessity of universal marriage for their safety, and the protection of the victims or partners of their vicious indulgence, has been more vehemently urged than on behalf of others. Instead of an army of celibates, we are to have an army of married men. Are we, then, to refuse to enlist bachelors? or are the functions of the minister of religion, or of the registrar, to be made necessary adjuncts to those of the recruiting sergeant? Where shall we find women who would worthily fulfil the duties of married life, and also be willing to cast in their lot with too many of those who can be induced to enlist?

But all other difficulties, and I might enumerate many more, fade into insignificance in comparison with those interposed by financial considerations. The constant society of the wife will, of course, be necessary for the incontinent soldier, if we are to obtain the benefits expected from his marriage and escape the evils of illicit intercourse. Deprived of that society for even a short time, he will have understood that self-restraint is not expected from him and therefore, self-indulgence is scarcely criminal. Whether on home or foreign service the wife must accompany her husband, or we may expect him to realize the picture drawn by the satirist—"Venerem incertam rapiens more ferarum." But will the nation be willing, if able, to meet the enormously increased expense of barrack and transport accommodation thus rendered necessary? One or ten thousand soldiers, with as many wives, and some hundreds or thousands of children, which may not be left behind, unless baby-farming be extensively adopted, necessarily under Government supervision, if we are to escape the horrors that would otherwise attend it. Again, what would be the fate of such a lumbering and unwieldy host under the exigencies and vicissitudes of active service? I think when the advocates of a married army take into calm consideration these and other obstacles to the adoption of their scheme, they will find them to be insurmountable.

The second ingredient in the panacea for the removal of prostitution is, in my opinion, greatly more objectionable than even the first. Facilities for divorce exist pretty extensively in other countries, with results of which we have heard and still hear; but amongst those results I have not noticed the abolition of regular professed prostitution.

It is, no doubt, an indulgence to human frailty, and in the opinion of those who believe we have to choose between universal incontinence and universal matrimony, contracted mainly at the dictates of appetite, it would no doubt be a necessary addendum to the latter, followed, as it surely would be, by frequent alienation and mutual disgust resulting from satiety, caprice, incompatibility of temper, and many other causes, any or all of which would, in consonance with the original reason for wedlock, require to be consulted and yielded to. I confess it brings to my memory the tinker's invitation to his doxy in Burn's "Jolly Beggars":—

> "This hour we meet, in rapture sweet,
> Wi' mutual love and a' that;
> But for how lang the flee may stang
> Let inclination law that."

If matrimony, restrained or restricted as to the number of children, may be called matrimonium strictum—matrimony, relaxed by increased facilities for divorce in compliance with "the law of inclination," may be called matrimonium laxum. I have already expressed my doubts whether it would lessen prostitution *eo nomine*, and as I feel sure neither the morals nor even the health of society would be benefited by the substitution of the one for the other, even were such substitution possible, I am equally sure society would not sanction the exchange.

I remain, Sir, your obedient servant,

John Elliott, A.M., M.B.

Waterford, Dec. 9, 1870.

Obituary.

FRANCIS TAYLOR, Esq., of Romsey, M.R.C.S., L.S.A.

Francis Taylor was born at Hull, on July 25th, 1811, and, at the age of nineteen, came to London to be apprenticed to a medical practitioner, and to finish his course of study by "walking" one of the hospitals. He attended University College and the Middlesex Hospital, where he distinguished himself highly, and obtained gold medals in the classes of Materia Medica and the Principles and Practice of Medicine. Having completed his studies, merely for recreation and a change of scene, he took the post of assistant to Mr. (afterwards Dr.) Beddome, of Romsey, Hampshire. Francis Taylor came out as a new light in Romsey; established a Scientific and Literary Society; was himself the centre of it, organised a course of instruction; delivered very valuable courses of lectures on chemistry and physics, illustrated by numerous experiments performed with his own admirable apparatus. He shortly married Miss Brounger, Mr. Beddome's step-daughter, and it was no doubt this event, in conjunction with his becoming Mr. Beddome's partner, which occasioned his stay in Romsey. He became a member of the Corporation, an Alderman, several times Mayor of the Borough, and was up to the time of his death one of the magistrates of the borough. In all town matters his advice was sought eagerly. He took a foremost part in restoring the Abbey Church, and completed the last step by fixing the cross. We may here observe that as an inventor, he first made india-rubber tubes for infants' feeding bottles, turned with his own hand a boxwood shield for a cracked and lacerated breast, and afterwards had this simple yet invaluable instrument made in glass, and fitted with the india-rubber tube. As a surgeon he was remarkably skilful, sympathetic, and successful. His manner at once inspired confidence, and he was always firm in resolutions and earnest in his undertakings. He was never so happy as when engaged in toiling for the well-being of his mankind, and, relieving poor suffering humanity. He died on Friday, Nov. 18th, the cause of death being heart-disease, and he was buried in Romsey cemetery on the 25th, a week after his decease. He worked to the last, and his great exertions in past years perhaps laid the foundation of the disease which terminated his mortal career. He lived and died a Christian without doubt or fear, and of him it may be fairly said, that he died as a good man should die "at his post."

Medical News.

The Modern Russian Soldiers must be a Jack-of-all trades if half the stories about him are true. Thus we learn that in Russia boots are issued in the piece, and made up by the soldier himself. The whole Russian army consists, therefore, of cobblers, and we believe that among them are to be found many excellent bootmakers. The idea of a Russian soldier employing a tradesman to make his boots is out of the question, as his small pay is scarcely sufficient to keep body and soul together. *Apropos* of this, we may mention that the commanding officer of a Russian battery of artillery receives about three-halfpence per day per man to provide all food, with the exception of flour and cabbages. The Russian soldier grows his own cabbages, and this excellent vegetable forms a large portion of his diet. His dinner consists of a thick soup, made of a little meat and quantities of cabbage and black bread. Many English soldiers know nothing of the miserable pay, diet, and equipment in foreign armies. A modern English soldier is, comparatively speaking, a millionaire. He is well paid and clothed, has not to make his own boots, and gets three good meals a day. The uniform of a Russian soldier does not belong to him until it has been in use for two years. When he goes on parade he must don his new clothes, which belong to the Government; but when off parade he must wear his two-year old clothes, which belong to himself. The Russian knapsack weighs about twenty-three pounds, and among other things contains a case of blacking for dying the moustache when in review order!—*Globe.*

Aid to the Sick and Wounded.—Several large cases of splints, bandages, field tourniquets, amputating and other instruments, supplies of chloroform, morphia, &c., with every modern appliance in medicine and surgery, have been recently dispatched to the head-quarters of the force under the orders of General Garibaldi. The cost was defrayed through the impartial humanity of the National Aid Society. The stores &c., were selected under the personal supervision of Dr. H. Scott, Professor Partridge, and Mr. Henry Spicer, and are being conveyed by the instrumentality of the latter gentleman to the scene where there is urgent need of such alleviations to human suffering. A large box of hospital clothing, linen, &c., was added by the kindness of Mrs. Chambers.

Pauperism.—The army of London paupers seems at length to be diminishing when season is compared with season. A slight turn for the better commenced nine or ten weeks ago, and the divergence between this autumn and the last became more marked with the advance of the quarter. On the first week of October there was a decrease of one per cent. as compared with the corresponding week of 1869; on the first week of the present month the decrease had risen to five per cent. We may feel the greater hope of the continuance of this satisfactory change, because the following figures, which are abstracted from Mr. Goschen's weekly tables, show that it has been steadily progressive hitherto:—

Number of Indoor and Outdoor Paupers (exclusive of lunatics in asylums and vagrants) relieved in the metropolis during the ten weeks ended with the first week of December, 1869 and 1870, respectively.

	1869.	1870.	Decrease in 1870.
First Week, Oct. - - -	128,880	127,673	1,207
Second ,, ,, - - -	127,533	127,036	2,497
Third ,, ,, - - -	131,186	129,806	1,380
Fourth ,, ,, - - -	133,711	131,200	2,511
Fifth ,, ,, - - -	136,182	132,537	2,645
First Week, Nov. - - -	138,236	133,751	4,485
Second ,, ,, - - -	139,928	135,251	4,677
Third ,, ,, - - -	142,436	137,413	5,023
Fourth ,, ,, - - -	144,788	138,470	6,318
First Week, Dec. - - -	147,467	139,969	7,498

Whether the decline may be due to a greater demand for labour than in 1869, or to a more wholesome administration of relief by the guardians, there is nothing before us to prove. Probably both factors have been combined in the production of the result. The change, cheerful though it be, nevertheless leaves about one in twenty of the metropolitan population on the pauper relief lists, if the vagrants and lunatics in asylums are counted in.—*Pall Mall Gazette.*

Contagious Diseases.—The Contagious Diseases Acts Commission met on Wednesday and Thursday, at 13 Great George street. The Commissioners present in the course of the two days were—The Right Hon. W. N. Massey (Chairman), the Right Hon. Viscount Hardinge, Right Hon. Sir J. S. Pakington, Bart., M.P., Right Hon. Lieut. General Peel, Sir J. S. Trelawney, Bart., M.P., Vice Admiral R. Collinson, Charles Buxton, Esq., M.P., A. J. Mundella, Esq., M.P., Peter Rylands, Esq., M.P., the Rev. Canon Gregory, the Rev. J. F. D. Maurice, the Rev. J. Hannah, J. H. Bridges, Esq., M.D., G. E. Paget, Esq., M. D., Holmes Coote, Esq., F.R.C.S., G. Campbell, Esq., G. W. Hastings, Esq., Mr. R. Applegarth, and J. Anstey, secretary.

Gleanings.

On the Air in Workshops.

The *Bowdoin Scientific Review* contains an article from Dr. Sigerson, in which he says of the air of iron works:

Although a quantity of this iron, carbon and ash must daily pass in and out of the lungs, and besides, although a certain percentage must remain in them (as shown by Pouchet's dissections and Professor Tyndall's experiments), it is difficult to find a healthier body of men than those who work in such factories, Dr. Sigerson observed one exception, a young man whose lungs were weak, and who had suffered from blood spit-

ting, with cough, contracted in an American foundry, where the heat was excessive. He inquired whether the atmosphere heavy with dust did not affect him injuriously. The artisan replied in the negative ; he said that he found himself well in it, his cough came on at home on rising and lying down. These facts seem to indicate that the carbon poured into the air of cities from gaslights and fires may not have so injurious an effect as sometimes fancied.

In the air of a shirt factory, fine threads and fragments of cotton and linen were found, with a few ova which were translucent. In this factory the girls had become snuff-takers.

In the air of an oatmeal mill, fibres were seen present in unexpected numbers, together with minute fragments of the hull, and a few starch granules. Some spores and acari were detected. Near a threshing mill some smut balls were found in the air.

The air of flax mills was found to be especially deleterious. Fine particles of the flax, together with pointed particles of the hard bristly wood tissue, so that direct injury was done to the lungs by these, and concretions formed by the filaments. The mill people were great sufferers.

The air of printing offices contains minute particles of metal, particularly antimony. Dust taken from a rafter eleven feet above the floor of a printing office was analyzed by Professor Sullivan, and found to contain antimony but no lead.

The air of a hair-dressing room contained scales and minute hairs. In rooms where the machine brush is used, the amount is increased.

The air of the dissecting room contained fragments and fibres with the mark of the dissecting knife upon them! They were fibrils of muscles, yellow and white fibrous tissue, some cells, scales and corpuscles. The air of stables was found to contain moth scales, a few spores, hairs and fragments tinged blood-red.

Tobacco smoke, examined by the microscope, was seen to hold little globules of nicotine twirling and flitting about in it. The statement is made by Dr. S. that "some remained on the walls of the mouth ; when the smoke is breathed (by novices) more globules are retained in the lungs, and nausea and illness supervene. These globules, if found in the air distributed by a tobacco smoker, might be taken for germs."

The air of the rooms of "tea-tasters" was examined, but no report is given. An interesting observation, however, in regard to the avocation of the tea-taster will be quite new to our readers. The tea-taster has to take a sip with a quick inhalation, and thus a small shower of fine tea-drops enters the lungs. On examination of such tea-drops, a considerable quantity of tissue from the leaves was found, which might aid to tease the lungs. But the real agents of mischief were numerous little drops of essential oil, very plentiful in Assam tea, which was particularly severe on the tea-tasters. Nausea, derangements (or as Dr. S. says, dis-arrangements) of the nerves and sometimes syncope afflicted them.

Cyanide of Potassium in Pulmonary Affections.

Dr. G. Mazza ("Ann. Univers.," p. 592, 1869) has found the cyanide preferable to hydrocyanic acid on account of the great volatility of the acid, and its consequent variability in strength. He describes it as a sovereign remedy in many forms of lung disease, but especially valuable in tuberculosis. In order to combat the sleeplessness due to the harassing cough, he combines the cyanide with small doses of morphia. In the early stages of the disease, he has frequently seen complete recovery, and when more advanced a mitigation of the symptoms is apparent.

NOTICES TO CORRESPONDENTS.

☞ Correspondents requiring a reply in this column, are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Out of thousands of such persons it may cause enquiries so signed, on very various subjects much confusion.

Dr. L. Wangford.—We regret we cannot insert the letter of our esteemed correspondent. The subject was closed some few weeks since, and space forbids us to re-open a question that has been already so well and ably discussed.

BOARDS OF GUARDIANS.

Since our last issue, we have been favoured with an official letter from Mr. Knott, clerk to the Board of Guardians for the Worcester Union, in accordance with a resolution passed at a recent meeting, demanding the name and address of the writer of the article which appeared in our columns on November 30th. Of course, we decline to accede to such a request. Our remarks were written without prejudice upon the proceedings reported in the local papers, and we most certainly decline to furnish such information or withdraw anything however unpalatable, which, upon a careful review, was simply the truth,

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

The Real Nature of Hysteria. By D. de Berdt Hovell, F.R.C.S.
The Modes of Dying. By W. F. Cleveland, M.D. London : Churchills.
The Ninety-sixth Annual Report of the Royal Humane Society.
Letts's Appointment Diary. Letts's Medical Diary, Professional Calendar, &c.
New York Medical Gazette ; Boston Medical Journal ; Philadelphia Medical Reporter : Woodhull and Claplin's Weekly New York ; Nature.

VACANCIES.

Clonmel District Lunatic Asylum.—Assistant-Physician. Salary £100 per annum, with board and residence. (See Advt.)
King's College, London.—Assistant Demonstrator of Chemistry.
Charing Cross Hospital.—Assistant-Physician and Assistant-Surgeon.
Middlesex Hospital.—Medical Registrar and Superintendent of Post-Mortems. Salary £50.
Queen Charlotte's Lying-in-Hospital, London.—Medical Officer.
Marylebone Dispensary.—Resident Dispenser. Salary £85 per annum.
Clayton Hospital.—House-Surgeon. Salary £99 10s., with residence.
University of Durham.—Medical Tutor. Salary £120 per annum.
Alderbury Union.—Medical Officer. Salary £80, with fees extra.
Newcastle-on-Tyne Lunatic Asylum.—Medical Superintendent. Salary £250, with board.
Delting and Northmavine, Shetland,—Medical Officer for the two parishes. Salary £54, exclusive of private practice. (See Advt.)

APPOINTMENTS.

Baker, Dr., Physician to the General Dispensary, Marylebone.
Baker, Mr. H. F., House-Physician at St. Bartholomew's Hospital.
Branson, H. J., M.D., Resident House-Surgeon at the Doncaster General Infirmary.
Buchanan, G., M.D., Professor of Anatomy in Anderson's University, has been elected Consulting Surgeon to the Glasgow Maternity Hospital.
Drake, Mr. A. J., House-Surgeon to St. Thomas's Hospital.
Fausset, H. J., M.B., a Medical Officer to the Poplar Union.
Franklin, Mr. G. C., a House-Surgeon to St. Thomas's Hospital.
Hewetson, Mr. R., Assistant-Surgeon to the York County Hospital.
Hind, H., M.R.C.S., House-Physician to St. Bartholomew's Hospital.
Hornby, G., M.R.C.S., a Surgeon to the York County Hospital.
James, Prosser, M.D., M.R.C.P., to be third Physician to the Hospital for Diseases of the Throat.
Jones, C. S., M.R.C.S., Surgeon to the West Sussex General Infirmary.
Lyne, H., L.R.C.P., Resident Surgeon to the Farringdon Dispensary.
Mackenzie, Morell, M.D.Lond., M.R.C.P., to be Senior Physician to the Hospital for Diseases of the Throat.
Moore, J. W., M.B., C.M., L.K.Q.C.P.I., Physician to the Molyneux Asylum for Blind Females, Dublin.
Osborn, Mr. S., Resident Accoucheur at St. Thomas's Hospital.
Ravenhill, E. B., M.R.C.S., Resident Obstetric Assistant at the Queen's Hospital, Birmingham.
Semple, R. H., M.D., M.R.C.P., to be second Physician to the Hospital for Diseases of the Throat.
Symons, Mr. H. E., Surgical Registrar at St. Bartholomew's Hospital.
Tannahill, R. D , M.D., Accoucheur to the Glasgow Maternity Hospital.
Thompson, J., M.B., L.K.Q.C.P.I., Surgeon to the Police, Leamington.
Tosswill, Mr. L., a House-Physician at St. Bartholomew's Hospital.
Wilson, J. G., M.D., Professor of Midwifery in Anderson's University, elected Physician-Accoucheur to the Glasgow Maternity Hospital.

Birth.

Kean.—On the 11th inst., at Newry, the wife of H. I. Kean, M.D., Q.U.I., of a son.

Marriages.

