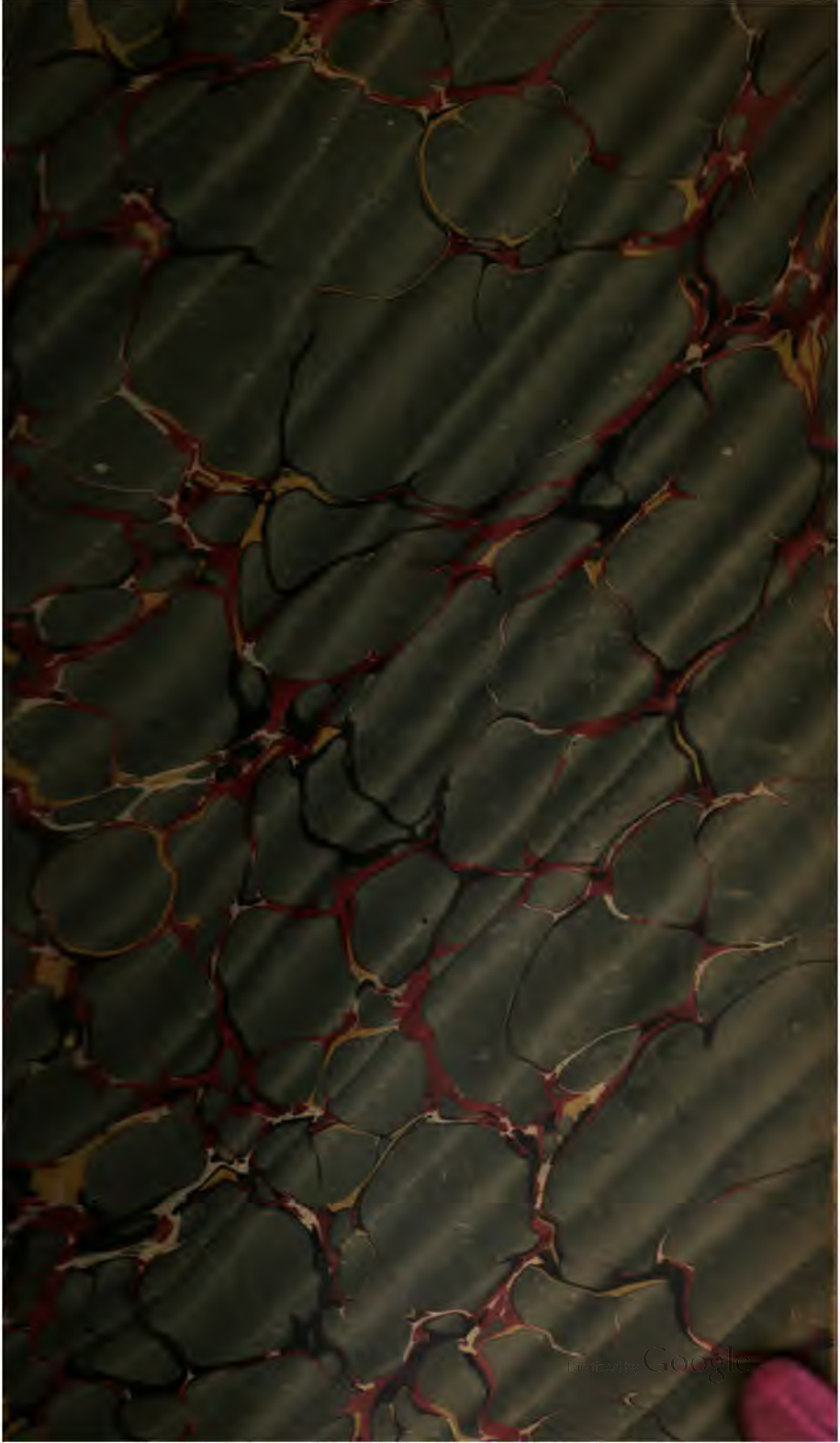

THE WESTERN

JOURNAL OF MEDICINE,

(Formerly Cincinnati Journal of Medicine.)

EDITED BY

THEOPHILUS PARVIN, M. D.

VOLUME IV.

INDIANAPOLIS, INDIANA:
PUBLISHED BY THE EDITOR.
ROBERT CLARKE & CO., 65 West Fourth St., Cincinnati.

SENTINEL PRINT, INDIANAPOLIS, IND.

1869.

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THE WESTERN JOURNAL OF MEDICINE,

(*Formerly*, "CINCINNATI JOURNAL OF MEDICINE.")

Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

VOL. IV. INDIANAPOLIS, JANUARY, 1869. No. I.

*A CASE OF POPLITEAL ANEURISM RAPIDLY CURED BY MANIPULATION, FLEXION AND DIGITAL COMPRESSION.

BY GEO. C. BLACKMAN, M. D.,

Professor of Surgery in the Medical College of Ohio; Surgeon to the Samaritan Hospital, Cincinnati, Ohio, etc.

We have recently treated a case of popliteal aneurism according to the above methods, which possesses at the present time, many points of interest, especially in connection with the cases lately reported by Dr. Mapother, of Dublin, Dr. Murray, of Newcastle-on-Tyne, England, and Sir Henry Thompson, of London. Before giving the details of our own case, we will present an abstract of Dr. Mapother's, as published in the *British Medical Journal*, October 5, 1867, and re-published in Braithwaite's *Retrospect*, part 56, page 157. The same journals also contain the particulars of Dr. Murray's views and treatment.

Dr. Mapother's first case was one of ilio-femoral aneurism. "Digital and partial instrumental pressure having failed, I tried to stop the common iliac with an elastic compressor, the patient being kept under chloroform for twelve hours. No clot formed. An anthracoid slough formed at the point of pressure. Five days afterward, another attempt

*"The term given to this paper means a particular manipulation of an aneurism, whereby the fibrin within may possibly be so displaced as either in part or in whole to block up the main artery on the distal side of the disease."—*Commencement of Mr. Fergusson's paper*, 1857.

was made, after the following preparatory steps: The abdomen was made lank by emptying the bowels and bladder; the limb was raised, bandaged and fixed to aid venous return, and to render increased flow of blood for muscular action unnecessary; and the sac was compressed by an elastic roller, so as to contract the space to be bled by the clot as much as possible. At Dr. O'Ferrall's suggestion, the superficial femoral was stopped, so as to keep the sac full. Signoroni's clamp was then fixed over the common iliac artery for four and a half hours, when the tumor was found solid and pulseless, the common and internal iliacs being still pulseless. Absorption and complete cure followed."

The Doctor's second case was one of popliteal aneurism. Pulsation was arrested by pressure maintained for five hours as firmly as could be done in a restless patient, but thirty-six hours afterwards the pulsation returned. "After three other attempts, unsuccessful because chloroform was refused, the femoral at Scarpa's triangle was compressed, and the flow of blood out of the sac was impeded by tight bandaging and elevation of the leg, distal pressure on the popliteal not being possible. The patient was kept apathetic, not insensible, with chloroform, for nine and a half hours, when the sac was found hard and pulseless. At the compressed point a superficial slough formed; but with this exception, the recovery was rapid and perfect."

Dr. Mapother suggests, that as distal pressure is impracticable in popliteal or "antecubital" cases, Mr. Hart's flexion plan may achieve the same result. Nearly seven years before he treated his case of popliteal aneurism just quoted, we tried the flexion method in a similar case, but the cure was delayed because we trusted to bandages and instrumental, rather than digital compression, until three hours before the pulsation of the tumor was arrested, at which time the digital compression was adopted. It is also to be taken into consideration that we had a restless patient to treat. But as bearing upon the history of this combination of methods in the treatment of aneurism, we re-produce here, from the Cincinnati *Lancet and Observer*, March, 1861, the report of a case treated by us in June, 1859, and in which we were ably assisted by Dr. John S. Billings and Dr. Charles Greenleaf, then medical students, but now accomplished surgeons of the regular army:

In June, 1859, I was consulted by Joseph Humbrick in reference to a large pulsating tumor in the left popliteal space. He was an American, and was twenty-seven years of age. For some years he had been engaged in carting lumber, and consequently was often compelled to sustain heavy weights. He was not aware, however, that he had ever received any injury upon the part affected. About thirteen months before I saw him he suffered

excruciating pain, which extended along the inner part of the thigh and calf of the leg as far as the heel. About three days afterwards he noticed a small pulsating tumor, about the size of a pigeon's egg, in the middle of the popliteal space. His case was regarded as acute rheumatism, and he was treated accordingly. The swelling continued to increase; and when I first saw him, on the 5th of June, it measured about four and a half inches in the axis of the limb, and five and a half in its transverse direction. It had a pyriform shape, the apex being above. For two months the pain had been severe; and at the time of his visit he was unable to extend his limb completely.

Having noticed the favorable reports of cases which had been treated by the London surgeons by flexion, I determined to unite this to the combined method of compression, manipulation, and the internal administration of veratrum viride, which I had successfully employed in a case of femoral aneurism of large size. On the 7th of June, after having given four drops of Norwood's tincture, I broke up and dislodged some of the layers of fibrin in the sac, by means of pressure with my thumbs and fingers (Fergusson's *Manipulation*); after this I applied a bandage, as recommended by Prof. Dudley, of Lexington, in 1818. The foot and leg were bandaged from the toes to the inferior margin of the aneurism, over which a compress was placed, and a still firmer one along the course of the femoral artery reaching to Poupart's ligament. These were covered by the bandage which extended to the groin. The leg was strongly flexed upon the thigh, and secured in that position. The only effect of the veratrum was to cause an intermission of the heart's action every thirteenth beat. For an hour after the *manipulation* the pain was intense; but morphia freely administered enabled him to pass a comfortable night. On the following day, however, the patient became exceedingly restless, and the compressor and bandage became deranged. After a week's trial, Dudley's dressing was abandoned and Petit's tourniquet substituted. At the expiration of another week this was changed for Skey's.* At this time the tumor had diminished somewhat, but still pulsated strongly. Under the use of digitalis the patient's pulse rose from eighty-five to one hundred and ten, and it was discontinued. Compression was continued for another week, by the alternate use of the tourniquets above mentioned. The patient now left for his home in Newport, Kentucky, the tumor having diminished about one-third in size, but the pulsation being quite distinct.

On the first of July, I requested my pupil, Mr. John Billings, and Mr. Charles Greenleaf, then medical students, to go to the patient's house and try digital compression at the groin. This was employed for three hours, when the pulsation entirely ceased. On Monday last, (February 14, 1861,) the patient came before the class of the Medical College of Ohio, and declared that his left leg was as good as the right. The contracted and indurated aneurismal tumor can still be felt, but pulsation has never returned. It is a question whether this indurated mass will ever disappear, for Mr. Paget has reported an examination of a case fifty years after the cure by ligature —John Hunter's fourth patient—and even after this long period, a hard, olive-shaped mass still occupied the popliteal space.

Shortly after the treatment of the above case, a patient came under our care, having an aneurism of the innominata of small size. Instead of ligating the subclavian and carotid on the distal side, I applied Bourgery's tourniquet, or compressor, for the subclavian, while a truss was adjusted to the neck to compress the carotid. Veratrum, in this case, had a happy effect in moderating the force of the circulation; and, with the compression above mentioned, I succeeded in producing a temporary consolidation of the aneur-

*For almost the exact counterpart of Skey's instrument, vid. the illustration of H. Searle's in Johnson's *Med. Chir. Review*, 1824. Mr. S. adds that "Sir Astley Cooper constructed an instrument on a similar principle, about twenty years ago, to compress a popliteal aneurism."

ism. In a few hours, however, pulsation returned, and in the course of a few days it became again consolidated. Thus alternating, matters progressed for several weeks, when, after trying digital compression for some hours, at several trials, it became evident that all our efforts were in vain. The patient left for the country, the tumor constantly increasing; and, in a few weeks more, after reaching an enormous size, it burst internally and suffocated the patient. A post mortem revealed an aneurism of the innominata; and the opening communicating with the sac was of large size.

In connection with this case. we have read with much interest, the report of a case published in the Dublin *Quarterly Journal of Medical Science*, November, 1867, in which Mr. George H. Porter treated a large aneurism of the right subclavian artery, by acupressure on the first stage of the axillary artery, and subsequently by direct compression on the arteria innominata. The consolidation of the tumor, however, was not complete, and only temporary. The disease at length terminated fatally.

We now give the details of our recent case, as reported by Dr. W. J. Murray, resident physician of the Samaritan Hospital:

Elliott Black, American, æt. 25, admitted October 21, 1868. He states that until two years before, he had always enjoyed good health. At that time, he suffered from an attack of asthma, which, however, was soon relieved. Ten weeks before his admission, he first noticed the swelling, and he had pain in the knee-joint. Three weeks previously, he had injured the leg by a fall sustained while he was engaged in rolling logs. To this fall and the accompanying twist of the leg, he attributes the origin of his difficulty. A swelling soon appeared in the popliteal space, which continued to increase until the time of his admission, when it had attained the size of a large orange. The aneurismal bruit was very distinct, and all the symptoms such as to leave no doubt of the character of the tumor. Prof. Blackman remarked to the class, that he would try, in this case, the obstruction of the artery on the distal side of the tumor as recently practiced by Dr. Mapother, of Dublin, and then he would combine, however, as he had done in other cases, manipulation of the tumor, with digital compression at the groin. He added, that as from the distribution of the arteries of the leg it would be impossible to shut off the current of blood completely by compression on the distal side, he would adopt Hart's method by flexion of the leg upon the thigh, by which the force of the current would be materially lessened. He hoped, also, to promote this object still further, by dislodging some of the layers of fibrine in the sac, through the manipulation of the tumor as first proposed and practiced by Sir Wm. Fergusson.