Lynch—Oliver.—On the 10th inst., at St. Philip's Kensington, J. Roche Lynch, L.R.C.P., only son of the late J. Roche Lynch, M.D., to Marian, eldest daughter of J. Oliver, Esq., of the Inner Temple.
Martland—Waddington.—On the 15th inst., at St. John's Church, Blackburn, by the Rev. J. Baker, vicar, William Martland, M.R.C.S., Blackburn, to Margaret Elizabeth Yates, Blackburn, only daughter of William Waddington, Esq , Bank Cottage, Burnley, Lancashire.
Stawman—Mansie.—On the 13th inst., at the Parish Church, Silkstone, Wm. Stawman, Surgeon, of Barnsley, to Sarah, second daughter of the late Rev. A. Mansie, Missionary in Jamaica.

Deaths.

Dawson.—On the 7th inst., at Great Bromley, John Dawson, L.R.C.P.Ed., formerly of Great Bentley, aged 84.
Farrants.—On the 10th inst., at 241 City road, London, R. J. Farrants. Esq., F.R.C.S., aged 60,
Hogg.—On the 11th inst., at 1 Guildford street, Russell square, Mary Margaret, wife of Dr. Reginald Hogg, aged 52.
Jeaffreson.—On the 13th inst., J. F. Jeaffreson, F.R.C.S.E., of Canonbury lane, aged 61.
Kelly.—On the 29th ult., at Jarrow, Durham, James Kelly, L.R.C.P.Ed., M.R.C.S.E., aged 42.
Lawrence.—On the 14th inst., at South street, Thurlow square, Richard Moore Lawrence, M.D., M.R.C.P., aged 48.
Morison.—On the 8th inst., at Wellfield House, Wingate, Co. Durham, Alex. C. Rutherford, third son of John Morison, M.D.
Morris.—On the 7th inst., D. P. Morris, M.R.C.S.E., of Colchester, aged 46,

The Medical Press & Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 28, 1870.

CONTENTS.

WITH TITLE PAGE AND INDEX.

Inaugural Address

DELIVERED AT THE

OPENING OF THE SESSION, 1870-71,

OF THE

SURGICAL SOCIETY OF IRELAND.*

By Albert J. Walsh, L.R.C.P. Lond., F.R.C.S.I.

Gentlemen,—As President of the Royal College of Surgeons it becomes my duty, and, indeed, I feel it to be the high privilege of my office, to preside at this the Fortieth Opening Meeting of the Surgical Society of Ireland, a society than which no other has done more to advance the knowledge of disease, to improve the treatment of it, and to raise the art and science of surgery in this country, to its present proud position. Gentlemen, when I look over the long list of worthies, men of the highest attainments, mental cultivation, and practical skill, who have filled with credit to themselves, and incalculable benefit to the science of surgery, the chair which I now have the great honour to occupy, and to which I have been raised by the kindness and good feelings of my professional brethren, I confess, I feel most anxious, lest during my official year our Society should not continue to hold that high character and European reputation, which the importance of its debates and the practical usefulness of its papers have heretofore procured for it; but though I do feel anxious, still I have every confidence that the industry, talents, and zeal of our present members will enable me at the expiration of my presidency, when resigning my trust to my highly esteemed and able successor, to do so with feelings of pride and gratification, arising from the progress we shall have made. The time has long passed by since surgery was considered but a trade, when a good surgeon meant a little more than a clever craftsman, only to be called on to act as operator, under the directions of the physician who then assumed a higher grade and a superior education; but even up to the period when such societies as ours were founded, surgery was at a very low standard, and it was not till it began to be treated as a science, that it quickly made the progress and assumed the importance which renders it so remarkable at the present day; how great the change, how improved the position, social and intellectual, of the educated surgeon. To societies, such as ours, much, if not all, this improvement is mainly due. For during the last century and commencement of the present, the great men who from time to time made valuable discoveries and gave a life-long labour to the advancement of surgery, were comparatively limited in their sphere of usefulness, their writings were read by few, their examples were disregarded, and it was not until Louis Chopart and others, at the Academy of Surgery in Paris, and Dupuytren, Bichat, and Boyier, at the meetings of the Ecole de Médecine, by reading their treatises, and submitting them to a public discussion in these societies, that the rapid and wonderful progress in the science of surgery took place. In London the Medical and Chirurgical Society carried on the good work, and deserves the gratitude of the Profession. In that Society Pott, Cooper, Brodie, Laurence, &c., read their treatises, gave their experience, and contributed largely to the advancement of our knowledge; and in this country our own society has not been less active in its usefulness. Its meetings, presided over by Crampton, Colles, Kirby, Cusack, Bellingham, and many others, have had the greatest influence in giving life and energy to the study and cultivation of surgery; and the intercourse continually maintained by these societies amongst the members of our profession, must be followed by what I consider as only second to its rapid progress, namely, that maintenance of friendly and generous feeling by which all those sentiments of distrust, jealousy, and petty rivalry are altogether eliminated and superseded. For these reasons I am convinced that a society such as ours

* Delivered before the Surgical Society of Ireland.

must tend, in no small degree, to the comfort and happiness of the individuals of whom it is composed; for whilst there is nothing more painful, to a well constituted mind, to be at variance with, or suspicious of others, so is there nothing which tends more to elevate the moral character, or to inspire peaceful and contented feelings, than the consciousness that our competitors are friends with whom we are on such a footing that we mutually make allowance for each other's failings, and are on all occasions ready to do justice to each other's good qualities, whether of the head or heart. Gentlemen, there are in this city several societies whose objects are similar, if not identical, with our own; some founded more than half a century ago, when physicians, surgeons, and obstetricians were looked upon as distinct bodies, each having their own peculiar studies, laws, and pursuits. This was, at first, necessary, and perhaps unavoidable; but now that science and the progress of the age, have overstepped the boundary lines laid down by the original founders of these societies; and as the subjects discussed, night after night, at their meetings partake as much of the medical as surgical character, it has forced itself on my mind that the time was approaching, if it had not already arrived, when their usefulness would be greatly increased, knowledge would be advanced, and science benefited by an amalgamation of the governing bodies. I have been led to this conclusion when I consider the objects and nature of these societies, which have been founded for the advancement of medical and surgical science, by reading and discussing papers relating thereto, but were never intended to be, and I trust may never become, arenas for the display of scholastic ingenuity and argument in support of this or that peculiar school or theory. Still less did their founders intend that they should be places for the exhibition of great eloquence or powers of debate. The opportunities for cultivating which talents, no doubt estimable and most useful acquirements, are to be found in other societies. In the medical societies, men of all degrees of standing in the Profession can bring forward for discussion the fruits of their experience or matured knowledge, and the results of their industry and research, in order that after being added to by what others can contribute on the same subject, and tested by discussion, the real value may be ascertained. Again, it not unfrequently happens that one of the younger and more inexperienced members of the Profession, having noticed what appeared to him an important peculiarity or appearance in a case or specimen which has presented itself, as he supposed for the first time to his vigorous and active mind, submits a paper on the subject to the Society, and in the debate arising thereon, it may turn out, from the observations of others, older and more experienced than himself, that, that which appeared to him to be new had already been observed and noticed by others, or that his deductions from the facts themselves, and explanation of the appearances, were not correct, or such as experience warranted. All such papers are published in the "Proceedings" of the different societies, and thus, too frequently, hasty and ill-digested matter, by no means for the credit of the societies, is given forth to the public, notwithstanding the existence of Publication Committees. Now, an amalgamation of the governing bodies of the societies, not of the societies themselves, would, I believe, greatly tend to remedy this evil; and to carry out this I would suggest that a Board of Examiners be selected from, and elected by, the several councils of the societies, to which Board all papers, after having been discussed by their own bodies, should be submitted prior to publication, and then, after being examined by the amalgamated board, and after, if found necessary, a further discussion upon the subject, it was considered worthy of publication, the paper would go forth to the Profession and the public with the value and support of the Board's sanction. But as this is not the time or place for discussing this matter, I only throw out these suggestions as I intend, after having further digested the details of my plan, to bring it before the Council of our Society, which is the proper place for its consideration. Gentlemen, it is now my painful duty to notice the great loss the Society has sustained during the past year by the lamented death of Professor Geoghegan. I am certain no person whom I now address can but recollect the valuable papers he submitted to the Society, and the pleasure they derived from the clear and lucid manner in which he conveyed his ideas, and treated the subjects therein—his language so concise and so completely to the point, conveying much information in few words. I confess it was always to me a pleasure to listen to him, and the value of the information given by him in this clear and easy-to-be-understood style was incalculable; he has, indeed, been a loss to our Society, which, I fear, we cannot easily replace, and the Profession will long feel the blank occasioned by his death. There is but one other subject to which I would beg to call your attention before I close my address, that is, to the rules and regulations which govern this Society. During the past year your Council have given much attention to these rules, and, after anxious and careful consideration, resolved upon referring the matter to a sub-committee, consisting of your honorary secretaries, Dr. Benson, who for the past thirty years and upwards has been identified with, and devoted to, the best interests of our Society, and to whom we owe so much of its great success, and Mr. B. Wills Richardson, whose anxiety about, and attention to, its interests, cannot be surpassed, in conjunction with the following members of the Council—Messrs. William Jameson, Christopher Fleming, and Humphrey Minchin, who have at all times identified themselves with the progress of the Society. These gentlemen, after much thought and consideration, framed a revised code of bye-laws, which your Council have adopted, and which they have submitted to the Council of the Royal College of Surgeons, who, no doubt, will approve of them. I would now venture to beg as a favour, that the members of the Society would support me during my period of office, and enable me to carry out these revised rules, especially those with reference to our debates, and, if this be done, I make no doubt, at the termination of my year of office, I shall be enabled to resign my charge into the hands of the Society with satisfaction to myself, and with the happy feeling that the good fellowship which should at all times pervade our intercourse with each other in our debates has never been marred or interrupted.

Original Communications.

HYDRATE OF CHLORAL.—ITS POSITION IN MEDICINE.

By Robert Uniacke Ronayne, L.R.C.S.I., &c.,
Youghal Infirmary.

(*Continued from page* 498.)

An admirable advantage, incidental to the employment of chloral, is the non-suppression or retardation of natural secretions, the bowels, skin, and kidneys continue to perform their normal functions unaffected by it to any injurious degree. The only unpleasant effect produced on the healthy, alimentary system is the occasional slight dryness of the fauces at morning, which, however, a drink speedily removes, and in respect to the secretion of the kidneys, where we also find a slight deviation from this rule. Here, however, the disturbance seems equally trifling. The urine passed immediately after a chloral sleep reacts neutral and does not reduce the copper of Fehling's solution; but that voided some hours later is more dense and does reduce the copper of Fehling's solution, thus similating a temporary glucosuria; in other respects it is normal. I have never seen constipation

caused by even its lengthened administration. On this subject, Dr. A. M. Adams speaks with confidence—"In head affections, where there is torpidity of the bowels and retention of urine, chloral does not, like opium, encourage this state of matters, but would seem, owing to some reflex action, whilst effectually overpowering undue nervous disturbance, to stimulate or assist the bladder and bowels to a more healthy action." This avoidance of any inclination to check the eliminative processes, causes chloral to be especially valuable in fevers where retrocession of these is sure to be attended by serious consequences. The administration of chloral is not followed by morning headache, nausea, nor disinclination to receive food. This sick headache is one of the most annoying followers of opium, and its absence from the track of chloral is an inestimable benefit; yet, further, I have seen some cases in which similar affections (though not arising from any drug have been effectually removed by its exhibition), returning on its remission, and again departing on its restoration. So far from giving rise to intolerance of food, the patient awakes bright, comfortable, and refreshed; free from lethargy of mind or body, and having generally a better desire for breakfast than previously felt. This appetite is a curious result of the use of chloral, and I have so often observed it, and noticed the patients themselves comment on it, that I cannot help associating it as a special attendant on chloral action. The craving for the morning meal which it produces cannot be accounted for by the good night's rest and the absence of pain alone, and I have been particularly struck with the numbers long deprived by cachexia of a taste for food, who voluntarily rejoiced in their newly acquired relish for breakfast. Action of the skin, so far as I have observed, seems little changed by it, if anything, I fancy it lessens the sweating of phthisis, by quieting the general excitement, and causing contraction of the capillaries. These appear to me the ordinary phenomena which accompany and follow the presence of chloral, but it is also capable of developing well marked particular effects. Amongst the most advantageous of these seem to be the decided control it exercises over the irritable cough of bronchitis and phthisis. In many of these cases, opium is highly objectionable; conium useful, but uncertain; and hydrocyanic acid often next to worthless, unless given in dangerous doses. Here, chloral quickly gives rest, and renders the harassing cough less frequent and harsh. Dr. Taylor, writing to Sir James Simpson of its benefit, in a case of congestive bronchitis with hæmoptysis, says—"As I contrast the distressed and audible breathing of last night with the tranquil sleep and improved state of the patient to-day, I cannot help concluding that, chloral has a *directly sedative effect on the whole respiratory surfaces.*"

Besides this, I have noticed other and important therapeutic actions result from its use, not the least useful of which, is its power of diminishing the quantity and improving the quality of the sputa in the above-mentioned chest diseases; in such cases it not only controls the severity and lessens the hardness and frequency of the cough, but it also reduces the actual amount of expectoration in a remarkable degree, sometimes cutting it down by one-half or more in a single night. In every case of this kind, I have achieved a similar result; this I consider a most valuable power, as by it a world of restless, exhausting misery is spared the already over-taxed weakness of the invalid, and life is prolonged by the husbanding of such slight vital resources as he yet possesses. In asthma, the ability of chloral to avert and arrest spasm borders on the wonderful. In severe cases where the nocturnal paroxysms were excessive, keeping the wretched sufferer sitting up in bed gasping for breath, a timely dose taken on the approach of dyspnœa, has invariably warded off the attack, or, if it had already set in, relieved the spasm, permitted the recumbent posture to be resumed, and procured a quiet night's rest. Those to whom I have given it have derived more benefit from its use than from stramonium, ethereal tincture of lobelia, or other antispasmodics, especially favoured in such cases; it has been spoken highly of in pertussis, but on this point I cannot treat with experience. Dr. A. M. Adams, however, thinks highly of its value, and writes—"Where the cough is unusually severe, and likely in consequence to lead to other complications, it will prove a most valuable remedy—about six grains given only at bed time will in most cases ensure a comparatively quiet night." Perhaps, the most peculiar result which I have undoubtedly obtained from chloral administration, although I am at a loss to account for it physiologically, is its efficiency in arresting the disastrous colliquative diarrhœa of phthisis. Although, as I before observed, its habitual use does not tend to the production of constipation, yet I have several times by its administration stayed the vital torrent where mist. cretæ c. opio, vegetable astringents and sulphuric acid with opium had hopelessly failed. Of course, there are limits to such action, and I should have little faith in its good offices where ulceration had actually taken place, but, in the stage of tubercular irritations which precedes the breaking down of the mesenteric deposits, I have experienced decided success by its aid alone. Chloral may be used with benefit in many forms of irritable stomach. It almost always calms that excitable organ, and even holds somewhat in check the obstinate vomiting of organic disease. I have been able by its means to procure many hours' rest, and tolerance of food for an ulcerated stomach, and I know of no other preparation for which I could say as much. It is possible that it might prove equally useful in the obstinate vomiting of pregnancy, and even become a respectable adjunct to the marine surgeons' nostrums against sea sickness. In various forms of irritability of the heart, as well as in valvular diseases of that organ, I have used chloral with satisfactory results. Although M. Bouchut says, "it increases arterial tension," I have found it relieve fluttering, and by checking the disposition to irritability, allay irregular action. In valvular disease, it appears also to do good by steadying the organ down to its work, and thus relieving laboured over action. Sir James Simpson has called attention to one most valuable property of chloral, viz.—that of lessening the pains of labour without restraining contractions of the uterus. He observes—"I have found the parturient uterus to go on contracting regularly and strongly when the patient was so deeply asleep under chloral, as to be only very imperfectly awakened up with the expulsive efforts of labour." Here, then, we find a much more convenient and safer companion in the lying-in chamber than chloroform, which latter can hardly be properly administered without the aid of a second medical attendant, a thing seldom attainable even in respectable private practice, and completely beyond the reach of the ordinary dispensary physician.

There is one disease of formidable aspect, about which, in connection with chloral, some controversy has arisen, I allude to the Sphynx of Medicine—traumatic tetanus. There are some very important cases of recovery on record where this agent has been credited with the cure; and that of M. Verneuil, in the *Lancet*, April 16th, 1870, seems the most convincing. On the other hand we have statements equally reliable, charging it with complete inutility to meet such straits; but as one swallow does not make a summer, neither can one or two cases for or against establish a rule. The truth may lie on both sides. All forms of tetanus are as surely not to be cured by any one drug, or combination of drugs, as that no hand could raise a Tower of Babel. Whilst on the other side many of the failures may have fallen unjustly on the shoulders of chloral, as all practitioners meet occasionally with cases of constitutional idiosyncracies, where susceptibility to the action of some particular medicine is found wanting; and it is possible that amongst the unsuccessful ones such may be found. I have met but one peculiar case of this nature, where a man suffering from chronic rheumatic arthritis, took large quantities of

chloral without its producing the smallest effect; whilst a patient in the next bed to him spent his nights in a pleasant oblivion derived from one-sixth the dose. I fancy the former's insusceptibility arose from a hyperacidity of the system to which his disease made him liable. But should more extended trial prove chloral to have no power over tetanus, I still think that should not make us undervalue what it has actually done in the broad fields of medicine and surgery. Amongst the other ailments in which chloral has found favour, I may mention hysteralgia, dysmenorrhœa, hysteria, pleurodynia, gastralgia, and cancer. In irritable bladder and chronic cystitis, Sir James Simpson has seen "it give the patient much longer and more perfect rest than large doses of opium." Liebreich speaks well of its utility in rheumatism, convulsive coughs, acute mania, *delirium tremens*, and as a sedative after surgical operations; and Bouchut considers it the most prompt and efficacious remedy in intense chorea, where the life of the patient is threatened. It is as well to mention that I have seldom found it necessary to prescribe chloral in higher doses than from fifteen to forty grains, and that it is neither an accumulative medicine nor one which must necessarily be increased in quantity on repetition — the same amount which relieved pain, or produced a soporific action, this day month does the same to-day. Now, as to its toxic effects, it seems that the functions acted on by chloral are attacked in this order:—1. The cerebral; 2. The voluntary muscular; 3. The respiratory; 4. The heart; and it is only when given in doses sufficiently large to induce a depressing effect on the last, that any threatening or fatal result is to be feared; and since the ultimate action of chloral and chloroform are similar, only that of the former is infinitesimally slower than that of the latter, it follows that poisoning by chloral must be more than proportionately rare.

Dr. Russell Reynolds gives the history of one nearly fatal case, but I find no record of actual death which can be laid at its door. The Paris Correspondent of the Medical Press and Circular (March 9th, 1870,) states that, "M. Laborde took progressive doses of a gramme, a gramme and a-half, and two grammes, on three successive days, and he suffered such painful sensations in the epigastrium, with nausea, cholic, and profuse sweats, that he was obliged to desist." The same writer cites a case of his own, "in which the patient preferred to endure intense neuralgia of the face, rather than experience the sensation left by a medium dose after it had completely banished the pain and procured several hours sleep. The feeling of illness all over was so distressing all the next day that another dose was altogether refused." I cannot regard these cases as proving anything more than that like all other medicines, chloral sometimes meets with constitutional disabilities which preclude its use, but that these must be rare indeed, I judge from the fact that in all the cases in which I have given it, but one such peculiar physical temperament has been met, and in no one has any of the disturbances mentioned been produced. Sir James Simpson states—"I have exhibited chloral in continuous small doses for one, two, or more weeks in succession, and apparently with most marked benefit." Now, when we know that his ordinary dose of the drug was sixty grains, we may presume that by small doses he meant about thirty, and that in his large experience he records (as far as I am aware) no such evil effects, I think amply justify me in coming to the above conclusion.

M. Liebreich has pointed out that strychnia is the best antidote to chloral poisoning, but from its insolubility in sulphuric acid, I think the latter is likely to be of service should such a case arise.

Having thus endeavoured to illustrate the various uses to which chloral may be applied, it only now remains for me to express the conviction which a lengthened and impartial, even jealous, trial of chloral has forced upon me, namely—that it is by far the surest, safest, most efficacious, and least objectionable hypnotic which we possess; that it is far superior to opium in all the qualities which they hold in common, and in the absence of all the ill effects which the latter is capable of exercising, and that with the exception of such cases as rupture of the uterus, peritonitis, and such like, where opium's very vices are its best commendation, it is capable of completely supplanting that drug.

ON DISEASES OF THE SKIN.

By J. L. Milton,

Surgeon to St. John's Hospital for Skin Diseases.

(*Continued.*)

The Pathology of Eczema.—1. The first of these circumstances is, that when the discharge comes from a part furnished with hair—as the leg, for instance, minute accumulations of fluid form at the junction of the hair with the skin. These are possibly considered as vesicles. M. Devergie, for instance, seems to take this view, but on more close scrutiny, it will be found that neither their course, situation, nor form correspond with those of a true vesicle, and on touching one of them gently with a blunt-pointed glass rod, a minute drop of serum will be found adhering to it. I have always failed to detect the slightest trace of cuticle on these little drops of fluid, whereas we know that the covering of vesicles will resist some force. When M. Devergie speaks of the fleeting nature of the vesicles of eczema, he overlooks the fact that genuine vesicles are not very fleeting, even in such transient disorders as miliaria, and that those of herpes, with which eczema, if vesicular, must be classed, not only bear such distension as to become globules without bursting, but endure the friction of the clothes for days without rupture. Herpes may appear again and again on the same person, without a single patch becoming eczematous. Eczema, so far as I have been able to observe, never becomes herpetic, nor have I ever seen an outbreak of vesicles on a patch of eczema. At times, portions of skin are seen covered with ill-developed vesicles, looking as if they would become eczematous. I have never observed them do so, but I do not impugn the accuracy of those who say they have. They sometimes complicate or accompany genuine eczema, but if the latter complaint continue ever so long, or reappear ever so often, they do not make their appearance again. *And these facts are, I submit, strong grounds for believing that there is a radical and unalterable difference between eczema and herpes—the vesicle and the papule.*

2. The second circumstance is that in the vicinity of eczematous eruptions, vesicles and bullæ are occasionally found, the former not unfrequently appear about the knuckles and on the back of the hand. These vesicles, however, last but a very short time, and in most of the cases I have seen they did not return after being once removed; in a few instances they did. No relation seemed to exist between the number of attacks of this kind of complication and of the outbreaks of eczema. One patient who had had eczema breaking out for years had never suffered from vesicles. In another case I was informed that each eruption of eczema had been complicated in this way and so on. So far, however, as my own observation goes, I never saw it more than twice in the same patient. This eruption seems to be in no way dependent on the state of the eczema, it will disappear when the latter complaint is stationary or getting worse. In all the cases I ever saw the vesicles were rare in proportion to the numbers and extent of the eczematous patches. A patient might have thirty or forty of these, and yet only one near which there were vesicles. These vesicles always healed quickly and did not become eczematous, nor was the disease in their immediate neighbourhood influenced either by their outbreak or departure, sometimes appearing afterwards in its usual form on the very spot where the vesicular eruption had been; a still stronger proof, it

appears to me, than even any of the foregoing, that there is *a wide distinction between the vesicular and eczematous inflammations.*

3. The third reason is, that a disorder which seems to me to be a form of herpes, has been confounded with acute eczema. It begins with heat, severe itching, and pungent, stinging pains. Vivid red patches form, and serum is effused under the cuticle, which is raised up in firm, irregular vesicles; then the serum becomes of a whitish hue and grows turbid, the vesicles break, the fluid oozes out, the cuticle is thrown off, leaving the skin red and tender, and the disease passes away, mostly, I believe, to return no more. In still more severe cases, numbers of little pustules form around the vesicles, constituting really an impetiginoid herpes. Now, this complaint, seen when the cuticle has just given way, and when the serum is pouring out freely, might be taken for eczema; but except that the vesicles run into a mass, instead of remaining separate, I see nothing to distinguish it from herpes zoster. It never tends to take on the one essential character of eczema, that of discharging serum for an indefinite period of time. It disappears almost, if not quite, as fast when nothing is done, as when it is actively treated, and the vesicles are firm, and only break after the fluid has become turbid and flaky. At the end of two months' duration of this disease in a chronic form, I have seen some of the vesicles still full of fluid; how long they had lasted, it was, of course, impossible to say, as I am speaking of the time the disease had endured when the patient first came under my care; and the accounts given by patients or their friends of any particular vesicle to which, perhaps, their attention has never been directed, were not likely to be very connected or reliable. Still, there was every reason to believe that vesicles had existed for two months, and the very fact of their continuing to exist under any circumstances proves, that the tendency to form vesicles predominates in these cases, and this we certainly do not find in eczema.

On every ground of analogy as to anatomical and pathological features, course and cause, eczema solare, eczema mercuriale, vesicular eruptions on the hands in bakers, confectioners, &c., and vesicular scabies ought, I think, to be referred to the variety spoken of in the last paragraph, and the whole group classed with herpes, of which they are only forms. They are simply instances of blistering produced by heat, or some other irritant, and no more eczema than blistering with cantharides, or boiling water would be.* There is, I may here remark, one form of solar eczema, which might be mistaken for the genuine complaint. It is that affection in which a large portion of skin in an exposed part, as the back of the neck, is steadily invaded by a crop of vesicles which gradually turn flaky and yellow. It is very slow, and will last a long time. I have seen cases in which it had not altered materially during two months. It is not always due to extreme heat. In children, during cold, dry, east winds, the vicinity of eczematous patches will sometimes be invaded by vesicles in considerable numbers. For the most part these may be referred to the same variety. Eczema mercuriale I have never seen in the acute stage, but I think, from the descriptions given, that it clearly belongs to this group, and that it is manifestly herpetic. The very course which it runs proves it to be different from pure eczema. It generally yields promptly if merely let alone, or under any simple treatment, and shows no tendency to come back again and again, which cannot be said of eczema. It is true this arrangement is quite antagonistic to all established views, and clashes with the pathology of Plumbe and Willan, but the fact is, that the eczema of Plumbe simply embraces solare and mercuriale; he never alludes to the same affection now-a-days called eczema as being a form of that complaint. Possibly he was influenced by the old view, which named our eczema scabies.* Any confusion, therefore, likely to arise from the change I desire to make, is due, not to a desire on my part to introduce novelty, but to the fact that what we recognise as eczema is a different complaint from that which was classed as such within quite a recent date. A new pathology has sprung up.

The chronic form of eczema, in a vast majority of cases, begins as an eruption of papules; in rarer instances, as an erythema or pityriasis. These may, therefore, for the present, be laid aside, in order to examine acute eczema, which we might expect to find more closely connected, if any form of eczema can be connected, with vesicular disease; but the more narrowly we examine it, the more certain does the conviction become, that its course and symptoms ally it rather to an acute erythema, erysipelas or kerion (scalled head). In this form of eczema a large portion of skin, as the forehead, for instance, becomes red, swelled, glazed, and stiff. This is followed by desquamation of the cuticle, and the formation of moist scales, and even crusts, or there may be a slight, though decided, weeping. Now, an observer bent on finding out the truth, and not on merely supporting a theory, may see this over and over again in several persons, or several times in the same person, without ever finding a vesicle. I attended a gentleman for this complaint, who was a good deal alarmed about it, as an intimate friend of his had been quite a martyr to eczema. For eighteen months the patient scarcely ever passed any great length of time without an outbreak on the face, yet on no occasion could either he or I detect a single vesicle.

* "I have no doubt that the minute ossicular form which the disease assumes when occurring from exposure to the sun, is materially dependent on the degree of heat applied; that a blister of the skin would occur if the heat were increased, while a minor degree of the latter would only be followed by eczematous redness; that it is, therefore, rather to be considered as an accidental injury, and treated on surgical principles in a manner similar to a slight burn or scald, than to be spoken of as a disease."—Plumbe "On Disease of the Skin." 1829. Pp. 353.

* "The disease which the ancients described under the name of scabies is identical with that disease which at present time we call eczema."—Dermal's "Pathology of Celsus."

A CASE OF ACUTE RHEUMATISM TERMINATING FATALLY ON THE FOURTEENTH DAY.

By Michael W. Sheedy, M.D.

On the morning of Sunday, the 19th of June last, I was called to attend J. C., æt. twenty-five, a young man of rather delicate constitution, and very respectably circumstanced in life. Upon enquiry I learnt his previous history as follows:—He was through life of very regular and temperate habits, enjoying rather good health, of pale and languid expression of countenance, with a chest somewhat narrow and receding. About six weeks before he sprained one ankle, and about the same time indulged in a slight spree during two or three days' racing in the neighbourhood. The above, in addition to pumping cold water on the sprain and damp clothes for one evening were the preliminaries to the attack which followed.

His friends having administered a vapour bath and some aperient medicines, sent for me, as the patient, they said, spent a wretched night. He seemed to me to be suffering great pain with a very anxious expression on face, the weight of the blanket on the feet and hands being intolerable. I bridged over the wrists and ankles, which were swollen, to keep the clothes off, and ordered the following:—

℞ Calomel, grs. v.;
Pulv. jal. ce., gr's. xx.;
Pulv. stat. sumend.

℞ Potas. bicarb. grs. ccccIxxx.;
Nitrate, grs. cxx.;
Vini. colchici., ℥ij.;
Aquæ camph., add ℥x.;
Mist. St. ℥ss, tertiis. horis.,;

Giving an anodyne liniment for the feet, I desired them to be bandaged in cotton wadding. Next day the medi-

cine having operated, and the pains a little less, he was slightly better, but the fever was in full force, viz., great heat and perspiration, urine scanty and high coloured, specific gravity, 1,025; pulse, 112. Ordered some chicken broth or beef-tea, a little arrowroot and a-half glass of sherry every second hour, continue medicine as before. Tuesday much the same, I prescribed, viz.,

℞ Mag. sulph., ℥j.;
Potas. acid tartrat., ʒij.;
Lucci. simon., ℥js.;
Aquæ, q. s.

which acted same evening; no better on Wednesday. On Thursday morning he woke out of a troubled sleep in an angry manner, insisted on getting out of bed, which he did; he was still very bad, when on Friday 2.30 p.m., I had a note saying he was in a dying state, and asking if I could see him at once. There was now a well marked bellows murmur accompanying the systolic sound of heart, a great deal of bronchial effusion, and pain in the base of both lungs posteriorly. I now applied a blister to præcordia, ordered ℥j., of mercurial ointment to be rubbed into both groins, ʒij., at each half hour's interval, with a small mustard plaister to base of each lung. Seeing him on next day, the murmur was almost gone, the sense of oppression at præcordia was vanished as also the pain at base of lungs, but on this day, Saturday 25th, a very ugly diarrhœa commenced, some very black looking stuff containing semi-liquid bloody pellets of mucous in the discharge, as a consequence great prostration ensued, to remedy which, I administered five drops of turpentine in a-half glass of brandy every second hour, with an opium suppository, which had the desired effect. Still not satisfied with his state, I asked for a consultation, which I had that evening. My consultee advised some quinine and iodide of potash mixture, which did not relieve any of the symptoms. For the next three days, there was certainly only a very imperceptible improvement, and on Thursday the 30th, I, for the last time, saw him alive at 1.30 p.m., when I found the heart had again resumed its abnormal murmur partially, the decubitus on the back, coma vigil subsultus tendinum, (a ticking in the ears) with great flaccidity of the body; which, though making my prognosis very fatal, still it did not lead me to think death was so near at hand. I may also add that his thorax and neck were the seat of a vesicular, and partly pustular eruption, which appeared on the previous night, and also that patient was seen so late as 11 p.m., the night prior to death by another medical man, and thought by him to be nicely. Patient died suddenly at 5 a.m., on Friday, the fourteenth day of his illness. Now, for information sake, I would ask those having more skill and experience than myself, to explain, viz.,—Whether bronchial effusion producing apnœa, mechanical obstruction to the heart's action, by a coagulum or effusion on the brain, by a clot from the heart was the cause of death so suddenly; and also what alteration they would suggest in the treatment according to the symptoms described above.

OBSERVATIONS ON FEMALE PHYSICIANS.

By Joseph Duggan, L.K.Q.C.P.I., Turloughmore, Co. Galway.

With reference to the subject of lady doctors, I am more than glad to find that the progress of the movement is more apparent than real; indeed, for their own sakes, I am delighted that it is so, as it has much of the *nihil admirari* about it. Not alone with surprise, but with regret, I find that some of my medical brethren have strenuously supported this audacious innovation; it does not redound to their credit for throwing this apple of discord into their own ranks. Oh! if the illustrious fathers of our noble profession could arise from the grave, and behold this moral degeneracy of their sons, they would indignantly exclaim, "Tarnish not the title deeds of the proud inheritance left you."

This pernicious and unsexing system of female education requires no great amount of logical acumen to expose its fallacies, which on moral, physical, and intellectual grounds are, to my mind, clear enough. I know every sensible man on a little reflection would at once see its glaring evils. The baneful effects it would have on the moral tone and well being of female civilised society, by turning the thoughts of woman from her own legitimate associations to assume the natural prerogatives of man. All the rights that she can attain in a medical point of view, she at present enjoys. In her own sphere, she is our "ministering angel," but as a physician, she is inadequate to the task. There will be a few, I know, and very few who, in order to gratify their masculine propensities, care not to erase those moral attributes and delicate qualities, which form the touching and graceful lineaments of the female minds, as contrasted with our own sex.

A few days ago I had the pleasure of conversing on this topic with a very well educated and sensible lady; she fully concurred with my views, and said it was one of those "freaks of her sex which she hoped they would abandon in time."

I think I have said enough on this point, and will not, therefore, insult the intelligence of my readers by saying more. *Verbum sap.*

Her physical incapacity is also very obvious; the weak and delicate frame of woman cannot bear toil and hardship like robust man; and I need not mention the fact that, country practitioners must endure wind and weather, riding and driving, often in frost and snow, at all hours. Let me imagine, for instance, one of these female doctors, perhaps married, getting a midnight call, a few miles distant. Away she must go—probably over mountain passes, ploughed fields, through highways and byeways, where no vehicle can go; only fancy her position, what a sad plight she will be in ere she arrives at her destination; and, as for her husband, his position is anything but enviable. On the other hand, if she is of the unmarried class, called spinster, there are some advantages gained, and she can manage a little better. If the Profession is, then, only suited for those spinsters, they will form a very small and isolated body indeed—a celibate sisterhood of Esculapian votaries, that condition which most of their sex will keep away from, if they can!

Then on intellectual grounds, woman has given us marvellous proofs of her great intellect and ability as historians, poets, novelists, and in every branch of language, literature, and the fine arts; and yet it is a remarkable fact, with a few rare exceptions, that she scarcely ever showed much capacity for acquiring a knowledge of the physical and natural sciences. She has not that aptitude or peculiar power of thought for abstraction and generalisation which is inherent in the male sex. In analytic and synthetic inquiries, she cannot compete with man. Woman never produced a female Newton or Laplace, a Bacon or a Linnæus. No; their minds are not moulded for such heavy work. Why, then, do they wish to dabble in the purely scientific Profession of medicine—one of the highest and most arduous studies that can occupy the mind of man, and the practice of it far more difficult still. See the physician at the bed-side; there he stands as judge, jury, and advocate combined; in fact, triple-minded. Contemplate on the powerful working of the brain, as he is reasoning with himself; consider all he has undertaken, and the great responsibility imposed upon him.