October 22.—The latter method having been carried out, Prof. B. flexed the leg strongly upon the thigh, and then requested Prof. Conner and Dr. S. C. Muscroft to keep up firm digital compression upon the femoral artery just below Poupart's ligament. At the end of thirty minutes, only a slight thrill could be detected. The digital compression was continued for sixty-eight minutes, when the leg was secured to the thigh by a strong band of adhesive plaster, and the patient was carried to his bed. Prof. B. remarked, that in all probability the digital compression had been sufficient to secure the formation of the clot which was to fill and consolidate the tumor, but to make the matter still more certain, he would continue the flexion treatment for a short time longer.

October 23.—Patient had no sleep in consequence of the severe pain he suffered, although he took 2¼ grains of morphia during the night. It was a noticeable fact, that immediately after the operation, the temperature of the leg and foot became greatly diminished, while the sensibility of the parts was greatly increased. For some hours, the foot and leg had a mottled appearance. On the day following the operation, the adhesive plaster was removed and the limb was extended until the leg and thigh were at right angles to each other. This change of position gave the patient great relief, and was maintained by a renewal of the application of the plaster.

October 24.—Pretty comfortable this morning, although occasionally some pain is felt in the knee. Tumor decreasing in size.

October 25.—Rested well last night with ¼ grain of morphia. No pulsation in tumor.

October 26.—Still improving; tumor much diminished in size; no pulsation whatever. Takes at night ¼ grain of morphia.

October 30.—Discharged—cured—the tumor not being more than half of its original size.

On the seventeenth of December, this patient came from his residence in Indiana, to show me the excellent condition of his limb. He stated that for some weeks after leaving for home, he suffered much pain in his leg and foot, and that it was easily affected by the cold. Prof. Conner and Dr. Dodge carefully examined the patient with me, and we were all fully satisfied that the cure was perfect. The tumor was thought to be about one-third its original size. It was quite solid to the touch.

The case illustrated to us the facility with which a superficial observer might be deceived, in reference to pulsation in the tumor. The collateral branches being quite enlarged, if pressure was made over one of these, there was evidently pulsation. The real condition of the tumor, however, was readily determined by pressing on it just beyond the line of the enlarged collateral branch.

We find in the *Monthly Medical Reprint*, (N. Y.,) October, No. iv, page 254, a report of a case of popliteal aneurism, treated by flexion and pressure, under the care of Sir Henry Thompson. The case is copied from the *British Medical Journal*, date not given, and is headed "cured by pressure in twenty-eight hours." As will be seen, however, by the brief abstract we furnish, the case was under treatment for several days:

"As the tumor was small, it was thought expedient first to adopt the treatment by flexion. Accordingly, on the following day, the limb was bandaged, acutely flexed upon the thigh, and retained in that position by additional bandages. The flexion caused no pain. The limb was kept in this position four days, until two P. M. on the 21st, by which time no difference in the pulsation was perceptible. Mr. Ernest Hart saw the case, and flexed it more completely. The limb, however, was set free on the 23d, as the knee had become swollen and painful. On the following morning, at eleven o'clock, the leg having been previously bandaged with stocking elastic, a Corte's com-

pressor was applied over the femoral artery just opposite Poupart's ligament, and another one about four or five inches lower down. The patient himself, a very intelligent man, changed the compressure about every three-quarters of an hour, and felt a little discomfort from its application. *By half-past three, on the following day, twenty-eight hours after the first application of the compressor, all pulsation in the tumor had ceased.*"

Is it not very probable that the cure in this case was expedited by the previous flexion of the leg? And would not the obstruction on the distal side of the aneurism have been much greater, had Sir Henry adopted the process of manipulation? For the benefit of those still unacquainted with this method, we make the following extract from the paper of this distinguished surgeon, published in the Transactions of the Royal Medical and Chirurgical Society of London, vol. xl, 1857. The patient had subclavian aneurism. "The patient was seated in a chair; and I placed the flat end of the thumb on the aneurism tumor, so as to cover the prominence. I then pressed, until all the fluid blood had passed from the sac, and I could feel that the upper side of the aneurism was pressed against the lower. I now gave a rubbing motion to the thumb, and felt a friction of surfaces within the flattened mass. The movements were little more than momentary, but they were such as I had pre-conceived." Giddiness and mental confusion immediately followed, and for a time, it is stated, that the patient was unable to stand. These symptoms, together with a cessation of the pulsation in the arteries of the arm, proved conclusively that some of the layers of the fibrin had been carried into the artery on the distal side of the aneurism. We resorted to this method of producing obstruction on the distal side of the tumor, as long ago as 1857, as may be seen by referring to the *Western Lancet*, June of that year, in which a case of femoral aneurism, treated not only by manipulation but by compression, was followed by the most brilliant results. The chief points of this case, as reported by Dr. N. J. Sawyer, (at that time resident physician of the Commercial Hospital, Cincinnati,) have been copied into *Holmes' System of Surgery*, vol. iii, page 431; also, into the *Nouveau Dictionnaire de Med. et de Chir. Pratiq.*, now in publication in Paris.

We claim that we were the first to make known through the medical press, Sir William's views in reference to this method of treating certain cases of aneurism. During our attendance on his lectures at King's College Hospital, in 1846, we heard him state that this idea was suggested to him in consequence of the dislodgment of the layers of fibrin in aneurism, (subclavian,) by the movements of the patient's arms as in swimming. A cure was the result, and hence the practice

which has been carried out as yet, but in a limited number of cases. In our correspondence for the *American Journal of Medical Sciences*, April, 1847, may be found our account of what we heard upon this subject in the lecture to which we have already referred.

A SINGULAR CASE OF POISONING.

BY DR. W. HOBBS, CARTHAGE, IND.

During the first week of May, 1868, Mrs. L———, of this place, visited her friends at Dayton, Ohio, taking with her her infant son, a babe about twelve months old, who was still nursing On the eighth of the month, her child was taken with convulsions, which continued at intervals for two or three days. The case was under the care of a "little pill" doctor in Dayton, and I have not learned his opinion of the pathology of the case, or the treatment which he used. I suppose, however, there was very little of either. The child was so seriously sick, however, that the father was sent for, but in a few days he was so much better that the family came home, of course bringing the babe.

A short time afterward, I was consulted by the father, to know whether it might not be feared that this attack of his child was the beginning of habitual epilepsy. My reply was, that children often have such attacks from intestinal irritation, and, such as this one, with large head and predominant nervous temperament, were peculiarly liable to them during the summer months. He said his wife was settled in the opinion that her child had epilepsy, and she would expect a return of the spasms in a few weeks.

The child was hearty and grew well, until the morning of the 8th of June, when it was suddenly taken with sick stomach, a foul, fœtid diarrhœa, and after a few discharges, was again seized with convulsions. Dr. P—— was first called to the case, but in the evening of the same day I was called in counsel, and afterward retained the management of it. The convulsions occurred at intervals of three or four hours for two days. Few of them continued more than twenty or thirty seconds, and after half an hour's stupor, consciousness was fully restored. During the whole attack, a high state of intestinal irritation

was maintained, and I could not otherwise conclude than that the convulsions were reflex actions from this cause.

After a few days, he was apparently well again, and so continued until the 10th of July, when the convulsions again returned, preceded and accompanied by the same symptoms as before. This regular periodicity perplexed me very greatly and thoroughly confirmed the parents of their child in the fears of established epilepsy. There being, however, no reason why I should change my views of the pathology of the case, I could but insist upon my opinion, against theirs, and await further developments.

In a few days, the patient was better again, and continued well for some weeks. The mother told me that about the 10th or 12th of August, he would have "fits" again; and, sure enough, on the 12th of that month, the worst attack of all made its appearance, preceded and accompanied by the same symptoms as before. This greatly added to my perplexity—it was the fourth attack, and the three intervals were just one month and two days each. How could this be explained? The convulsions could be easily accounted for, by the intestinal irritation, but what irritant could act thus punctually at exact periods? That was the great question. The child was nursing and taking about the usual amount of other food for one of his age. I had before ordered special care given to his diet, about the occurrence of these periods, when only milk, starch, and animal broths were allowed him, besides the breast. The mother was in good health—the state of his dentition was no cause of disease.

In my perplexity, I inquired of the mother by what rule she had predicted the occurrence of the paroxysms. She replied that she did it by the *phases of the moon—that the interval was one lunar month and half way to a change.* This suggested to my mind, an inquiry into her own catamenial periodicity. I found that she had been menstruating regularly since her babe was a few months old—*that she became "unwell," at Dayton, while her babe was sick, and that since then, in June, July and August, the sickness of her babe at each attack, preceded her flux but a day or two.*

My perplexities were now at an end, and I saw clearly, that the periodic functional changes in the reproductive organs of the mother, so altered the chemical constitution of her milk, that it, at a certain period, became poisonous to her child, and by its irritating qualities, so affected the intestinal canal of my patient, as to produce the train of symptoms observed in these attacks.

This was about the middle of August, and a very serious epidemic of "bowel complaint" was prevailing among the children in this part of the country, but notwithstanding this fact, I ordered the child weaned at once. This order the mother carried into execution, but still she could not quite shake off her fears of epilepsy. During the remainder of August and the whole of September, we courageously fought death at the door, through the whole range of drugs and diet, and in October, we gained the victory.

My little patient is now fat and hearty, and has had no spasms since the 12th of August attack above mentioned. The bowel troubles which followed the weaning, made little or no impression on the nervous centres.

This case has been one of peculiar interest to me, and as I do not remember to have seen a similar one reported, I thought it worth the notice of the profession.

With others, I have often seen instances in which the mother's milk became unhealthy after the establishment of the menstrual flow, so that the child had to be weaned; but this case differs from such, in the fact that the milk was healthy and nutritious up to a certain period, which was within twenty-four or thirty-six hours of the commencement of the "flow," when it quickly changed its qualities, and became powerfully irritating and poisonous. These qualities it certainly retained but a very short time, perhaps not longer than until the "flow" began, if even so long, as the convulsions of the child and the intestinal irritation which caused them, continued but a short time, if at all, after the "flow" was established. Indeed, I can not see that the irritation in either attack which came under my notice, continued longer than might have been expected as the effect of a single portion of irritant poison taken into the stomach. That the milk was suddenly changed from a nutrient to a poison, is shown by the fact that the child was well nourished to a certain period, when it became as suddenly sick as though it had taken arsenic, or almost any of the mineral poisons. That this quality of the milk did not long continue, is further proved by the fact that the child nursed often during his sickness, a portion of which was retained in the stomach. Repeated doses of so virulent a poison, would certainly have destroyed the patient, or maintained the irritation for a longer period. Will some kind chemist tell us what this poison was, and by what process it was formed in the vital laboratory?

CASE OF PERFORATION OF THE INTESTINE IN TYPHOID FEVER—DEATH.

BY A. G. CRAIG, M. D., GHENT, KY.

Cases of perforation of the small, and occasionally of the large intestine, in typhoid fever, are not very rare, and yet not of as frequent occurrence as some writers would lead us to believe. I have known but few physicians who have met with this accident in their practice, and during my term of service as an *interne* of the Commercial, now the Cincinnati Hospital, I do not remember to have seen a single case. Of two hundred and five fatal cases of typhoid fever collected and analyzed by Bristowe, Murchison, Louis, Pfeufer of Munich, together with the records of the London Fever Hospital, perforation occurred in forty-three, the proportion being a fraction under one-fifth. The following brief report of a case, occurring in my practice, may not prove uninteresting to the readers of the *Journal:*

On the morning of the 25th of August, 1868, I was called in consultation to see a little girl whom I found with congestion of the brain. The case terminated fatally on the following day. Her little brother, aged about ten years, had typhoid fever, but was at that time, convalescent, though there were marked tympanites and great tenderness on pressure over the whole abdomen. I was requested to attend the patient until he had entirely recovered. Hygienic and supporting measures, such as fresh air, rice-water, wine-whey, beef-essence, etc., together with small doses of turpentine emulsion, formed the most important part of the treatment. About nine o'clock, on the evening of the 30th of August, I called to see my patient; I found him cheerful, disposed to talk, and seemed to be doing as well as I could expect, except there was enormous distension of the abdomen, and the tenderness on pressure, had considerably increased since the day previous. His skin was moist; pulse 103, and moderately full; breathing tranquil; tongue moist, and gradually cleaning; some appetite; very little thirst; bowels inclined to be loose; urine scanty and high colored; *decubitus dorsal.* After congratulating the parents at the prospect of a speedy recovery, I took my departure. At two o'clock on the following morning, I was summoned to the bedside of my patient. I found him in a state of collapse. His pulse had ceased to beat; his countenance had assumed a ghastly, hippocratic aspect; his extremities were cool, and the whole surface was bathed in clammy sweat; he was mori-

bund. His father informed me that at about ten o'clock he heard a gurgling in the bowels, which probably was caused by the escape of the liquid contents, and that in a few minutes afterwards, he was suddenly seized with severe pain in the abdomen, and vomited freely and frequently. His pulse soon became quick, and fluttering, and scarcely perceptible, and he rapidly sank into a state of unconsciousness. Death took place at daylight.

The practitioner can not be too guarded in giving an opinion as to the probable termination of a case of typhoid fever. Perforation occurs oftener in the mild than in the aggravated cases of the disease, and the severity of the fever does not correspond with the amount of the intestinal lesions. After perforation has taken place, the case is hopeless, though life is sometimes prolonged for several days.

REPORT OF A CASE OF STRANGULATED HERNIA—OPERATION, &C.

BY J. R. WEIST, M. D., RICHMOND, IND.

On the evening of September 22, 1868, I was requested to see Mr. R. Lyon, at Millville, Henry county, Indiana, who was said to have strangulated hernia.