He must then have a clear and comprehensive knowledge of man in health and disease and a well developed brain, capable of great reasoning powers, tact and erudition. Without fear of contradiction, I may safely assert that woman is incompetent for such a task, and that she is wholly unfit for the profession, and can never meet the emergencies of medical practice. I hope the ladies will not consider the broad truths I have stated, as any way intemperate or uncourteous, I consider them perfectly per-

tinent, by showing how utterly inconsistent it is for ladies to adopt such a profession.

It is very odd they don't try the pulpit or the bar, where their high aspirations might have free scope for gratification and far more remunerative for their pockets than this noble but ill-requited Profession of ours. Ere long we might see a female Bossuet or a Fenélon, pulpit orators, glorious in eloquence, dealing not in thin generalities, but driving God's truths into the hearts of poor sinners. And at the Bar, their sharp wit and fervid oratory might some day wing one of them to the loftiest forensic honours.

"Major mihi rerum nascitur ordo."

I need not assure them what a happiness it would be to have the privilege of contemplating the probability of being one day crowned with a mitre, or robed on the woolsack. Nothing would give me greater pleasure than to see the intellectual genius of woman appreciated, and developed in the various walks of life, suitable, and not offensive, to her sex, nor unbecoming the character of woman.

Female physicians existed in former times, but they miserably fulfilled the duties of medical practice, accordingly they dwindled away, and became obsolete, succumbing to that obscurity which they adorned. They never wrote or did anything to improve the science or practice of medicine; with a few exceptions, our medical archives do not reveal any traces of their intellectual existence. My fair aspirants may rest assured that the same fate awaits them now; the female doctor of to-day will ere long vanish like a splendid phantom, to be considered in after ages as a dream of female medical fanatics. I would, therefore, exhort them to abandon this unnatural female calling; there is too much of the Amazon about it, and they may depend on it, its uphill work will not be so congenial a life as those allotted to her by nature, which the educated lady so gracefully fulfils, gliding amid the tranquil enjoyments of domestic life as a gentle and virtuous wife; her love is a paradise of delight, which dissipates the cold and indigent realities of life, and imparting with unobstrusive and fascinating manners that happiness which enchants the soul. Among her children, she is the attractive centre of love and affection—the oasis in the desert of their existence, the green spot to which their hearts' eyes turn, when they are sick and wearied of the false glare of the world around them.

Hospital Reports.

LONDON HOSPITAL.

We continue our abstract of the History of the London Hospital and its Medical College.

The entry of the first student took place in January, 1742, and annually from that time pupils were admitted to attend the practice of the physicians and surgeons. So early as 1749 Mr. Harrison obtained the permission of the House Committee to deliver a Course of Lectures on Surgery in the Court room of the hospital, and in 1757 a similar permission was granted to Mr. Thompson, another surgeon to the Institution. It is now more than a hundred years ago since Mr. Thompson performed at the hospital the first amputation of the hip ever done in this country.

In August, 1781, Sir William Blizard (to quote a Minute of the House Committee) obtained permission to deliver two courses of lectures on anatomy and surgery during the next winter in the Demonstrating Theatre of this Hospital; at the same time to obviate any reflections that may arise from the feelings of some persons, he engaged not to use (the remains of) any of the patients of the hospital. Thus almost from the foundation of the Hospital anatomical demonstrations and courses of lectures had been continued, but it had now become necessary to make more comprehensive arrangements for medical education. Owing to the absence of practical opportunities of studying anatomy and surgery at the English universities, as well as to the customs of the times, students proposing to practice as Surgeons were virtually excluded from the benefit of university education. From other causes the great mass of medical practitioners of the last century, the apothecaries, shared the privation. The advantage of forming a complete school of medicine in connexion with hospital became obvious, and the medical faculty of the University of Edinburgh, then in the zenith of its reputation, presented a model, which was, not improbably, imitated.

Accordingly it is stated in the *Public Advertiser* of March, 1788, that "The Physician and Surgeons memorialized the Governors of the Hospital to the effect that in their opinion the teaching of the several branches of physic and surgery by lectures at the Hospital would promote the credit and interest of the institution; that the present accommodations are inadequate to such an undertaking; they therefore requested leave to erect a suitable building." The result of this application was, that the General Court of Governors assembled February 5th, 1783, gave permission for the erection of a building at the east end of the Hospital, according to the prayer in the petition.

About £500 were collected in subscriptions from individual governors and friends of the hospital; the remaining portion of the expense of the old building (about £1,500) was guaranteed by two of the Medical Officers of that period, Dr. Maddocks and Sir William Blizard. Through the premature decease of Dr. Maddocks, the liability devolved mainly upon Sir William Blizard, who in this matter, as in others proved himself one of the most far-seeing and devoted friends of the hospital. Among the most active promoters of the undertaking was Mr. Samuel Davey Liptrap.

The London Hospital, therefore, enjoys the credit of having in 1785 set the first example of a complete Medical School in connection with a hospital upon the model of the Medical Faculty of an University. Moreover, the printed prospectus of the London Hospital Medical College for 1792 shows that in addition to the Courses of Lectures on the usual subjects of Medical Education, a *Course of Lectures on Clinical Medicine* was at that time given in the School. Subsequently, Clinical Lectures were discontinued, but they were successfully resumed by Dr. Billing in 1823. The building at the east end of the hospital continued in use until 1854, when the present Medical College was inaugurated. In the previous year, in compliance with the representations of the Medical Council of the School, the governors had decided to erect a spacious and convenient edifice for the purpose of meeting the enlarged requirements of Medical and Surgical Science, and of attracting to the London Hospital a Staff of Dressing Pupils adequate to the necessities of a great School of Practical Medicine and Surgery. The expense of erection, which amounted to more than £10,000, was borne by the governors of the hospital.

ST. VINCENT'S HOSPITAL, DUBLIN.

Report upon Fox's Palatable Cod-Liver Oil.

By Robert Cryan, L.K.Q.C.P., L.R.C.S., &c.,

Physician to the Hospital.

I have had the Palatable Cod-Liver Oil of the Messrs. Fox and Co. administered to several of my patients, and I am convinced that it has been of very great advantage to them. Some of my patients in St. Vincent's hospital, in whom the ordinary cod-liver oil in its natural state, or even combined with sulphuric ether, almost always produced unpleasant eructations and vomiting, found the Palatable Cod-Liver Oil of the Messrs. Fox and Co. not only agreeable to the taste but also easily retained upon the stomach. In that rather large class of cases where

the use of cod-liver oil is indicated, but, in its ordinary form, found to disorder the organs of digestion, I believe the administration of the Palatable Cod-Liver Oil will be highly advantageous. I may add that the dose of the Palatable Cod-Liver Oil should be nearly double that of the ordinary oil. Hitherto, I have not had very many opportunities of prescribing the Palatable *Castor* Oil, but, so far as my experience extends, I can report very favourably of it.

CITY OF DUBLIN HOSPITAL.

Report upon Fox's Palatable Cod-Liver Oil.

By John Hawtrey Benson, A.B., M.B. &c.

My experience of Fox's Palatable Cod-Liver Oil is decidedly in its favour. I have usually found that the delicate patients take it with ease, and do not perceive the disagreeable characteristic taste of cod-liver oil, except slightly as a after-taste. It is not strictly true that it does not "rise" from the stomach after it has been taken. But it is relatively true, for it does so very much less than any other specimen of cod-liver oil I have prescribed. The Palatable Oil can be, therefore, taken in larger quantities than other cod-liver oils, and when so taken I consider its therapeutical value not inferior—perhaps superior—to that of other oils.

Transactions of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, December 13th, 1870.

Dr. Burrows, F.R.S., President, in the Chair.

temporary glycosuria as a sequal of cholera.

By William Sedgwick, M.R.C.S., L.S.A.

After a brief historical retrospect of the subject, the author remarked that, in studying the character of the urine in cases of cholera, attention should in the first instance be directed to the fact that the first and albuminous urine passed or withdrawn after the usually prolonged suppression of the secretion was usually deficient in urea, and free from sugar; and that the subsequent condition of temporary glycosuria was preceded by the occurrence of a blue colouring matter, which appeared to be intimately associated with saccharine transformation. It was a significant fact that sugar in the urine occurred not, as a rule, in the first urine secreted after a more or less prolonged suppression, but subsequent to the occurrence of albumen; and that whilst there was during the early stage of cholera convalescence a relative deficiency of urea when albumen was present, sugar, on the contrary, was associated with urea in excess. The deficiency of urea which occurred in connexion with the albuminous urine of cholera was the more noticeable from the fact that, as the amount of urine secreted within a given time, after the previously complete suppression of it, was small, the proportion of urea should have been relatively increased, if the development of that organic principle in the system had been uninterrupted; and consequently it might be suggested that, as urea had been found to be one of the best diuretics, the suppression of urine which occurred in cholera and in allied conditions of the system resulting from poison or from disease, admitted of being directly referred to temporary arrest in the formation of that excrementitial product. The production of the blue colouring matter in the urine of patients suffering from cholera was chiefly important from the fact that it was very closely associated with the development of glycosuria; the occurrence of sugar in the urine in such cases appearing to be simply a somewhat later stage in the series of pathological changes which, so far as they affected the urinary secretion, could be traced to one common origin. Attention was directed to the frequency of the occurrence of a blue colouring matter in the urine in a great many other diseases which, like cholera, admitted of being more or less directly referred to the alimentary canal; and it might be suggested as probable that, as sugar had also been found in the same class of cases, these two abnormally increased, if not altogether abnormal, constituents of the urine were due to the same cause, and derived from the same source. In reviewing the pathology of the urine in cholera, the chief facts to which attention should be directed, with reference to the occurrence of glycosuria, were—the suppression of the urinary secretion as a primary result of the disease, with arrested formation of urea; albuminuria, with deficiency of urea; the presence of a blue colouring principle; and, finally, diuresis, with excess of urea and sugar in place of albumen. In the sequence of phenomena there indicated, urea as the essential principle of the urine necessarily occupied the chief position; and the subsequent presence of sugar during the stage of convalescence, when albumen was no longer present in the urine, suggested that the temporary glycosuria of cholera might be due rather to the progress of reparation than of destruction, and that it was, as it were, the result of an excess of restorative effort on the part of the system to repair loss from previous disease. This suggestion derived support from what occurred in diabetic patients during an attack of fever, when sugar in their urine was apt to be replaced by albumen; and by what occurred in the same class of patients during the last agony, when a similarly retrograde course with respect to the pathology of the urine was pursued; for in them also the urine became albuminous, and the sugar disappeared; and it was moreover supported by a large amount of collateral evidence which was almost conclusive in its favour. It would be found useful, in studying the character of the glycosuria which had been observed during convalescence from cholera, to take into consideration the various physiological, pathological, and artificially produced states of the system in which, as in cholera, sugar was commonly present in the urine without giving rise to confirmed diabetes. For temporary glycosuria, like the previous suppression of urine, had no claim to be regarded as an exceptional phenomenon, which was in any way characteristic of cholera; but, on the contrary, it would be found to occur during convalescence from other forms of acute disease, in which it was often associated with the previous development of a blue colouring principle in the urine. It would be found also to occur, apart from disease, as a physiological condition during certain stages of development, and at certain epochs of life. And, finally, that it admitted of being experimentally produced. With reference more especially to the occurrence of temporary glycosuria in the latter class of cases, as a result of sympathetic nerve section, the author remarked that in all experiments of that kind the primary effect produced must be on the vascular system to which the branches of the sympathetic nerve were distributed, and that any effect produced on other parts of the organism must be secondary to that. Consequently, whilst recognising vascular paralysis as the primary result of section of the sympathetic nerve in all parts of the system, it was important to notice that in the secondary results produced no such constant uniformity had been observed, since these were liable to vary according to the locality in which the experiment had been performed. He was of opinion that, with regard to the occurrence of temporary glycosuria as a sequel of cholera, there was no fact in experimental physiology more significant than that observed by Eckhardt in 1867, of the absence of sugar from the urine after section of the splanchnic nerves, which, taken in conjunction with the fact observed by Morcau in 1868, that section of those nerves was followed by an intestinal flux, possessing the same characters as the flux of cholera, indicated very clearly the direction in which the inquiry should be pursued. For when the neuro-paralytic condition of the digestive canal so produced was compared with what occurred after the influence of the central portion of the sympathetic nervous system had been artificially increased by the application of galvanism or electricity to the part during life, as shown in MM. Linati and Caggiati's experiments, it would be found that the results then obtained were essentially opposed to those which followed arrest or diminution of that influence, either from section of the nerves or from cholera.

In conclusion, the author remarked that the temporary glycosuria which had been observed in all the various cases which he had cited might be regarded as a consequence of long-continued and immoderate secretion, consequent on a previous diminution or arrest of the influence of the sym-

pathetic or vaso-motory nervous system, which apparently occupied a position functionally midway between the secretory surface on the one side, and the supply of blood on the other, and thus became the moderator of secretion in virtue of its action as controller of the circulation. From his observations on the subject, he had been led to infer that all secretion was associated with saccharine transformation; and that whilst, on the one hand, an excess of secretion was accompanied by a corresponding excess in the formation of sugar and consequent glycosuria, a moderate exercise of secretory function was, on the other hand, accompanied by a correspondingly moderate formation of sugar, which was not more in amount than could be disposed of in the system; and that it was only when the blood contained sugar in excess from such causes as those which had been already referred to that some of it was, in consequence, eliminated by the kidneys. Consequently, it might be urged that the temporary glycosuria, which occurred as a sequel of cholera, served to show that during reaction from previous collapse there was a temporary excess of restorative effort, and that although, as was well known, an abortive attempt at reaction was in that disease a very common cause of death, yet in those cases of cholera which terminated favourably, and in which glycosuria had been observed to occur during convalescence, the subsequent disappearance of sugar from the urine might be accepted as evidence in favour of the normal balance of organic function having been satisfactorily restored, and that the tendency to excess during recovery from a central arrest of nutrition had ceased.

THE SURGICAL SOCIETY OF IRELAND.

The first meeting of this Society for the Session of 1870-71, was held on Friday evening, December 9th, in the Albert Hall, Royal College of Surgeons.

Dr. Albert Walsh, President of the College, in the Chair.

Dr. Richardson having read the minutes of the last meeting.

The President delivered his Inaugural Address, which will be found at page 517.

REGENERATION OF BONE.

Dr. Kelly exhibited a hand which had been removed from a man, who had received a bite from another man on the thumb. The case he said was interesting, owing to the reproduction of the terminal phalanx of the thumb, which had been removed with its tendons and ligaments attached, and presumedly with its periosteum also. As it was removed in its entirety with its periosteum, the regeneration could not be accounted for by the ordinary theories of the regeneration of bone which had been advanced,—that the new bone was produced from the remains of the original bone, from the original bone before its complete death or from the periosteum. The case he thought was valuable, as indicating an analogy with the independent reproduction occurring in the Radiata and the Articulata.

INJURY OF THE HAND.

Dr. Wharton, V.P., exhibited an example of a machinery accident which had been brought into the Meath Hospital on the 6th instant. The subject of it, was a youth, fourteen years of age, engaged in Messrs. Pim's factory at Green mount, who unfortunately introduced his hand into a portion of the machinery, and was so injured that amputation was necessary. The entire integuments of the palmar surface of the hand were stripped up, and converted into a pulpoid mass. Upon removing the hand, all the metacarpal phalangeal joints were found to be dislocated towards the palmar surface, and the same thing had happened to the thumb; so that it would appear, after the integuments of the hand were stripped off the fingers the latter were dislocated towards the palmar surface. As soon as reaction was established the hand was amputated. There was but little hæmorrhage, and the boy was doing well.

VESICAL CALCULUS.

Mr. H. G. Croly exhibited a small calculus which he had removed from the bladder of a boy, five years of age. The child had been suffering from the time he was two years of age with many of the symptoms of stone. When only two years old, the mother noticed that he pulled at the prepuce, and had considerable pain in making water. The symptoms went on and she treated the boy for worms, but finding that he did not get better, she brought him to Mr. Croly, who having placed him under the influence of chloroform, sounded him and struck the stone. The boy was admitted to the City of Dublin Hospital and a few days ago the lateral operation for stone was performed. One of Mr. Croly's reasons for bringing the case forward was, because he had experienced considerable difficulty in getting the stone out of the bladder, which was unusual in a child. The operation was performed with a staff grooved in the side and with a single knife. The knife was got readily into the groove of the staff and he got his finger into the bladder without any trouble, but then he could not find the stone. He should mention, that in sounding the child in the presence of his colleagues, it was on the withdrawal of the sound from the bladder that the stone was struck, and by that he learned that the stone used to get behind the pubis. This point he considered to be one of some interest. He got the stone out by tapping the child on the anterior part of the abdomen when the calculus, but afterwards the stone from its small size and flattened shape, escaped from the forceps and ascended into a pouch behind the pubis, so that it was twice up in that situation and gave him some trouble in extracting it. They all knew that one of the great difficulties in performing the operation of lithotomy on a child was getting into the groove of the staff. He thought this difficulty occurred more frequently from the want of proper height in the operating-table than from any other cause. The table should be of such a height that the bladder would be above the operation, so that they would look up to it as an abdominal and not as a pelvic viscus. After the operation in this case, a chemisette catheter was introduced, and the child had gone on well with the exception of a slight attack of bronchitis.

In reply to Dr. H. Kennedy, Mr. Croly said he had not heard of any blood having passed from the bladder previous to the operation.

SYPHILIS.