On my arrival, about midnight, I found the patient to be a thin, spare man, weighing about one-hundred and twenty-five pounds, thirty-two years of age, who gave me the following history of his case: "Have had a small inguinal hernia on the right side for about thirty years, which has always been reducible until within the last year. The hernia has never given me trouble, and I have never worn a truss. On the eighth of September, I fell from a fence, and was immediately afterward seized with severe pain in the region of my hernia. On examination I found the protrusion greater than ever before. I made an effort to reduce it, but failed to accomplish reduction. The pain grew rapidly worse, and extended over the entire abdomen. I sent for Dr. Guisinger, who gave me chloroform and tried to reduce the hernia, without success. He then gave me a large quantity of morphine, from which I received some relief. The next day Dr. Guisinger sent for Dr. Jones, of Anderson. On his arrival, they gave me chloroform again, and tried to return the bowel, but failed as before. Dr. Guisinger con-

tinued to treat me, principally with opiates and fomentations to the bowels, until yesterday, when I came on the cars—twenty-seven miles—intending to go to Cincinnati and consult Prof. Blackman, as I was convinced that nothing short of an operation would give me relief; but the tenderness and pain in the tumor and abdomen became so great that I could go no further. I walked half a mile to the depot, and one-fourth of a mile from the cars here. While Dr. G. treated me, I had several black discharges from the bowels after taking salts. Vomited a great deal for the first two or three days after I was hurt, and but little since, until I came here. The vomiting has not been so bad to-day as it was soon after I was hurt. Since I came home no physician has seen me, as there is no one here whom I could trust in a case of this kind."

The patient seemed to be well posted on the subject of hernia, and on my expressing some surprise at this, he informed me that he had at one time studied medicine.

(The above is the only history obtainable of the case at the time; but some ten days after, I received from Dr. Guisinger the following letter in answer to one of inquiry from myself, which I here insert, in order to render more complete the history of the case prior to the time of my seeing it):

FLORIDA, INDIANA, OCTOBER 2, 1868.

DR. WEIST—*Sir:* I received your note and will cheerfully comply with your request.

"Dr. Lyon came to this settlement on September 8th, eat an over-gorge of peaches, fell off the fence and got hurt. I was called in the night to see him; found him laboring under all the symptoms of strangulated hernia. He was suffering with a feeling of stricture across the bowels, and very sick, with stercoraceous vomiting, complaining more of his bowels than any case I had ever seen in twenty five years' practice. I gave him a heavy portion of morphine, and sent for my chloroform. After the messenger returned, I put him under a partial influence, and made use of the taxis to reduce the hernia. After working with him about two hours, using all the precaution I could, the bowel gave evidence of returning, by a distinct gurgling noise at two different times, but to my mortification, there appeared to be a something in the sac that I could not reduce. As his vomiting subsided and he appeared to be pretty comfortable, I gave him an opiate and left him until morning.

In the morning, I found him pretty comfortable. He had slept well through the night. The hernia had returned as large as when I first saw him. I sent for Dr. Jones, of Anderson. When he came, we put the patient under the influence of chloroform, and reduced the hernia as before. We both concluded from his symptoms, that the strangulation was overcome, and that the sac contained old adhesions of long standing, as the history he gave us was, that it had not been any more reduced for years. We ordered an injection. When I returned on the morning of the tenth, I found him in rather a precarious condition. He had slept well and had his rectum unloaded; but he had a dry skin and a bad pulse. I gave him calomel, ipecac

and opium, and ordered fomentations. When I saw him in the evening, he appeared smart, skin moist, pulse eighty-five, and no pain except over the abdomen I ordered senna and salts, which moved his bowels four times during the night—each time freely—matter very dark and fæcal. I continued the treatment, with the addition of quinine. The next day when I called to see him, he had got up, dressed himself and was out of doors. After reprimanding him for his indiscretion, I left him medicine, with the promise of seeing him again in the evening. When I saw him in the evening, he appeared worse than he had been at any time. His bowels became tympanitic, pulse one hundred and fifteen, and all the symptoms of peritonitis. I continued the calomel, ipecac and opium, with fomentations, until the eighteenth, when I dismissed him, thinking he would get along if he observed the proper care; but in a few days he walked to the station, got his ticket and left for home.

"The case is a very interesting one. When I dismissed him, he appeared very smart—slightly under the influence of the calomel—appetite good and was cheerful. I have no doubt but that the adhesions were of long standing. He never complained of any soreness of the sac. Are you not mistaken in regard to gangrene of the bowels? Please inform me of the result, etc. Very respectfully, J. S. GUISINGER."

On examination of the patient, I found the face presenting the hippocratic aspect; the skin moist; tongue very dry and shining; pulse one hundred and thirty and very small; the abdomen tympanitic and intolerant of pressure; on the right side there existed a hernial protusion, extending from opposite the internal abdominal ring, into the upper part of the scrotum, of about four inches in length by two inches in width at the widest part; just below the middle of the swelling was a slight depression, about half an inch in width, extending transversely over it; at the upper end of the tumor, percussion elicited a tympanitic sound—elsewhere, the sound was dull; everywhere, except at the upper portion, the swelling had a feeling of solidity, such as I have never before met with in a case of hernia—this was particularly marked, at and below the depression above described; the entire tumor was very tender; during the preceding twelve hours, there had been some stercoraceous matter ejected from the stomach—this, however, had not been a marked symptom; bowels had not been opened since his return home.

This examination satisfied me that strangulation of the bowel existed, and that there was present, adhesion of the bowel to the sac, of such character as to render a return of the bowel within the abdominal cavity by the taxis, impossible, even were it advisable to do so. Yet, it was clearly evident that death was impending, and that if anything was undertaken for the relief the patient, it must not be delayed.

The patient and his friends were informed of the difficulties in the case, and that an operation gave him the only chance for his life, and that the result of even this was doubtful; that at best it would likely

entail on him the inconvenience of an intestinal fistula, for a time at least. After hearing my statements, both patient and friends decided that the operation should be done. The patient had previously decided, that without an operation, he must die.

An operation having been determined on, a new difficulty presented. The only physicians in the town were two young irregulars. The patient at once vetoed the suggestion of his friends that they be sent for to assist. I, of course, heartily endorsed his decision. The nearest regular physicians were six miles distant—the night was very dark and the roads bad. To send, therefore, for them, would cause a delay that I felt might be fatal to my patient. So, in compliance with my own sense of duty, and the urgent desire of patient and friends, I determined to proceed at once with the operation.

Selecting three assistants from the persons present, the room was cleared, a table prepared and three or four kerosene lamps lighted. It was now two o'clock in the morning. It is needless, perhaps, to say that I duly appreciated the responsibility of my position.

The patient was placed on the table and the parts shaved, after which, I administered chloroform. When well under the influence, the anæsthetic was entrusted to my most intelligent assistant.

The operation was performed in the usual manner. After the skin was divided, the coverings were carefully raised, one after the other, and divided on the director. Six or seven layers were thus raised and divided. The sac was opened to the extent of about an inch in its upper portion. An examination of the parts now disclosed that a small portion of the anterior surface of the bowel at this point, was gangrenous; the stricture was found to be at the internal ring; this was divided in the usual way without difficulty. An exploration of the interior of the sac was then made with the finger. This examination was scarcely commenced, when the bowel gave way at the gangrenous portion, permitting the escape of, at first, a small amount of gas, then of about half a pint of matter, looking precisely like pus, and without fæcal odor; after this, some fæcal matter, having a dark color and a most villainous smell, escaped. Further examination made evident the fact, that from a point just below the opening in the sac, sac and bowel were everywhere adherent. The adhesions could be easily broken up down to a point corresponding to the constriction noticed on the exterior of the swelling. At this point they were so firm that they could not be broken up without endangering the integrity of the bowel, consequently they were not interfered with. The opening in the bowel was now enlarged

by picking away its softened structure with the thumb and finger. The finger was then inserted into the bowel and passed down to the point of construction, in order to determine if its caliber at that point was seriously encroached upon—this was found not to be the case. The finger was next passed into the upper portion of the bowel as far as the internal ring, in order to assure myself that the stricture had been sufficiently divided. No omentum was detected in the sac.

Not more than half an ounce of blood was lost during the operation. This small amount came almost entirely from the divided superficial external pudic artery. The bleeding was easily arrested by torsion.

The opening in the intestine being in direct relation with the external wound, there was no occasion for the use of sutures to retain it in proper position. Two silver sutures were placed in the lower angle of the wound and one in the upper, leaving between them an open, external wound, about an inch and a half in length.

The parts having been cleansed, the patient was removed to bed, having a better pulse than at the beginning of the operation. The operation lasted about twenty-five minutes.

As soon as the patient recovered from the effects of the chloroform —which he did promptly—half a grain of morphine and an ounce of whiskey were administered. As soon as consciousness was fully restored, he stated that he felt greatly relieved, and that he now believed that he would get well.

I left him at half-past five in the morning, resting comfortably, previously giving some directions for the relief of a bad sore that had formed over the sacrum, and ordering a quarter of a grain of morphine to be given every two hours, in case he suffered much pain, and simple water dressing to the wound.

On visiting my patient at two o'clock the next morning, I found that he had rested pretty well since I left him; the portions of the morphine had been given, some nourishment had been taken during the day; abdomen but little distended, and much less tender than before the operation; wound looking well; but little fæcal matter had passed the wound; the bladder had been emptied naturally. At three o'clock on the preceding day—twelve hours after the operation—flatus and fæcal matter had passed by the natural channel. At half-past five o'clock in the morning the skin was moist, pulse eighty, tongue moist. Left the same directions as before.

At two o'clock, Saturday morning, September 26th, visited patient

again; found him comparatively comfortable; there had been but little pain since my last visit; no distension of abdomen; pulse ninety; tongue dry, but was informed this dryness was only present between ten and three o'clock each night; flatus and fæcal matter had passed at intervals through wound, but an equal quantity had passed by the natural passage; the portions of the wound brought together had united; the remainder showed healthy suppuration. Left quinine to be administered (grs. xv within twenty-four hours) and ordered light, yet nourishing diet.

At one oclock P. M., Tuesday morning, September 29th, saw patient again, and found him doing well; there had been but little pain since last visit; bowels had been freely moved on Saturday; but little fæcal matter had passed by the wound since Saturday; pulse eighty-five; tongue moist, but red; no distension or tenderness of abdomen; tumor free from tenderness; wound showed healthy granulations. Left no medicine.

On the second of October, I learned by letter that my patient "was getting better fast, that his wound did not discharge much," and that he had that day been removed to the poor-house at New Castle, a distance of some seven miles.

A few days later I wrote to Dr. Ferris of New Castle, requesting him to visit the patient and report to me his condition. In reply, I received a letter from Dr. F., dated October 6, from which I make the following extracts:

"I visited Dr. Lyon to-day, in company with Dr. Reed, the attending physician of the poor-house. Your patient is doing remarkably well up to this time, in every respect; his pulse eighty-six, full and soft; tongue red and smooth, but not dry; skin good condition; artificial anus healed, and the wound is looking well; he had two operations by the natural anus last night —they caused considerable pain, sickness of stomach, and some prostration, but he is now feeling quite comfortable; we ordered morphine or opium in sufficient quantity to keep his bowels quiet for four or five days; the cold water dressing to be continued; light, yet nourishing diet prescribed; he manifested much gratitude for your kindness and skill in his behalf, and directed me to say that he will visit you as soon as he is able. I am informed that his money failed and that he had to be shipped to the poor-house. He will receive good nursing," etc.

Under date of October 17, Dr. Ferris again writes:

"For three days, October 5, 6 and 7, there was neither gas nor fæcal matter passing through the wound, and to all appearances, union had taken place, for during this time he had two or three large evacuations of fæcal matter from the bowels, by the anus; also, discharged gas freely by anus, but no symptoms of any discharge through the wound from the bowel. October 8, the superintendent of the poor-house informed me that he ate very freely of rice, crackers, &c.; this seemed to fill up the stomach and bowels, and caused

two or three alvine discharges; that the patient became impatient because he thought he was not waited on as constantly as he desired; would move himself about on the bed and help himself over the chamber, and that during these unnecessary and imprudent exertions on his part, the new adhesions gave way, and some fæcal matter and gas passed from the bowel through the wound. The patient and Dr. Reed, the attending physician, are both of the opinion that adhesion had taken place, and that this was broken up by undue exertion. Since that time, a small amount of excrementitious matter has escaped from the wound, at each stool. In other respects, he is doing remarkably well."

Nothing more was heard from the patient until November 25, when he presented himself at my office, *well*. He reported that the fistula closed soon after the date of Dr. F.s' letter, but opened twice afterward, under circumstances similar to those narrated by Dr. F. above, permiting the escape of a small amount of fæcal matter, but that since five weeks it has remained closed, during which time the stools have been passed regularly, and during that time no soreness or pain in the abdomen has existed. On examination, a short, firmly contracted and depressed cicatrix was found marking the point of operation. Just below this cicatrix, and in the upper part of the scrotum was found a hard globular swelling about three-fourths of an inch in diameter, in all probability consisting of the remains of the fold of intestine found in the sac at the time of the operation. There was no evidence that this communicated with the intestine within the abdomen. The patient's general health was excellent.

The many points of interest connected with this case, render it worthy, in my opinion, of the detailed report here given. The principal of these points are found—in the history of the case before falling into my hands, in the difficulties met with in the operation, and in its progress since, and especially, in the early closure of the intestinal fistula, and the present condition of the parts; but I forbear commenting on them.

PULSATION IN THE THORACIC WALLS, AND AORTIC ANEURISM.

BY DR. WM. CARSON,

Physician to the Good Samaritan Hospital, Cincinnati.

As the diagnosis of aneurism and pulsating tumors is confessedly difficult in many instances, we give the following case bearing on the subject:

James Hopwood was admitted into the Good Samaritan Hospital on December 31st, 1867; a native of Ohio, aged twenty-seven years, five feet ten inches in height; weighs now one hundred and fifty pounds, six weeks ago weighed one hundred and seventy-six pounds; laborer since ten years of age; had led a wandering life and was recently a deck hand on a steamboat; father and mother living; two brothers and two sisters had died—one brother of dysentery—causes of death of remainder unknown to him; patient had typhoid fever when sixteen or seventeen years of age. and rheumatism between two and three years ago in ankles and knees; had no pain or evidence, so far as he knows, of cardiac trouble at that time; the ordinary state of his functions was good up to the date of his present illness; appetite good; bowels regular; no cough, no headache, &c.