Mr. John Morgan introduced for discussion the subject of the "Duality of the Venereal Virus," and said he should be glad to hear the opinion of the members of the Society on that much debated question. Every one was conversant with the continental theory of the existence of two sores, the infecting and the non-infecting sore, but lately there had been some change of opinion among writers on this subject, and perhaps the most striking one was that of Mr. Bumstead. Those who had read that gentleman's most carefully written book, were aware that he mentioned two kinds of venereal sores. He even gave in his book, a comparative column between the symptoms of the two. He (Mr. Morgan) had, however, received a letter from him within the last two months, in which he stated that he had found reason to hesitate in confirming what he had previously so anxiously endeavoured to impress. If a writer of Mr. Bumstead's experience, and who had written so largely on this particular subject was now inclined to hesitate and doubt as to his former views, the Society, he thought would agree that the question was worthy of discussion. He (Mr. Morgan) had lately performed some experiments at the hospital, by inoculating patients already affected by syphilis or constitutional venereal virus; and he invariably found that the result of the inoculation was the production of the ordinary chancroid or soft sore. The question was, whether a patient not already the subject of syphilis, if inoculated was capable of producing a hard or infecting sore. He had never been able to succeed in getting a hard sore by inoculation, but then of course he had never tried the experiment on a previously healthy person. Ricord and others, asserted that after some time the hard sore was capable of degenerating into a mucous tubercle. Now, if they took a mucous tubercle and inoculated with it as he had done, they would find the invariable result in a syphilitic patient was the production of a soft sore or chancroid. Inoculation from a true chancroid would produce a chancroid—and inoculation from a bubo, or from a vaginal discharge would invariably produce in a patient, already constitutionally affected, a soft sore. In performing these experiments of inoculating from a vaginal discharge, he had taken the greatest pains to satisfy himself that there was no abrasion of the surface, no intra-vaginal or uterine sore. He had performed over two dozen of experiments, and invariably produced the specific pustule and the peculiar sore well known as the chancroid or soft sore. The only point to be considered was what would be the result, if the experiment had been performed on a non-infected patient and he would be glad to hear from any member of the Society, who might have had an opportunity of ascertaining it, whether the result of inoculation in such a case would be a hard sore or a chancroid. He had

taken the vaginal discharge and produced a soft sore, from that soft sore he produced another, and from it another and so on, all the result of the original inoculation with the vaginal discharge. If it were the case, as many continental writers affirmed, that sores had been communicated to men by women who had no abrasion or breach of the surface themselves, they must come to the conclusion that the sores were caused by inoculation with the vaginal discharge. In the Lock Hospital, nearly all the patients were affected by soft sores, and they had been invariably followed by secondary symptoms; and over and over again he had inoculated from these sores. These results were directly at variance with the opinions expressed by many eminent writers on this subject. They were all aware that a vast difference of opinion existed in reference to it. In America Gross differed from Bumstead; and in England we had such men as Syme and Sir William Fergusson, holding that there was no such thing as a dual poison, while others of equal authority held the reverse. The question was whether this dual sore existed? Was there one sore capable of infecting and another that was not? All the patients who were affected with sores in the hospital under his charge had secondaries, yet the hard sore were very rare indeed. He had seen as good a type of this hard sore in women as he had seen in men, but hard sores were very rare, while soft sores were frequent, and yet all the patients suffered from secondaries. These patients were the chief sources of venereal sores in Dublin. The inoculation test confirmed the theory that there was not a dual sore. He should say that he thought women suffered more from constitutional symptoms than men. Women who got soft sores did not escape, while men sometimes did. In *Hayes' American Journal* for August last, Mr. Bumstead had an article in which he said it made no matter whether the material for inoculation were taken from a hard sore or a soft sore, he found the result equally the same. The theory was, that if a person be already affected by the hard sore, he should be incapable of inoculation again; but now we had Mr. Bumstead saying that you can inoculate from the hard sore. The hard sore, if irritated, would produce pus, and he (Mr. Morgan) had in his possession some pus sent from Christiania, which had come from a hard sore which had been irritated by savine powder. This pus thus produced had been inoculated on a patient already suffering from constitutional symptoms, and it produced a soft sore. It was found that a hard sore was capable of degenerating into a mucous tubercle, and if they inoculate from a mucous tubercle it produced a soft sore; and this brought the matter to a focus—whether there was a difference between these two venereal sores—one sore capable of infecting, and the other sore not? The treatment of syphilis by inoculation was very interesting. He had inoculated, as he had already said, patients suffering from constitutional symptoms with vaginal discharge; the soft sore was produced, and the patients invariably got well. He should add that the sores he produced by inoculation, including those produced by the pus sent him from abroad, were rather persistent. What he was anxious to do was to draw the attention of the Society to the question—Was there a distinct line of demarcation to be drawn between the two sores? What was the experience of the members on that point? If they were of opinion that there were two distinct sores, it was an extraordinary fact that in hospital they seldom or ever saw the hard sore, and therefore must come to the conclusion that, if the two kinds of sore existed among males, they got it not merely from the hard sore but from any form of sore. There was another point to which he wished to refer, namely, that sores, as a rule, were not so frequent as was supposed. The general account which women gave was that the first thing they noticed was a discharge. Male patients have come to him saying, they got a sore from such a woman; but when he came to examine her she was found not to have a sore at all. The women say the first evidence of their being affected is a discharge, then comes a sore, then a mucous patch, then an affection of the skin, &c. It was not very difficult to believe this, for if you can take the vaginal discharge and inoculate with it, producing a soft sore, he did not see why a male patient, having some slight fissure or abrasion of the surface, might not be infected by the vaginal discharge only in the course of direct connection with the female. Then came the great question which he had already dwelt upon, and on which he desired to elicit the opinions of the members of the Society, what would the result be in a person not previously tainted with syphilis? He thought it would be a soft sore. Sometime ago a gentleman came to him with a soft sore, and in three weeks after that a vigorous gonorrhœa occurred. It seemed to him extremely likely that the same discharge gave rise to the gonorrhœa and the soft chancre or sore.

Dr. Barton thought it rather an unfortunate thing that their views on this subject should be rather disturbed than settled by Mr. Morgan's experience. He could not follow his statement so accurately as to be able to discuss it in detail; but it struck him as the general result of what Mr. Morgan said that his (Mr. Morgan's) own mind was considerably confused on the subject, and for this reason—he incidentally let fall that he was not quite sure what gonorrhœa was, and suggested that perhaps it was generated by means of the introduction of the second poison, intimating that he was not sure there was a second poison. The general conclusion of Mr. Morgan threw serious doubt on the views heretofore entertained, but did not satisfy their natural desire by establishing anything clear or definite as to the nature of these different sores. He (Dr. Barton) believed there were two different kinds of sores, one of which ran a local course, whereas the other was the commencement of a constitutional disease. He thought the observations of Mr. Morgan went to prove that perhaps they were hasty in speaking of two distinct poisons. They should say rather that there were two distinct diseases, and their object should be to clear up what were the signs by which they knew one disease from another. Many of the points mentioned by Mr. Morgan were old. They knew that the discharge from a syphilitic woman might produce sores, although there were no sores on them, and that these discharges when inoculated would produce soft sores was already well established. The fact that a vast majority of the patients in the Lock Hospital had ordinary soft sores, and that they were followed by constitutional symptoms, was a very important matter. He thought that in these women it was absolutely impossible, in the early stage of these sores, to say which of the two diseases they were. It required very great accuracy of observation to clearly establish anything of this kind, and in the patients Mr. Morgan had to deal with, the difficulty was increased, for they were exposed to contagion of every form. He repeated that it was necessary cases should be noted with great accuracy before they were accepted as overturning a great amount of evidence which existed, to prove that the two sores are in their early stage not easily known, and that observation was required to tell them from one another. The whole subject was one of great difficulty. The object of his remarks was this, that he did not think the observations and experiments of which they had heard went further than to show that in women the early stage of true syphilis was not marked by the characteristic indurated or hard sore; but they had no right from that to infer that the chancroid or soft sore was the only true source of the disease.

Dr. Stapleton said there was an old French author, Diday, who said he believed inoculation from secondary syphilis produced the soft sore, and not the hard or true contaminating sore—the Hunterian chancre. He recollected last year bringing before the Society the case of a gentleman who came to him with a number of soft sores, and on the 18th or 20th day afterwards they were beginning to heal when a hard chancre declared itself. After a great deal of questioning he acknowledged to having had a second connection in the interval. Another person came to him with a nest of chancres, some ten or twelve. The lady who gave him the disease was examined by another medical man, who pronounced her to be perfectly sound, but she might have had a vaginal discharge. It had been laid down that if a man had a hard sore, he might be inoculated with the soft sore, but it had a tendency to run into phagedena. Of course, it would not be justifiable to inoculate a clean subject with any form of this disease. It was extremely difficult to find a true Hunterian chancre in a state to inoculate from. He had known cases which went on to secondaries, and yet the patients did not know they were contaminated. From his own experience, he firmly believed there were two distinct poisons; and, moreover, he believed if a man got a regular hard chancre, he did not care how he was treated, with mercury or other medicines, he would get secondary symptoms; whereas the man with a true soft chancre would not. Instances had occurred in which discharges from the urethra had been treated as gonorrhœa, whereas, on a more accurate examination they were found to result from soft chancres in the urethra.

Dr. Macnamara.—Do you say a soft chancre is not followed by secondary symptoms?

Dr. Stapleton.—Yes, if it is a true soft chance you may cure it with mercury; whereas you cannot cure a hard chancre with mercury.

Dr. Hamilton Labatt was surprised to hear it said that a soft chancre was never followed by secondary symptoms. When he was a mere student in hospital he saw a variety of cases in the wards in which secondary symptoms had followed from the soft chancre. If secondaries only followed hard chancres they ought to be very rare, for hard chancres were very rare; yet the fact was that secondary symptoms were very common.

Dr. Macnamara said the subject was one of great importance, and could not be adequately discussed that evening; and it was important that it should be properly discussed in a city, the surgery of which was so intimately associated with the subject of syphilis. He, therefore, moved the adjournment of the debate until the next night of meeting.

The motion of adjournment was agreed to.

DUBLIN OBSTETRICAL SOCIETY.

Second Meeting, Dec. 17.

Communications:—

1. Dr. Atthill "On some Forms of Enlargement of the Uterus."

2. Dr. J. A. Byrne "On Vaginal Tumour, and Prolapse—Removal—Recovery."

3. Dr. Johnston.—"A Clinical report of the Rotunda Lying-in Hospital for the Past Year."

Dr. Atthill read a paper

ON SOME FORMS OF ENLARGEMENT OF THE UTERUS.

After passing an encomium on the uterine sound, which he considers to be not only one of the most useful, but also the safest instrument we possess, if carefully and skilfully used; he proceeded to say that enlargement of the uterus was met with in a very large percentage of those cases in which the symptoms are referable to the organs of generation in the female, a condition easily explicable when the great change which takes place in the uterus under the influence of pregnancy, and even, in a degree, at each menstrual period, is borne in mind. The following, apart from the actual existence of pregnancy, are the causes to which most frequently enlargement of the uterus is due, namely to—

1st. Sub-involution of the uterus after pregnancy, or abortion,
2nd. Congestion of the uterus from sudden suppression or retardation of menstruation.
3rd. Acute inflammation of the uterus, or its peritoneal covering.
4th. Chronic inflammation of the uterus.
5th. Hypertrophy of the uterus.
6th. The stimulus given to the uterus by the presence in its walls of fibrous tumours.
7th. The existence of any form of intra-uterine tumours.

With respect to sub-involution, it was very frequently met with, being a condition specially likely to occur in cases in which any form of pelvic inflammation follows delivery. It may also occur after abortion. The earliest symptom of sub-involution, and the most common is, undoubtedly, menorrhagia, a symptom nearly invariably present. Dr. Atthill, however, narrated a case of sub-involution of the uterus, in which amenorrhœa existed. The uterus in this case was very large, the sound penetrating to the depth of five inches. This patient was perfectly cured, the treatment adopted being the introduction up to the fundus of the uterus of eight grains of the solid nitrate of silver, which, dissolving, stimulated the whole of the inner surface of the uterus, and caused healthy interstitial absorption to be set up. Dr. Atthill advocated this plan of treatment in cases of enlargement of the uterus depending on sub-involution. The occurrence of enlargement of the uterus from sudden suppression of menstruation was next dwelt on; the occurrence of this form of enlargement is difficult to verify. Dr. Atthill, however, stated that he believed it to take place not unfrequently, and gave the particulars of a case in which the measurement of the uterus, by means of the sound, proved this to be so. All writers mention the liability of the uterus to enlarge during an attack of acute inflammation of that organ. The correctness of this was confirmed by the details of cases in which, by the introduction of the sound, the increase in size and subsequent diminution was proved, in instances both of metritis and peritonitis. Chronic inflammation of the uterus appears to be a very common cause of enlargement of the uterus, and gives rise to much distress. It is often associated with retroflexion, not unfrequently being the cause of that displacement. Menstruation was stated to be, in the writer's opinion, generally much diminished by the occurrence of chronic inflammation. Of all the cases of enlargement of the uterus, simple hypertrophy of the muscular tissue of the uterus is that giving rise to the greatest amount of distress, and the form least capable of being benefited by treatment; in it menstruation occasionally becomes painful, sometimes scanty, but seldom, if ever, increased in quantity. Cases illustrating this, and each of the other forms of enlargement of the uterus, were detailed and commented on, and the paper concluded with some general observations on treatment. The consideration of the other forms of enlargement of the uterus being deferred to some future occasion.

Dr. Roe submitted to the Society a specimen of a

CYCLOPS MONSTER.

The case was the fifth child, and the presentation was of the shoulder. Zedemann was of opinion that the deformity arose from absence of one olfactory nerve. There had been much difficulty in ascertaining that the case was not one of twins, especially as the shoulder presentation in cases of cyclops monstrosity was very unusual.

Dr. Ringland remarked on the fact that on the first call of the case, the placenta and funis were found low down in the vagina. He believed that the placenta was low down in the cervix, and that a partial action of the uterus about its neck had expelled the placenta as the first act. The very extensive bruit had decided the operator not to eviscerate without a persistent attempt at turning a very large fibroid which had been found in the interior wall of the uterus, so that the uterus after *post-mortem* was almost as large as that of pregnancy.

Dr. More Madden narrated a case of a prostitute occurring under his case. The child had lived for an hour and twenty minutes, and on *post-mortem* examination it had been ascertained that there was but one optic nerve. The woman in this case had attributed the monstrosity to a fright, and Dr. Madden was under the impression that the Profession was over-hasty in rejecting the theory of maternal impression.

HARVEIAN SOCIETY OF LONDON.

Dec. 1st, 1870.

Dr. W. F. Cleveland, President, in the Chair.

Dr. Westmacott related the case of a child, five months old, who died after vaccination. The mother accidentally cut the child's thumb, which bled greatly, and was followed by an abscess near the biceps muscle.

Dr. Thomas Ballard read a paper

ON APOPLEXY,

basing his remarks upon the records of cases, which had occurred under his own observation. Headache, giddiness, and vomiting, usually precede insensibility, palsy and death. This was a chain of symptoms which he thought to be well represented by the term apoplexy—the first three to be regarded as the earlier, and the last three as the later stages of the disease. This succession of symptoms occurs alike in both sexes, and at all ages. The point of treatment urged was, that for the cases indicated a judicious abstraction of blood was the remedy beyond all others which was useful, and in many cases was the only one required.

December 15th, 1870.

Dr. W. F. Cleveland, President, in the Chair.

Dr. Wynn Williams showed a patient, æt. fifty-four, who had an epithelioma of the lower lip removed by Mr. Cooper Foster, in Oct. 1869. The man had been a great smoker of clay pipes. The disease returned, and Dr. Williams injected it six weeks ago with a solution of bromine 20 minims to ʒj of rectified spirit. About 10 minims were injected into the soft parts on two separate occasions, and the whole mass sloughed out. The slough took fourteen days to come off. The smell was horribly offensive, but this was relieved by an iodine lotion, ʒiij. of tincture to ʒviij. the water. The lip was so contracted, that a second operation could not have been performed with the knife.

Mr. Fairlie Clarke read a paper on

SURGICAL DRESSINGS.

The author after touching upon the importance of the subject in its bearing upon surgical practice and "hospitalism" drew a contrast between two methods which are in vogue at the present time—the method of Professor Humphry, who leaves all wounds as far as possible, entirely uncovered, and the "antiseptic method," as practised by Professor Lister. The author of the paper strongly advocated the use of antiseptic lotions of various kinds, but he thought that the "germ theory" ought to be investigated on its merits as a question apart, and that the use of carbolic acid, chloride of zinc, &c., ought not to depend in any way upon a theory which is still *sub judice*. He (Mr. Fairlie Clarke) insisted upon the need of styptics, prompt and efficient means of arresting the flow of blood as the most important step towards bringing about immediate union or primary adhesion.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

Friday, Dec. 9th, 1870.

Dr. Clapton, F.R.C.P., President, in the Chair.

Dr. J. S. Bristowe read a paper entitled,

CASES ILLUSTRATIVE OF THE VARIOUS FORMS OF IMPAIRMENT, OR LOSS OF THE POWER OF SPEECH, WITH REMARKS.