His account of his present illness was, that six weeks ago he had "taken cold," had aching in his bones, headache and fever. Three weeks ago he got wet at work, and was taken with pain in his right side, severe enough to prevent full inspiration about the nipple; cough dry at first, and then with a slight expectoration; also, has headache.

His condition, at our first examination, was as follows: Is thin and sallow; sits bent, usually, with an expression of discomfort in respiration; right pupil larger than the left; pain in the track of the fifth pair of nerves on the right side of the temple and nose, which he says is almost constant; digestive organs healthy, with a fair appetite; pulse one hundred; right radial pulse weaker than the left; systolic murmur very loud at the base of the heart, and transmitted along the carotids —very distinct throughout the right infra-clavicular region, diminishing towards the apex; the murmur was loudest at the third intercostal space and adjoining the right border of the sternum, where were perceptible a decided pulsation, of an inch and a half or two inches in extent, and also a thrill on palpation; two sounds were audible at the point of pulsation; the second sound was somewhat obscured at the base, but clear at the apex; the apex beat was below the sixth rib, though it was by no means strong, nor was there any unusual heaving impulse; we could not detect any difference in time between pulsation at apex and the aneurismal thrill, nor between the radial pulse and it. After several examinations with reference to the point, we thought we could discover that from the point of pulsation and thrill, towards the apex beat, there was a space where the intensity of the sound was diminished, followed by an increase as we carried our stethoscope towards the apex beat; a condition which encouraged the idea of two centres of pulsation.

Percussion over the right infra-clavicular and upper part of superior mammary regions, was decidedly dull; respiration thirty-two, auscultation showed feeble respiration, but generally in the infra-clavicular

region, harsh rather than bronchial at a few points. Once or twice there was heard a slight creaking sound; slight sinking under right clavicle.

January 10.—General condition and the thoracic symptoms much the same; has had a hemorrhage from the lungs, amounting to a half pint of pure unmixed blood; rather more cough; still speaks of pain on right side of face; in about half of frequent examinations of the radial pulses, there was no difference perceptible; the inequality of the pupils remains more constantly than the inequality of the radial pulsations; the pulsation and thrill in the intercostal space, are as when he entered the hospital.

January 20.—Has had another hœmoptysis, but much smaller than the first; his sputa are still tinged; sits very much bent, and respiration difficult; appetite good; sleeps tolerably well.

Subsequently to this, the progress of the case was marked by nothing unusual, until a month before his death, when evidences of disorganization of the right lung supervened in increased cough and expectoration, and physical signs of second stage of turberculization. Eight days before his death, the pulsation in the intercostal space was not visible, a change which we attributed to the formation of a cavity in the right lung, and consequent recession of the pulsation from its superficial position. For five days he was unable to lie down, and frequently during that time, he had a peculiar laryngeal spasm. He died March 23d. Autopsy nineteen hours after death.*

Deceased was pretty well developed physically, but had become somewhat emaciated.

Nothing abnormal in external appearance of thorax and abdomen.

On opening the abdominal cavity, a singular derangement in the position of the colon was disclosed: the transverse colon running perpendicularly in the mesial line to within three inches of the pubes.

Stomach—Epithelium normal, except in some places where the conical appearance, known as mammillated, was found; some degree of venous congestion in the sub-mucous coat at the lower part of the greater curvature.

Liver—Enlarged, and old peritoneal adhesions were found on left lobe; its capsule was easily detached, and its substance presented a very granular appearance.

Spleen—Splenic pulp rather paler and slightly firmer than normal; malpighian bodies were visible upon close inspection; numerous old adhesions also found.

*By Prof. Bartholow.

Kidney—Pale in color; cortical portion in a more than normal proportion.

Lungs—One large abscess found in superior lobe of the right lung and numerous smaller abscesses scattered thoughout the pulmonary tissue.

Heart and Aorta—Ascending aorta distended into a pouch-like form, with walls very thin and distensible; aortic orifice much narrowed, its valves incompetent and calcareous deposits upon them; calcareous deposits also on the posterior segment of the mitral valve; semilunar valves of the pulmonary artery competent and no deposit upon them; tricuspid valves not competent; orifice excessive in size; no calcareous deposit on valves; a mass of enlarged bronchial glands was found behind the aorta and pressing against the posterior part of the ascending portion.

Brain—Some fluid effusions found in the sub-arachnoid space; superficial veins of the brain all congested and full of blood, which condition arose from the obstruction to the return of the venous blood.

Our diagnosis was aortic aneurism for the following reasons: There was a co-existence of, *First*—Pulsation and thrill at third intercostal space, though without any projecting tumor. The murmur was unusually loud and rough at that point, and very distinct over right infra-clavicular region. *Second*—Feeble respiration throughout the summit of right lung, and dullness, which we supposed might be due to pressure. *Third*—Inequality in radial pulses and in the pupils, was often observed. *Fourth*—Hemorrhages at different times, which are accompaniments of aortic aneurism, where communication with the bronchi has taken place. *Fifth*—Generally dyspnœa—not paroxysmal, however—but towards the last, the peculiar spasmodic breathing alluded to above. *Sixth*—The pain in the temple and face, referable as we thought, to an indirect implication of the fifth. *Seventh*—The recognition of two centres of pulsation, as there seemed to be between the apex beat of the heart and the abnormal pulsation to the right of the sternum, a minimum point to the right and left of which the murmur increased.

The post-mortum explained most of these points, as follows:

The pulsation was from an unusually superficial right auricle—an illustration, we think, of Dr. Gairdner's view, that when the right side of the heart is enlarged it becomes more superficial and the apex beat less distinct. The unusual murmur was at and near the aortic orifice, from the calcareous deposit upon the valves and the obstruction produced by the mass of enlarged glands, pressing against the aorta and

turning the blood current still more towards the anterior part of the aorta, where there was some thinning of the wall, but no aneurism. The inequality of radial pulses and the pupils, is not explained by our examination. The feeble respiration was owing to tubercular deposits, and not aneurismal pressure. The hemorrhages were owing to the same causes, and probably also to the heart difficulty. The dyspnœa must have had the same origin, unless the peculiar laryngeal spasm during the last week, originated from an implication of the recurrent laryngeal nerve in the enlarged mass behind the aorta. Possibly the pain in the temple and face originated in the same way, though our examination was not extended to that point. The post-mortem showed that there were not two centres of pulsation—the absolute certainty of which is one of, if not the best, of the evidences of aortic aneurism in the thorax. The disappearance of the pulsation, was probably due to the formation of the large cavity in the right lung, by which a recession of the auricle was allowed.