The author, after stating that he had nothing new to announce, or even to suggest in reference to aphasia, proceeded to explain the mechanism of speech, which he divided into two associated, though entirely distinct, parts—that furnished by the larynx and that furnished by the mouth. Through the mechanism of the larynx is produced musical intonation; through the mechanism of the oral cavity are evolved articulate sounds. It is not surprising, therefore, that in disease we sometimes find the musical element of the voice affected, at other times the articulate element, that in the one case the patient speaks in a whisper—he has lost his voice as the phrase goes—that in the other case he retains his "voice," but cannot utter intelligible sounds. Dr. Bristowe then proceeded to consider aphasia under three heads—First, that due to a mental defect, independent of any affection of the organs of speech. To this form the name amnesia has been applied, or by Dr. Ogle the equivalent term of amnemstic aphasia. Particulars of four well marked cases of this condition were given; in all, the patients were paralysed on the right side, in other words, the left side of the cerebrum was diseased. The first case was one of very slight, but very distinctly marked amnesia, the affection of the brain being, doubtless, due to some small effusion of blood either into the corpus horatii or its neighbourhood. The second case was also one of slight amnesia, arising in connection with paralysis agitans of the right side, both conditions being, doubtless, dependent on some affection of the left cerebral hemisphere. The patient had heart disease, and Dr. Bristowe believed the symptoms were due to some softening of the brain substance, following the plugging of some of the small arteries. The third case was also one of hæmorrhagic hemiplegia; the amnesia being remarkably well shown, and was all the more evident from the fact of its being associated with a great deal of intelligence, and even liveliness of manner. The fourth case has also an exceedingly well marked example of amnesia, probably dependent on effusion of blood. These cases, to a certain extent, confirmed the views of Dr. Dax and M. Broca, these writers associating aphasia with disease of a definite part of the cerebrum, viz.—the posterior part of the third frontal convolution—the convolution that is in front of the hilum of Rolando. Dr. Bristowe considered, however, that although we might be inclined to agree with Dr. Maudsley, that further experience would show that impairment of speech belongs equally to affections of both hemispheres, that there was no doubt whatever that up to the present time aphasia has been found associated in a vastly preponderating degree with disease of the left side of the brain, and that it was quite certain, as Trousseau maintains, that aphasia is, in some instances, obviously the result of disease of the right hemisphere; and that it was equally certain that the dependence of aphasia on disease of a particular convolution, whether on the right or left side, was at present far from being a matter of certainty. The second form of aphasia was that in which, without there being any apparent mental defect whatever, and without there being any trace of paralysis of the organs of speech, the patient loses the power of speech absolutely. Particulars of one exceedingly interesting case of this form were given, in which Dr. Bristowe succeeded in teaching the patient to speak, a full account of which is published in the last volume of the *Transactions of the Clinical Society*. In a typical case of this kind the patient retains his memory and all his mental faculties; if he could read and write previously he can read and write still. In fact, he is in the condition of a person born mute who had never been taught to speak. It would seem indeed, Dr. Bristowe considered, that speech when once acquired is as purely a reflex phenomenon as are the acts of deglutition or respiration; that there is some ganglionic centre intermediate between the cerebrum (which thinks and wills) and the nuclei of the motor root of the fifth, the portio dura, and the hypoglossal (whence the motor power of the organs of articulation is derived), intimately connected by nerve fibres with all these parts, which, when the mind wills to express itself in words, acts as its agent in the matter, and directs the necessary combined impulses of the nerve nuclei, upon which the combined movements essential to the production of each articulate sound and each articulate word depend. If this be the arrangement, and Dr. Bristowe thought it most probably was, it is easy to understand how disease which affects this co-ordinating centre, which cuts off the connection between the centre (the portion of the cerebrum which may be supposed to preside over the memory of words), and the nerve-nuclei, would render a patient mute, even while retaining his knowledge of language and unimpaired intelligence. The patient would will to speak, but the agent on which he had hitherto relied would fail to obey his will, and here a something incomprehensible to himself would intervene between his will and its execution, and he would remain silent. The third form of aphasia was that in which the nerves of speech were paralysed, either from disease in the course of their trunks, or from some disease affecting their nuclei of origin. In these cases the patient fails to speak, not because his memory of words or his mind fails him, not because his co-ordinating power is lost, but because the organs of speech themselves are paralysed. Particulars of one case, illustrative of this condition were given, in which there was general paralysis, including paralysis of the organs of speech, caused by the formation of a small clot in the medulla oblongata. Dr. Bristowe stated that the most remarkable examples of this form are those furnished by disease of the medulla oblongata interfering with the origins of the various motor nerves engaged in speech, and by that peculiar form of paralysis described by Duchenne and Trousseau, and which the latter terms glosso-pharyngeal paralysis. Dr. Bristowe added that cases are certainly met with in which the above three varieties of loss of speech are combined in a greater or less degree. Dr. Bristowe concluded by stating that aphasia due to affections of the larynx, or of the pneumogastric nerve, or to hysteria, had all been abundantly investigated, but that he did not propose to dilate upon them.

A discussion ensued, in which Mr. Lockhart, Dr. Purvis, Dr. Gooding, Mr. Mitchell, Mr. Hope, Dr. Clapton, and Dr. Thorowgood took part, several of the speakers citing cases that supported Dr. Bristowe's views.

A hearty vote of thanks having been unanimously accorded to Dr. Bristowe for his highly interesting and instructive Paper, the Society adjourned.

SCOTLAND.

Edinburgh.—The Medical Education of Women. The Royal College of Surgeons of Edinburgh has held a special meeting for the consideration of the question of the medical education of females. The chair was occupied by Dr. Gillespie, the president; and there was a large attendance of members. It was moved by Dr. Andrew Wood, and seconded by Dr. Gairdner, treasurer of the College—"That, in the opinion of this College, it is neither proper nor expedient that males and females should be associated together in the study of medicine either in hospitals or in classes." An amendment was moved by Dr. Handyside, and seconded by Dr. Watson—"That, in the opinion of the College, it is not expedient that the College come to any resolution in regard to mixed classes." On a division, Dr. Wood's motion was carried by a majority of twenty-seven to four. A considerable number of the members of the College left before the division.

PUBLISHER'S NOTICE.

REDUCTION IN PRICE.

On and after the 1st of January next, the Annual Subscription to this Journal will be reduced to £1, post free, for Subscriptions paid in Advance—i.e., within the first three months of the year. Subscriptions on Credit will remain as formerly, at £1 2s 6d.

The MEDICAL PRESS AND CIRCULAR *will henceforth be the cheapest, as it is now acknowledged by impartial critics to be the most practical, and the only independent organ of Medical Opinion in this country.*

REGISTERED FOR TRANSMISSION ABROAD.

THE

MEDICAL PRESS AND CIRCULAR

Is published simultaneously in London, Dublin, and Edinburgh, every Wednesday morning. Price 5d. Stamped, 6d.

POST FREE TO ANNUAL SUBSCRIBERS £1 2 6
„ IF PAID IN ADVANCE 1 1 8

*** Post-office Orders and Cheques to be drawn in favour of
A. A. TINDALL, 20, King William-street, Strand, London, W.C.
MOFFAT and Co., 6, D'Olier-street, Dublin.
MACLACHLAN and STEWART, South Bridge, Edinburgh.

AGENTS FOR THE UNITED STATES—
New York—TURNER and MIGNARD, Nassau-street.
Baltimore—KELLY, PIET, and Co.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 28, 1870.

1870.

THE year is so rapidly closing that we naturally look back for a moment at its course, and may be excused for turning a moment from the awful scenes of its later days to a brief retrospect of some of the questions that have occupied us as a Profession. The year opened in the midst of a campaign for Medical Reform, and although good service has been done, it closes without anything having been accomplished. Sir John Gray's Bill, the Government Bill, and many other schemes—some good, some indifferent, most of them embodying both good and bad qualities—are all now consigned to the limbo of the past, and the only thing that remains is for us to learn from them, lessons that shall enable us to attain our wishes.

It is but a short time since we criticised the last effort at Bill making, and it is likely enough that very soon other projects will be announced. There is even a talk of Government once more offering to settle the differences of Medical Reformers. It becomes us, therefore, to be ready and watchful. What the Profession most lacks is unity. It is desirable for ourselves, and also for the public, that we should be a fraternity with some mode of action, not a mere aggregate of individuals. We ought to be a self-governing body—as distinct as that which constitutes the legal profession. In theory this has been recognised, but we have been divided into sections. The State committed us to corporate bodies, and these, instead of being representative of the Profession as a whole, have set up divisions and claimed to rule them. Thus, they have become an incubus. Hence, half our woes and half the dangers of the public. The Act of 1858 attempted to remedy this by combining these bodies into the General Medical Council. But vested rights, the rivalries of the Corporations, and the little power given to the Council, render the act almost nugatory. Had the General Council been a body representative of the Profession, and possessed of adequate authority, a great reform would have been accomplished. To make it such has been the effort of all true Reformers since its creation. It matters little as to the method if this can but be done. The most radical method is to sweep away all the Corporations as Licensing Bodies, but this has found little favour, as it would cut us adrift from revered histories, and cripple the resources of great and national institutions. To set up a council, such as that proposed lately by Mr. Hawkins, would act to some extent in the same way, and the proposal excites the anger of most of the Corporations. Nevertheless, the scheme of Mr. Charles Hawkins is simple and thorough, and unless rival interests come to some agreement to accept a less radical change, the Profession may insist upon having it. The scheme of Dr. Prosser James is much milder, though it might be found equally effective. We have more than once pointed out, that so far as the Council is concerned, it might have been carried out without an Act of Parliament, and that is one of its chief recommendations. Perhaps the doctor himself would be disposed to extend it, if legislation can be obtained. Still, when he first proposed it to Lord Palmerston he seems to have thought it would suffice. The Corporations secured more than it was intended to give them, and now are unwilling to cede much. Still, it is not impossible that something may be done, and that in 1871 this tiresome question may be set at rest.

Apart from an Act of Parliament, there is yet another chance of Reform. We have pointed out during the year that the Corporations might, by voluntary amalgamations, secure all the benefits that they now enjoy, and confer many others on the Profession. In Ireland much progress has been made, and great credit is due to the College of Surgeons in Ireland for its efforts in this direction. In England, too, some progress has been made, but the amalgamation has been prevented from being completed by some very ridiculous susceptibilities. If the several bodies will accept the principles laid down in an article "On the Chance of the Corporations," which appeared some months ago in the MEDICAL PRESS, it will be easy to refer the details to a committee of disinterested men who love their Profession. The superior Bodies could afford to be condescending. The inferior ones might gain in general estimation by not insisting too strongly on their rights. An umpire would soon arrange all that—and yet it is not done; and so we go on with our numerous licenses, and the competition downwards, which has done such incalculable injury. But time passes. Here we are at the end of 1870, and next year let the Profession insist on Parliament giving us that which our competing bodies deny—a single Board. At the same time let it give us the Representative Council we need so much, and the self-government through that Council which would be so beneficial to the public as well as to ourselves.

Another question that has greatly agitated professional circles this year is that of the Contagious Diseases Acts. A Royal Commission is now appointed to inquire into their working, and much medical evidence will, we hear, be taken. We have received, in respect to this and some other equally difficult and delicate subjects, a mass of communications, with which it has been no easy task to deal. We find, too, that some friends are greatly surprised at the toleration we have exhibited. In fact, we are told that we are "too tolerant by half." We accept the censure —if such it be—without regret.

On every question of importance to our Profession we have been ready to hear both sides, and we hope to maintain our character for impartiality, even at the risk of being too tolerant. To those correspondents who complain that their opinions have not been so fully supported in our columns as they wish, we beg to say they might themselves support them. Discussion should be as easy to them as complaint. It would be more satisfactory to us.

As we have touched on this point, we may as well repeat that not only on these, but on all questions, our columns are freely open to those who differ from us, and our constant endeavour is to be impartial.

We had intended when we commenced this Retrospect to pass in review other subjects, but must postpone them to another week.

LIFE ASSURANCE.—IV.

A SERIES of articles on Life Assurance in a Medical Journal would, however short, seem hardly in place, unless, before they closed, the subject were viewed from a medical practitioner's point of sight. Members of the Faculty stand in at least three special relations to the matter. They have to consider their duty to the community, their duty to their patients, and their duty to themselves.

Their duty to the community must be onerous indeed, if anything remain to be added to it beyond what has hitherto been deemed incumbent upon them. In strict morals, no doubt, every one of us, from Queen to quarryman, owes himself to his neighbours, to his nation, and to his kind. But the obviousness of this universal obligation increases upon the eye in proportion to the individual's qualifications to benefit his fellow-creatures, and to the importance of the things in respect of which he may be specially qualified. The more a man does the more he may do, has become a proverb, and one which threatens to overwhelm the physician and the surgeon beyond all men besides. The profession, however, is actuated by a spirit which will not allow its members to shirk or to shrink, although, while accepting impossible responsibilities, they must fain be content to do so much only as they really can.

Already the medical man is expected by the State to cure its acknowledged poor almost as gratuitously as he might any miserable patient picked up by himself on the roadside. Besides this, he is summoned to pay as close an attention to the sanitary condition of the town or the village in which he dwells, as if he were paid for it or had nothing else to do, his special qualifications for the service vastly increasing, of course, the value of the boon to his neighbours, but, as for himself, tending constantly to an increase of work absorbing time and energy, while yielding no pay. All the while, he is, by ungenerous minds, suspected of revelling in conditions prejudicial to health, and of grudging every measure adapted to remove or abate them.

Nevertheless, it is his duty to the State and Nation to devote himself to the general health, and, if we could conceive of that duty being performed so as to get rid of disease by getting rid of the tendencies to it, it would then become the duty of the State in return to consider by what means other than the payment of fees on behalf of persons under treatment, the community could best afford a maintenance to an order of benefactors who would be as necessary to keep up the anti-mortific condition of things as they were to bring it about. Meanwhile, the people and their doctors must get on together as well as they can. There is this to be said on the side of the doctors, that in proportion as wealth and intelligence increase and are spread, will the sense of obligation for relief under pain and sickness, and the power to express that sense in a substantial manner, be accumulated and abound. Then, too, it is considered that, as a High Authority has told us, the poor we must always have with us, that, among the poor, the most formidable diseases are apt to nidificate, and that, under such circumstances, the affluent can neither flee from, nor defy the virulence of infection, the medical man finds himself unable to resist the feeling that every form of motive, personal and public, urges him to give the full benefit of his knowledge, observation, and skill to the whole community through that portion of it among whom he habitually resides.

There is no platform on which the combination of interests comes more forcibly into view than that of the Life Assurance Office. The State has a deep interest in the stability, the efficiency, the universality of this form. Nothing she *does* tends more to relieve society at large from the burden of maintaining the poor. The remark is applicable to the country at large, but only because it is in the first instance more perceptibly applicable to every parish severally. For benefits like these we all are infinitely indebted to the Life Assurance Office. If the policies are punctually paid when they fall due, it reflects credit upon the medical examiners, if the policies fall due at early dates and in quick succession, a shade of suspicion is cast upon the degree of care and of penetration which they have exercised.

There are, therefore, strong reasons why the medical estimates of the value of particular lives should be most scrupulously formed. The insuring public, as those who furnish the Faculty with the most remunerative employment within their reach, have an unquestionable claim upon their good faith and intelligent pains, for the holders of life policies, at any given time, are injured by the taking of any life at ordinary rates which does not merit that place in the Company's books. On the other hand, every medical man, and especially the juniors, have a deep professional interest in the patient, faithful, conscientious exertion of their skill in the examination of persons offering themselves for insurance. This kind of practice affords a field for observation and a fund of experience such as ordinary attendance upon the sick members of families could never give, and the resulting gain to medical knowledge must be inevitably great. If, however, it be asked what solid benefit accrues to the members of the profession as men seeking a livelihood in common with their fellow-men, there is nothing to boast of in the very moderate fees paid for such examination. The best *quid*

pro quo that physicians and surgeons can get out of the Life Companies is, by taking out policies on their own lives. They deserve well to be received on the terms of "the most favoured nations," and, unless in very bad cases, would find most offices ready to accept them as among the more reliable class, from their superior knowledge how to take care of themselves. From reflection upon the precarious tenure of health in the sphere of their duties which necessarily exposes them to the constant vicissitudes of the weather, besides bringing themselves frequently into contact with people afflicted with infectious diseases, obviously the best course that they can pursue is, to insure their own lives. Like all other men who win their bread by exertion of hand and brain, and not by the fructifying use of a money capital, they have thus the means of providing a competency for their wives and families while they live, instead of leaving them to lament their connection with professional men whose means of supplying the wants of those dependent upon them ceased when the breath of life went out of their bodies.

Notes on Current Topics.

About the War and Wounded

What a Christmas time for the poor soldiers in the field. The strongest may well quail before the bitter weather we have lately had. What then can be the condition of the sick and wounded, and especially of those unfortunate wounded left on the battle-field without help? Such a demon's dance as this cruel war has set up in Europe is enough to make angels weep over the madness and ambition that has relentlessly plunged the race in war. We, in our island home, as yet unvisited by the dread scourge of war, cannot but feel some pain at the thought of the misery being endured by brave men. The thousand homes of Germany and France must vibrate with emotion at the thought of what their absent members are enduring; those men themselves, their agonies are indescribable. When shall this cruel war come to an end?

***

Nothing has proved itself so helplessly incompetent as the Intendance Department of the French army. The probability of this proving to be the case was well known years ago, but the authorities refused to take warning; it is therefore anything but assuring in such times as these to be told that the Control Department of the British army is similar in plan, and possesses all the vices that have added to the miseries of the French wounded. It is useless for Professional writers to say more. The medical journals have always been warning the public, but their complaints make no impression. We appeal to our brethren of the lay press, now that army reform commands some attention, to waken their readers to the fact that the Army Medical Service is discontented, and that not without reason.

***

A correspondent describes the district of Sedan, where the houses were mostly used instead of tents, as in a sad condition. These temporary hospitals, situated in lovely districts, looking out on most picturesque views, were but hot-beds of disease. Pyæmia, dysentery, and other miseries were rapidly reducing the numbers of unhappy sufferers. Here and there want of care and cleanliness may be seen, but in the best regulated places pestilence was raging.

***

The Belgian and Dutch surgeons have largely employed plaster-of-Paris to put up broken limbs. We are told that in some cases the shortening was very great. It is to be supposed that in the hasty setting brought about by the large numbers, many such cases must have occurred.

***

The German surgeons use plaster-of-Paris bandages to a large extent. They put up fractures in this way at a very early date, and that in the simplest mode. The bandages are merely soaked in the liquid plaster, and applied to the limb without anything underneath. Occasionally a piece of pasteboard is used to give more support at the fractured part. Holes are cut opposite the wound after the plaster has set. Swelling sometimes takes place to a considerable extent, and gives rise to mischief, especially as the foot is mostly left uncovered by the bandage.

The terrible miseries of some of the wounded is related by the *Times* correspondent with the Saxon Army Corps, at Le Vert Galant, who writes:—"As many as 1,500 French prisoners have been despatched from Lagny in a single train. On a recent occasion, when one of those trains stopped, some provisions were distributed to the prisoners by Captain Neville and Mr. Sutherland. The poor fellows clamoured for the food. Out of every carriage there was a cry of '*Ici!*' and when they got the provisions they ate them ravenously. The pressure and actual want are to be attributed to the two battles of the 30th ult. and the 2nd of December. So many wounded were removed to Lagny and its neighbourhood that it was not always possible to find food even for them.

***

With such miseries going on we are glad to hear that the French Government is doing what it can, and that a decree creates six depôts for convalescent soldiers—viz., at Nantes, Bayonne, Toulouse, Montpellier, Perpignan, and Nice.

***

Late advices from Le Mans describe the town as in a state of the greatest confusion. Regiments were constantly arriving, to find that no preparation has been made to receive them. They have neither food to satisfy their hunger, nor beds on which to rest their limbs. From early morn to dewy eve bodies of men from the Army of the Loire were continually pouring in. The appearance of the men was most pitiable. Their arms useless from rust; many without boots; several completely done up; the cavalry even, if possible, in a worse state than the infantry. In many cases the soldier helped the horse, not the horse the soldier, to cover the ground; for the wretched animals were hardly able to crawl along.

***

An equally wretched scene occurred at Alençon. The town was filled to overflowing. The soldiers were billeted everywhere, and one out of every three houses displayed the ambulance flag. Nay, the very streets bore witness to the miseries of the war, for they were crowded with carts

laden with the wounded. One moment, an officer tells that two-thirds of the regiment to which he belongs has been lost; the next, an officer passed whose regiment actually no longer exists.

* * *

A correspondent stated last week that there were *six thousand* wounded between Blois and Orleans, *destitute of medical assistance.*

Among the wounded at Arras, one man had received a ball on the side of his nose, which had penetrated the palate, and then gone down his throat, leaving no clue to discover its whereabouts.

A shell fell upon one man, and exploding, tore both his hands from his wrists, without doing him any further injury.

A bullet struck one near the left temple, instantaneously making its way to the shoulder, remaining in his arm for some time, and finally emerging at the elbow.

Lord Stanley on Health.

In his able address last week Lord Stanley said to some men starting in life :—

"Let them recollect that the race in which they are engaged is one which will last all their working days, and in which endurance is more important than speed. They knew already that intemperance is one form of suicide—let them remember that all neglect of physical laws is open to the same reproach, and that there may be intemperance in work as well as in meaner indulgences. You cannot have mental efficiency without health; you cannot maintain health in an exciting and exhausting employment, such as most mental occupations are, when eagerly followed, without some care to preserve it. What I had to tell you about keeping up literary tastes has been said already. They are a great pleasure—a wholesome and a lasting one. Keep them up if you can, and as long as you can. But while you do that, remember also that there is one thing as compared with which not only material health and luxury, but all art, all literature, all science even, are relatively unimportant, and in regard to which the poorest labourer may compete with any of you on equal terms—I mean a steady, untiring performance by each individual of his public and private duty."

Presentation to Dr. Waring-Curran.

A very handsome testimonial was last week presented to Dr. Waring-Curran by the inhabitants of Sutton-in-Ashfield, on his leaving the neighbourhood to succeed the late Dr. Macnamara at Mansfield Woodhouse. The testimonial consisted of a massive gold chain, with ornaments set with blood stone and onyx; a beautiful ring, set with a large carbuncle, and a surgical instrument of considerable value.

"The Technical Educator."

Everyone is acquainted with the "Popular Educator," issued in numbers and parts, by Messrs. Cassell, Petter, and Galpin. The new edition seems to have been as successful as the first. The same enterprising publishers have commenced a new serial "The Technical Educator," which promises to do for applied science, what its predecessor has done for general education. There can be no doubt that technical education has now come to the front, and from what we have seen of this new serial we believe it will accomplish all that can be expected of it. In Part I. are several articles of direct interest to our Profession. The articles on agricultural chemistry are written by Dr. Cameron, the learned Professor at the Royal College of Surgeons, in Ireland, and the mention of that name is sufficient guarantee to our subscribers of the solid value of his contributions. Again, "Applied Mechanics" is written by Professor Robert Hall, of the Dublin College of Science. Mr. George Gladstone, F.C.S., contributes articles on "Chemistry Applied to the Arts." There are many other subjects that will come forward as the "Technical Educator" proceeds, in which the sciences most cultivated by our Profession will be elucidated as to their applications; besides which, drawing and art in all its branches is completely treated. We heartily wish the new serial as great a success as its predecessor.

Education at Leamington.

The College at Leamington is making progress, and a new boarding house has just been opened in connection with it. This building forms the western side of the quadrangle of the Elizabethan structure of Binswood. The proceedings were initiated by the Lord-lieutenant of Warwickshire, Lord Leigh, patron of the College, and he was surrounded by the *élite* of the county. It was expected that Dr. Barry, formerly head-master of Cheltenham College, the Bishop of Exeter, and other leading educationalists would have been present, but they were, unfortunately, prevented from attending. Amongst those who took part in the proceedings were—Dr. Jephson; Dr. O'Callaghan, F.S.A.; the Rev. H. G. Woods, Fellow and Tutor of Trinity College, Oxford, &c. The new boarding-house has the residence of a master attached to it, under whose management it will be conducted. The basement and ground-floor contains various requisite offices, also a spacious dining-hall, a school-room, as well as several private studies, which will be placed at the disposal of the most diligent boys. The upper floors contain forty dormitories, bath-rooms, and other apartments; also separate rooms for invalids. The whole is well heated with hot water, and thoroughly ventilated. The staircases are of stone. No expense has been spared to ensure health and comfort in the minutest particular. During the proceeding the scholarships gained by the students in open competition were awarded.

Spread of Fever by Cabs.

Last week a police inspector applied to Mr. Paget for a summons against a man for hiring a cab, and riding in it, without giving due notice to the driver that he was suffering under typhus fever. He also applied for a summons against the driver of the cab for not disinfecting his vehicle after his engagement. Mr. Paget said that in the public interest this was a very important and proper prosecution, and he should certainly grant the summons. It should be made known that persons labouring under a malignant fever, or small-pox, who rode in cabs and other public vehicles, without previously giving notice of their malady, were liable to heavy penalties, and the drivers of vehicles were also equally liable if they did not properly disinfect their cabs after carrying fever patients.

Skin-Grafting Superseded.

Recent statements on the interesting subject of skin-grafting seem to show that they were mistaken who at first thought it necessary to transplant pieces of skin of any

depth. All observers now agree that the first phenomenon is the disappearance of the characters of true skin in the piece transplanted, which becomes a mere pellicle. Further, there should be no trace of areolar or adipose tissue left, and Dr. Fiddes says that there is no necessity to take any skin, but merely a few epidermic scales. We would now suggest the trial of a popular plan that we know proved successful years ago, and which is known as a favourite one with many a village "lady-bountiful." The so-called "skin of a new-laid egg" laid carefully on an old ulcer, and left there for some days, is the popular cure to which we allude. The egg must be new-laid, and the pellicle carefully spread out over the ulcer. The membrane can be very easily separated from the shell to which it generally adheres, when the egg is broken. In a case communicated to us this week it was completely successful, after years of ordinary treatment had failed. It may be worth the while of surgeons to make an experiment or two with this popular remedy.

Naval Medical Reform.

Dr. Brown, of Rochester, has collected information from officers of all ranks as to the causes of discontent with the Naval Medical Service. We have so often dwelt upon the subject that we need only repeat once more that the surgical staff only asks for justice.

Illegality of the proposed Irish Unions Apothecary Appointment.

The Irish Medical Association Journal of last week publishes a very important opinion emanating from one of the most eminent Queen's Counsel in Ireland, and condemning, on legal grounds, the proposed appointment of a Poor-law Apothecary General. Counsel says:—

Upon the best consideration I can give this question, which is one of some difficulty, I think the Order of the Commissioners in the form in which it is issued is not warranted by the Act.

The Commissioners may, under the ninety-second Section, desire any number of Unions to join in the making of any contract, although I do not think this provision was ever intended to authorize a general combination of all the Unions in Ireland into one. The words of the section authorize it, and I do not think that so far as it desires all the Unions in Ireland to join in one contract for medicines it is illegal, although I think it is a straining of their powers to a purpose for which it never was intended.

But it appears to me, that the Commissioners have gone beyond their authority in giving the new officers to be appointed power to enter into contracts on behalf of the Guardians. The only power conferred in any section of the Acts that I can discover, and the only power that I can find in the statutes giving power to anyone to make contracts binding the ratepayers and enforceable against the rates, is that contained in the 27th Section, allowing the Board of Guardians to contract.

I therefore think that the Order of the Commissioners enabling the newly elected officers to contract on behalf of all the Unions in Ireland is illegal. I think no contract can be made binding on the ratepayers except by the Board of Guardians.

It is plain that, if the Commissioners have this power, all control over contracts can be taken away by a General Order, and vested absolutely in one official, empowered to contract on behalf of all the Unions in Ireland.

It appears to me, that the only way of testing the legality of the Order is to apply for a certiorari to bring it up to the Queen's Bench to be questioned. I think this Order could be applied for on the part of any Board of Guardians in their corporate capacity, or any *interested* ratepayer, or guardian or ratepayer. I think it questionable whether it could be obtained on the application of a contractor for the supply of Medicines to a Union under an existing contract.

It is not necessary to give any opinion as to the power of the Commissioners to compel any Board of Guardians to join in any specific contract which is laid before them, and which they refuse to make. Such a power is entirely different from one authorising an officer to bind the Guardians by contracts, in their name, of which they never hear. I think the Commissioners have full power to make any regulations as to contracts for the supplying of Medicines which they may think necessary to insure a pure supply of Medicines. In my opinion, the Commissioners have no power to delegate to anyone, or rather, confer on anyone an authority to make contracts in their name.

The Editor of the Irish Medical Association Journal considers that this opinion, taken in conjunction with the universal disfavour with which the Commissioners' proposal has been received by the Irish Guardians, disposes finally of the scheme embodied in the sealed order.

It is here distinctly stated that although the Commissioners have power to order the various Unions to join in making a contract, they have no legal right whatever "To delegate to any one, or rather to confer on anyone, an authority to make contracts in the name of the guardians." It is, therefore, evident why the appointment of an officer was given to the Guardians. That officer could have no power whatever, unless in virtue of his appointment by the Guardians. By joining in the election, or assenting to it, the guardians would be assigning to the officer their power to make contracts; but if they do not so alienate their privilege, there is, it seems, no power in the Commissioners to take it from them, and they would be still entitled to make their own bargain and to repudiate any bargain made for them by the Poor-law Unions' Apothecary.

The issue is, therefore, entirely at the disposal of the Guardians. If they disapprove of the form which the action of the Commissioners has taken, they free themselves entirely from its operation, by declining to join in making any appointment, and if they take this course, the central officer will be restricted in his control to those unions which endorse his election.

Vanity Fair gives in its cartoon a caricature of Sir William Fergusson. Neither the picture nor the biography, in our opinion, do the worthy baronet justice.

It is said that the Factory Acts have been completely disregarded lately at Woolwich Arsenal. We are not aware that Government has any protection from the evils intended to be removed by the restrictions imposed by Parliament. The subject demands some explanation.

It has been decided by the Fellows of the London College of Physicians to publish an annual statement of accounts. This College is progressing rapidly in public favour, and we hope soon to see the Fellows meet the wishes of the Members, and the whole College take its proper position at the head of the Profession.

One of our medical contemporaries states that new forms for statistics relating to convicts are coming out, and remarks that the medical officers of prisons are in a position to make returns of a most interesting and valuable character. Hygiene, diet, and many subjects might be admirably investigated by the members of our Profession, who have under their care numbers of criminals; and, although some points are alluded to in the usual statistics, it is surprising that they have not been elucidated more thoroughly.

The sum total of the collections on "Hospital Sunday" at Birmingham this year amounts to £4,025, being the largest sum ever yet collected for the minor charities which by rotation take this year's proceeds.

Literature.

BIRD'S PHYSIOLOGICAL ESSAYS.*

The Essays offered us by Dr. Bird are "On Drink-Craving," "Differences in Men," "Idiosyncrasy," and the "Origin of Disease." The three first appeared in the *Indian Annals of Medicine*, 1863—5 and 8. The last has been published in the *Indian Medical Gazette* for the present year. Collected they form an octavo vol. of nearly 250 pages, and they will be found of interest beyond professional circles. Dr. Bird has collected many valuable facts, and has marshalled them with skill, but he is far from having established the theories he maintains, and we must regret that he should exhibit such a strong materialistic bias. To maintain that the time will come when we can predicate the actions of individual men, as we may now those of the heavenly bodies, is a proposition that will turn away many a reader from the book in which so unworthy a proposition is seriously put forward. It is contrary to all human experience to expect that every variety of thought and feeling is but the effect of variety of structure. The individuality of every person is something essentially connected with life, and when the vital spark has fled, the materialist cannot discover any change of structure to account for the great change that has taken place. What right, then, has an author to assert that love is nothing more than "a condition of our tissues;" or that an individual will be avaricious, intellectual, ambitious, or otherwise minded, "according to the tissue in which the point of attention, around which the cerebral motions gather, is oftenest placed?" This certainly beats phrenologists themselves.

The essay "On Drink-Craving" is just now full of interest. What medical man has not been troubled with cases that he knew not how to manage or advise about? Dr. Bird advocates the establishment of Drunkards' Reformatories; but legislation in this direction is on every hand felt to be surrounded by difficulties, and a very large proportion of Englishmen would regard it as an uncalled-for interference with the liberty of the subject. Dr. Bird has no sympathy with teetotallers; he looks upon a desire for stimulants as a natural appetite, which in drink-craving is morbidly exaggerated, and he attacks with great power Dr. Carpenter's extreme views.

In the essay "On Idiosyncrasy," Dr. Bird relates a number of remarkable cases. The last essay "On the Origin of Disease" develops a theory in twenty distinct paragraphs, of which the last gives some notion of the whole, and which is as follows:—

"The theory of disease above expressed may be named the heat or force theory in contradistinction to that which is known as the poison theory. It rests on the broad and sure basis of physical science in all its departments, and by means of it we are connected and interwoven, not only with the earth and everything that moves on it, but with the sun, the moon, and all the radiant stars."

FLOWER'S OSTEOLOGY OF MAMMALIA.†

This manual, if we may so call it, comprises the substance of the learned author's first Course of Lectures, delivered at the Royal College of Surgeons of England, during the present year, and it is a work for which we venture to predict a great success. Comparative anatomy has been too much neglected, but now it is likely to step into its proper place, and the bony framework of animal bodies is the part around which all is built, and which not only demands the first attention, but is from various causes the easiest to study. With the present Hunterian Professor as a guide, any student will find his path considerably smoothed, while he is in no danger of having to unlearn what he has acquired. Indeed, the student is under considerable obligations to Professor Flower for giving him so capital a handbook; and the publishers deserve credit for having brought it out in a form worthy of the author. We may remark that no more technicalities are employed than are essential, and that theoretical views are mostly excluded, so that those who desire to begin to study the animal kingdom have only to obtain the book before us. The numerous illustrations are faithful copies from nature, and greatly assist the comprehension of the text. They are mostly taken from specimens in the Hunterian Museum, and they reflect great credit on the artist, Mr. R. W. Sherwin. Professor Flower's is the best Text Book of the subject.

* Physiological Essays. By Robert Bird, M.D., Bengal Army. London: Trübner and Co. 1870.

† An Introduction to the Osteology of the Mammalia. By Wm. H. Flower, F.R.S., Hunterian Professor at the Royal College of Surgeons, and Conservator of the Museum. London: Macmillan and Co. 1870.

CURRENT LITERATURE.

Among new editions we have to announce Mr. Barwell's work on "Lateral Curvature of the Spine," of which the second edition, enlarged, is sent us by Messrs. Macmillan and Co. There are a number of new pages and new illustrations, chiefly to assist in diagnosis.

Dr. Gull's "Harveian Oration," delivered at the Royal College of Physicians on the 24th of last June, is now issued in a complete form by Messrs. Churchill. We gave an abstract of it at the time and therefore need only announce it.

Mr. Lund has reprinted (Cornish) from the *Manchester Medical and Surgical Reports* his two careful essays "On the Treatment of Wounds" and "Excision of the Knee-joint." Mr. Lund ably sustains the position he holds in the Manchester School and the Royal Infirmary.

Another Reprint worthy of mention is that of Dr. Keyes, from the *New York Medical*, of November, "On Syphilis of the Nervous System." (Trübner and Co.) It is a clinical study founded on cases by Professor Van Buren and the author.

Dr. Cleveland, President of the Harveian Society, publishes his Annual Address of last October "On the Modes of Dying, and the means of obviating the Tendency to Death." (Churchills.) The address is worthy of attentive perusal.

Dr. J. G. Davey reprints from the *Journal of Mental Science* his paper "On *Felo-de-se*," (Bacon, Lewes), which was read at the meeting last August, and contains useful hints and suggestions.

Dr. Tilt's Third Edition of the "Change of Life" (Churchill's), seems almost to demand at our hands a longer notice than we can give it in this place. It being so well established as a favourite book, must, however, be our defence for merely remarking that the author seems to have revised it with great care; and, in doing so, to have passed in review all the really valuable additions to the literature of the department of practice he follows, since his last edition was issued.

Gleanings.

Carbolic Acid in Surgery.

Professor Bardeleben (*Berlin Klin. Wochenschr* vii. 8, 1870), whilst strongly in favour of Lister's method, allows that several disadvantages attend it; such as the hindrance to the growth of granulations, the caustic action, and the occasional symptoms of poisoning. He has found that these disadvantages may be avoided without the good effects being lost, by using the sulpho-carbolate of zinc, as recommended by John Wood. In the same journal Professor Langenbeck states, that for six or eight months he has altogether abandoned the use of the permanent water bath in cases of severe injury, as he has found as good effects from the carbolic acid dressing, with less inconvenience. He recommends dilute solutions, one to six or eight, as most suitable.

Quantity of Carbonic Acid Contained in the Air of School Rooms.

Dr. Breiting (*Chem. News*) made a series of fourteen experiments, beginning at 7·45 a.m., and continued to 4 p.m., in a room of 251·61 cubic metres' capacity, and containing sixty-four children. The quantity of carbonic acid contained in the air of that room during these experiments varied from 2·21 to 9·36 per cent., while free open air contains four ten-thousandths of that gas; and a quantity of 1 per cent. of the same gas present in air is considered injurious to health.

Purification of Chloral Hydrate.

Prof. F. A. Fluckiger states (*Pharm. Cent. Hall*) that much of the commercial chloral hydrate is impure, and unfit for use until purified. It is usually met with in irregular masses containing moisture, and having a sharp, pungent odour, indicating partial decomposition. The salt may be readily purified by dissolving it in *pure* bisulphide of carbon (soluble in forty-five parts of the menstruum at 18° C.) and allowing the salt to re-crystalize by the spontaneous evaporation of the solvent. The product appears in colourless prismatic crystals, not hygroscopic, and free from acid reaction.

The Relief of Pain after Surgical Operations.

M. Sedillot has recently communicated to the French Academy his views in regard to the use of electricity in surgery, which are translated in the *Bowdoin Scientific Review*. After calling attention to the fact that surgical operations are now usually conducted while the patient is in a state of absolute unconsciousness induced by ether or chloroform, he remarks that, upon the termination of the anæsthesia, the patient wakes to suffer severe pain. Opiates, refrigerants and chloral have been tried to wholly remove the pain, but without success. The alleviation is slight.

M. Sedillot states that the cauteries, both potential and actual, and the electric cautery, render cut surfaces insensible and free from accidents. But certain causes have interfered with their extensive adoption for the relief of pain in surgery. The hot iron answers far better than the potential cautery, but it cools very rapidly and must be often re-heated. Its action is very superficial. Nelaton has employed the flame of illuminating gas, another has suggested the use of the jet produced by the ignition of hydrogen and oxygen.

Far better than any of these must be ranked the *electric* cautery on account of its intensity and the ease with which it can be managed. Professor Middendorpf, of Breslau, in 1854 published a description of a serviceable apparatus for electric-cauterization, but he states that in order to produce the best effects with the apparatus, it is necessary to produce merely a dull red heat of the wires. This, to be sure, is a heat sufficient to prevent any loss of blood, but is not enough to cause absolute dryness of the cut surface. Sedillot advises the use of a white heat in the electric cautery, as he secures by this means all the advantages claimed for the other degree of heat, together with additional advantages now to be mentioned. The remarks made upon the painlessness of severe burns must be given in the words of the author (translated):

"Burns of the third degree cause little pain. We have seen persons fatally burned who retained for some days their appetite, ability to sleep and even a hope of recovery. A workman who had thrust his foot into a stream of melted metal and drawn it out completely charred, did not suffer pain. A young girl whose garments had taken fire ran, frightened and in flames, down four flights of stairs and was complete scorched from head to foot. Yet in the short time during which she lived after the accident, she suffered scarcely any pain. After her death the skin was dry, tense and without any pliability, giving to the body the appearance of a brazen statue. This painlessness, which is a matter of general observation, is to be explained by the destruction of the nerves. The heat from the electric cautery in like manner renders wounds insensible, and it is easy to understand that patients treated by this method, while under the influence of chloroform (which we do not always employ) should complain of no pain upon their waking. A little later, say from the third to the ninth day, an inflammatory reaction commences, usually very slight indeed, and of very short duration. Wounds covered by eschars are less exposed to contagions and infections of a miasmatic, putrid or purulent character than wounds produced by cutting instruments. On account of this fact, the first possess a great superiority over the second. Liquids cannot be extravasated nor altered, and the repair goes on rapidly in these subcutaneous wounds."

The apparatus used by Sedillot is very simple, consisting of wires, or plates of platinum introduced within the circuit of a galvanic battery. These, as is well known, become intensely heated, and the degree of heat is perfectly within control.

In Sedillot's clinic, many operations have been recently performed by this method. Among these may be mentioned the removal of dermo-fibroid tumours, cancroid and cancerous growths, and direct destruction of a fibro-epidermic tumour of the nose. In no case has any accident followed the use of this cauterizing plate or wire. Sedillot gives the following as his conclusions: *a.* The electric cautery (electro-thermic) prevents pain after the operations; *b.* prevents loss of blood; *c.* prevents retention and alteration of fluids; *d.* prevents infections, putrid and purulent complications; *e.* presents the most favourable condition of sub-cutaneous wounds; *g.* is absolutely under perfect control, so that tissues may be changed to eschars, or carbonized, or even volatilized, as occasion may require; *h.* clinical experiments place electro-thermic among the most remarkable improvements of modern surgery.

Medical News.

Royal College of Physicians of London.—At an extraordinary meeting of the College, on Monday, the 19th inst., the following gentlemen, having conformed to the bye-laws and regulations, and passed the required examinations, were granted licences to practise physic, including therein the practice of medicine, surgery, and midwifery:—Alexander Cummings Air, M.R.C.S., 33 Lorrimore square, London; Ernest Richard Evans, M.R.C.S., St. Bartholomew's Hospital; Samuel Evans, M.R.C.S., 23 Manchester street, London; John Howe Hughes, M.R.C.S., Gosforth, Carnforth; William Kipling, M.R.C.S., Ronaldkirk, Darlington; Francis William Pittock, M.R.C.S., "The Elms," Ramsgate; Alfred Risdon, M.R.C.S., 67 Warwick street, London; William Egerton Saunders, M.R.C.S., Guy's Hospital; Charles Lyon Vasey, M.R.C.S., 5 Cavendish place, W.

Apothecaries' Hall, London.—The following gentlemen having passed the necessary examinations were admitted licentiates of the Society of Apothecaries, on the 22nd inst., viz.:—Messrs. R. E. Deane, of Batley, Yorkshire; E. R. Evans, of the Evelina Hospital, Southwark; E. T. Hughes, of Anglesea; A. K. Longhurst, of Farnham; W. H. Nethercliff, of Whitchurch; and E. Wykes, of Birmingham. At the same Court the following passed the primary professional examination, viz.:—Messrs. F. I. N. B. Elliot, J. Kindon, R. A. Lithgow, G. J. Llewellin, C. E. Whittington, and E. G. Younger, all of Guy's Hospital; J. H. Penkivil, and W. A. Ward, of St. Bartholomew's Hospital; W. Penton, of the Leeds School of Medicine; F. H. Spencer, of King's College, London.

University of Dublin.—The following degrees were conferred on the 14th inst.:—Bachelor in Medicine—Charles Dunscombe Allen, William Thomas Briscoe, Reuben Joshua Harvey, William Hugo Lambert, Henry Marcus Levinge, Alfred Henry Martin, Richard George O'Flaherty, Edw. Albert Rawson, Hatton Smyth, Wm. Henry White, Joseph Wm. Neligan. Master in Surgery—William Thomas Briscoe, Reuben Joshua Harvey, Edward Albert Rawson, Hatton Smyth, William Henry White. Doctor in Medicine—Robert Thomas Cooper, William Hugo Lambert, G. George Smith, Anthony Traill.

In the eight principal towns of Scotland the deaths of 2,254 persons were recorded during the month of November. The mortality was considerably below the average. Fever caused 129 deaths, of which 81 occurred in Glasgow. Relapsing fever is spreading extensively in Glasgow, and is also manifesting itself in Paisley and Greenock. Scarlatina was most fatal in Aberdeen, where it caused 10 per cent. of the total mortality. Measles caused 17 per cent. of the deaths in Paisley.

Dr. Philipson's sickness returns show that the total admissions into the Newcastle Fever Hospital during the months of September and October amounted to 90; of which 23 were cases of continued fever, 7 of enteric fever, and 60 of typhus. In the corresponding period of 1869, 18 cases of typhus were admitted, 30 in 1868, and 79 in 1867. Many of the last October admissions were of a mild type.

The retirement of Dr. Mouat.—"The retirement of Dr. Mouat from the Inspectorship of Gaols in Lower Bengal has caused a little difficulty. His place has been filled by Dr. Fawcus, his late deputy, a capital gaol-manager, only altogether out of the groove of seniority; and, indeed, not yet a surgeon, only assistant-surgeon. Dr. Norman Chevers, a gentleman, perhaps at the head of the Profession in India, is held to have had the prior claim in every way; and, it is said, that he was quite willing to accept the post. On the other hand, it is argued that Dr. Chevers would very soon, from age, be unequal to the great labour of such an office. The appointment rested with the Lieutenant-Governor of Bengal; and he is charged, as usual in such cases, with giving his decision on narrow grounds, which, I should say, is the reverse of the fact. Whatever else may be said of the appointment, Dr. Fawcus certainly has proved himself the man for gaol-management, and in that light the question would be viewed by Sir William Grey. No one, however, hints that Dr. Chevers would not also have proved a good gaol-superintendent; and everyone admits his high attainments, character, and claims. The dispute, however, is purely a parochial one, and sways to either side according to the feeling of the advocate. Dr. Mouat has been mentioned in some quarters as a gentleman eminently entitled to the Star of India, which has never yet been given to a medical man for purely civil services."—*Times' Correspondent.*

A Good Opening for a Medical Man.—At an inquest held by Dr. Lankester, at the "Cock and Hoop," West-end, Hampstead, on the body of Mrs. Matilda Newman, a highly-respectable person, it was elicited that Dr. Winter did not arrive at the house of deceased until three and a half hours after death had taken place, which was from heart disease, the medical gentleman, when sent for, being out on his list of calls. The friends did not send for another doctor because there was none in the neighbourhood. Dr. Lankester said that, though strange, it was true that there was only one medical gentleman near the spot, the population of which was now some thousands; and having a new lord of the manor there was some prospect of building operations being carried on, and a great addition to the population, and it was a capital chance for a medical gentleman to obtain a good practice.

Quackery.—At Bow street, John Hamilton, M.D. (query of what University), of 404 Oxford street, was charged with causing obscene medical tracts to be distributed to youths in the public street. Mr. Vaughan fined the defendant 40s., and ordered him to pay the costs of the summons, and £1 1s., the costs of Mr. Collette, who prosecuted on behalf of the Society for the Suppression of Vice.

Richard Harvey, Esq., of Greenway and Torquay, Devon, bequeathed the following amounts (among others), payable on the death of his widow—namely, £4,000 to the Royal Hospital for incurables; £4,000 to the Hospital for Paralysis; £4,000 to the Hospital for Consumption, Brompton; £3,000 to the Cornwall Infirmary; £3,000 to the Asylum for Idiots; and £2,000 to the Cancer Hospital, Brompton. The Rev. J. H. L. Gabell has sent £1,000 to the Board of Cheltenham Hospital, to be applied either towards the erection of a fever infirmary, or to the ordinary funds of the hospital. Charles Stuart, Esq., of London and Bishopstoke, bequeathed £200 each to the Hospital for Sick Children, Great Ormond street, and the Middlesex Hospital. The Aberdeen Royal Infirmary has become entitled to £500, under the will of Dr. Tawse. Mr. F. A. Schroeter has given £100 to the Royal Free Hospital, "in memory of his son." The Dental Hospital of London has been presented with £21 by the Grocers' Company.

How to clear the Streets of Snow.—Our public arrangements are wretchedly bad, and positively provoking. Year after year the streets are blocked with snow or dangerous with ice, yet nothing is done to remedy the evil. There is no practical difficulty in rendering both road and footways perfectly safe for man and beast. As we have repeatedly urged, it is only a stupid economy that prevents our employing the thousands of poor whom we *must* relieve, with or without industry, in the useful labour of cleansing the streets at this season. Two hours work before breakfast would be hailed by those who are the most deserving of their class, and it would amply suffice to place the streets in excellent condition, before the busy traffic of the day begins. The extra expense thrown upon the parish would be very small indeed, and the result a real benefit.—*Globe.*

Cattle Plague.—Cattle plague is at present reported to exist in Austria, in the provinces of Transylvania and Galicia; in Belgium, in the districts of Jamoigne and Bloid; in France, in Alsace and Lorraine, Seine and Marne, the Ardennes, and the Moselle; in North Germany, in Prussia, Rhenish Prussia and Brandenburg, in Pomerania and German Lorraine; in South Germany, in Bavaria, Baden and Wurtemberg; in Russia, in Poland, places opposite East Prussia, and at Riga and its vicinity; in Turkey in Asia, on the north-east coast of the Black Sea; in Turkey in Europe, in Thessaly and Roumania. Pleuro-pneumonia exists abroad, in Holland, North Germany, and Turkey in Asia; at home, in thirty-six counties in Great Britain. Foot and mouth disease exists abroad, in North Africa, many parts of South America (especially on the north of the Rio Nigro, and on the side of the river Uruguay), in Denmark, France, Italy, and the United States; at home, in sixty-three counties of Great Britain. Sheep-pox exsits abroad, in North Germany, and Italy. Sheep-scab prevails abroad, in North Germany, and is reported to exist at home, in thirty-three counties of Great Britain.

NOTICES TO CORRESPONDENTS.

☞ Correspondents requiring a reply in this column, are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Out of thousands of such persons it may cause enquiries so signed, on very various subjects much confusion.

Notice to Members of the Irish Medical Association.—This being our "Index Number," we are prohibited by Post-office restrictions from issuing the weekly official Supplement of the Association. Subscribers will receive their copies intact, as usual, next week.

Dr. S.—See our last number.

J. C.—You should make application at 2 Soho square.

A Provincial Surgeon.—Look among the Hospital Reports in the volume for the information you desire.

Enquirer.—Our notes "About the War and Wounded" will be continued for the present.

M.R.C.P. Lond.—Declined with thanks.

J. S., Glasgow.—The information you desire is among our "Notes on Current Topics" for this week.

Z. Z. Z.—Will appear next week

A Paris Doctor asks respecting the story of the Prussians having ejected the French wounded from a Belgian (!) ambulance at Versailles (?)

Alpha.—We commend to your notice the lately published letter of a French lady sojourning in this country, on the incapacity of Englishwomen in what, she says, Frenchwomen consider to be the first duties of their everyday life——knowing how to mend, to cut out, sew, knit, wash, cook, to look nice and make all around you look nice, even with the smallest means. She asks, "Why do not Englishwomen know a little more about the plainest elements of cookery?" In conclusion she says: "When I hear of ladies' brains busied upon such subjects as the Contagious Diseases' Act, and then see my landlord's very intelligent and nice little daughter of twelve, who can neither sew nor knit, although she goes to school, I marvel why clever and influential women will *chercher midi à quatorze heures*, and not seek to remedy evils nearer and more fitted to their Christian efforts."

A Naval Officer.—The *Army and Navy Gazette* states that a proposal is now under consideration of the proper authorities that all candidates for the naval medical profession shall be allowed to proceed to Netley, there to take advantage of the instruction provided by the admirable school which is to be found at that institution. It is intended that the gentlemen nominated for the military, naval, and Indian medical services shall enjoy equal privileges during their term of residence.

VACANCIES.

Royal Surrey County Hospital.—Medical Officer. Election February 23rd.

Brompton Consumption Hospital.—Resident Clinical Assistant.

Shrewsbury Infirmary.—Dispenser. Salary £70 per annum.

Killarney District Lunatic Asylum.—Resident Medical Superintendent. (See advt.)

Clonmel District Lunatic Asylum.—Assistant Resident Physician. Salary £100, with board, &c. (See advt.)

BOOKS, PAMPHLETS, AND MEDICAL JOURNALS RECEIVED.

Body and Mind. By Hy. Maudsley, M.D. London: Macmillan and Co.

A System of Surgery by various Authors. Edited by Timothy Holmes, M.A., F.R.C.S. Vol. IV. London: Longmans, Green, and Co.

Il Medico Condotto; New York Medical Gazette; Nature; Chemist's Advocate; Boston Medical Journal.

APPOINTMENTS.

Cavanagh, J. W., L.R.C.P., Surgeon to the Main Bridewell, Liverpool.

Donovan, D., jun., M.D., L.R.C.S.Ed., Medical Officer for the Union Workhouse, Skibbereen, Co. Cork.

Douglas, W., M.D., L.R.C.S.Ed., Deputy Superintendent of the Criminal Lunatic Asylum, Broadmoor, vice Wm. Orange, M.D., M.R.C.P.L., promoted to Resident Medical Superintendent.

Fenton, M. A., M.B.T.C.D., L.M., L.R.C.S.I., House Surgeon to the Coventry and Warwickshire Hospital.

Holland, J. C., L.K.Q.C.P.I., House Surgeon and Resident Apothecary to the Cork North Charitable Infirmary.