This case is an unusual one, and we have not found any precisely like it. We here give, however, an abstract of two cases, involving points that arose in our case:

The first is reported in *Med. Chir. Transac.*, vol. xl, page 167.*

The patient had, for many years, shown evidences of organic disease of the heart in secondary troubles of circulation and respiration. When Dr. Markham saw the patient, it was within a few days of his death. "The heart was felt beating, with an extensive heaving impulse, quite in the left lateral region of the thorax; it was also felt over the whole precordial region, but indistinctly near the sternum." "At a point about an inch and a half or two inches from the right edge of the sternum, and in the fifth intercostal space, a pulsation was observed, synchronous with the ventricular systole. This pulsation was visible along a space about three-quarters of an inch; it communicated a strong thrill to the finger placed upon it, and likewise forcibly raised the finger. The stethoscope, placed over it, transmitted to the ear, a loud, prolonged, rough murmur. There was also observed a loud bruit over the whole precordial region; and a slight impulse of the heart was perceptible at the epigastrium. It was evident that there was great enlargement of the heart, and valvular disease. The character of the pulsation, and of the thrill, and of the bruit which accompanied it, naturally at once suggested the idea of its being aneurismal; but then, how could the existence of an aneurism at such a point, be explained?" "On the

*By Dr. W. O. Markham, Physician to St. Mary's Hospital.

other hand, that the pulsation had no origin from any part of the heart itself, seemed clearly indicated from the position of that organ, which as described, was felt beating quite in the left lateral region of the thorax, and by the fact, also, of the clear percussion sound over the sternum. This consideration led me to the conclusion very guardedly expressed, that the pulsation was aneurismal.

The autopsy showed enormous dilatation of the auricles. "The right auricle reached far away to the right of the sternum, and occupied that portion of the thorax, beneath the parietes, where the pulsation had been felt. Hence, it became manifest, that the pulsation, the thrill and the loud prolonged bruit, took their origin from the right auricle." There was disease of the mitral and aortic valves.

The question came up in my own case, could such a pulsation and thrill come from the right auricle? Dr. Markam attributes them, in his case, "to the account of the blood rushing into the auricle from the venæ cavæ, during its diastole," and he suggests "that the murmur and the thrill arose from the fact of clots of fibrin having been formed in the auricle at the time I saw the patient, which clots were thrown into vibration by the blood flowing into the auricle from the venæ cavæ." This explanation would not apply to our case, because it was continuous for months, and we have another of the murmur in the existence of aortic valvular disease and pressure upon the blood current by the enlarged glands.

The second case is one given by Dr. Fuller,* of a woman, aged forty-eight, complaining of dropsy, dyspnœa, palpitation and sickness. "She was complaining of pain and pulsation, referred to the upper part of the stomach, and to a spot just to the right of the sternum, between the second and third ribs. Distinct pulsation could be felt in that situation and there was an imperfectly defined tumor. "Taking the murmur in connection with the dullness on percussion, the distinct and to some extent circumscribed pulsation between the second and third ribs to the right of the sternum, and the obviously obstructed cardiac circulation, all who saw her inferred the presence of an aneurismal tumor." Post-mortem showed a mass of malignant disease. This mass was pressing in some measure on the heart itself, and also on the large vessels; and while this pressure produced alteration in the form of the aorta, which, weighed by abundant atheromatous deposits, gave rise to the murmur so distinctly heard, pulsation was communicated to the malignant mass and thus was felt to the right of the sternum." This

*Diseases of the heart and great blood vessels, page 213, London Edition.

was not a case of pulsation of the right auricle, simulating aneurism; but a loud murmur was produced by pressure of a tumor upon the aorta, thus tending to confirm the impression of an aneurism.

We may here state a remarkable instance of an aortic aneurism, pulsating in the fifth intercostal space. It occurred in the practice of Dr. Bright, at Guy's Hospital. Dr. Sibson, who makes mention of it, remarks that it is the only instance, out of five hundred cases, that he has met with.

CLINICAL LECTURE ON A CASE OF DEATH FROM CHLOROFORM.

BY DR. BILLROTH,

Professor of Surgery at the Vienna University.

It is customary to divide chloroform-narcosis into certain stages, but these, both in regard to the mode and the rapidity of their sequence, vary much in different individuals. In the first stage, the patients are usually thrown into a state of *excitement*, which chiefly influences the psychical and motory spheres, for I know of no case in which excitement of the sensitive nerves through chloroform, has produced hyperæsthesia. In only quite exceptional cases are the nerves of the senses abnormally excited, and subjective personations induced. Commonly, the motory stimulation is so combined with the psychical, that mental images are conjured up, in consequence of which, the individuals conceive the idea that they are fettered or impeded in their actions, and execute movements for their liberation. The physical stimulus exhibits itself in various ways in different individuals, just as drunkenness will render one man quarrelsome or violent, another loving and maudlin, and a third melancholic. Purely individual conditions thus exert great influence. The motory effects, besides the struggles due to psychical influence, are chiefly of a spasmodic character, exhibiting themselves in convulsive movements of the muscles of the extremities, and especially of the muscles of deglutition and mastication.

Anæsthesia commences in this stage, but the patients are usually restless, and sometimes so unmanageable as to require to be restrained by three or four men, so that any of the more delicate operations could not be undertaken. When I inhale chloroform myself, I am sensible at this stage, of a tremendous feeling of internal restlessness, vibration and beating at the fingers' ends, and of an overpowering sense of the loss of all capacity of will or action. So little tractable are most patients in this stage, that we have to carry them into the next—that of *tolerance*. The convulsions cease, and there is muscular quietude. The mental disturbances continue, but they have lost their connection with the motory apparatus. The condition of dreaming is set up, and, just

like in sleep, when the narcosis is slight, vivacious images are attended by movements; when this is deep, all spontaneous motion ceases. This condition of deep sleep is the most favorable one for operations, and the one we seek to maintain.

To this, succeeds the *paralytic* stage, in which all traces of the power of movement have ceased; for while during the stage of tolerance, reflex movements are not infrequently met with, now there is absolute rest. Only breathing and the heart's pulsation continue, and if the narcosis be too prolonged, even these will become paralyzed. The possibility of making a practical use of chloroform, depends entirely upon the fact that the muscles of the extremities and of the trunk are first, and those of the heart and respiration last paralyzed. This paralytic stage is seldom resorted to for therapeutical purposes, and it is so chiefly for the reduction of old dislocations or the rupture of anchyloses. Between this paralytic stage and paralysis of the heart, there is, however, always a large interval, the passage of the one into the other not usually taking place suddenly. The cessation of respiratory activity, is announced first by stertor, and then by irregularity or incompleteness of the respiratory movements; and that of the heart by the gradually approaching feebleness and slowness of the pulse—the respiration ceasing prior to the action of the heart.

The practical rules for the employment of chloroform, are founded upon the observation of these stages in thousands and thousands of cases. Yet there are individuals who, standing apart from all such rules, after a few inhalations quickly perish. It is said of such, that they have an idiosyncrasy, as regards chloroform. And there is no reason why this should not be the case, or that all persons should be alike sensible to the action of chloroform, while the various other narcotics act so differently on different individuals. Enormous individual differences, in fact, exist as to sensibility to the action of poisonous substances employed as medicines. Thus, I am attending a lady in whom one-eighth or one-sixteenth of a grain of morphia excites such suffering, uneasiness and vomiting, that, in spite of the severest pain, she dares not take it; and yet upon any of us such a dose would produce scarcely any effect. Another patient, for whom a mixture of half a drachm of iodide of potassium in six ounces of water was ordered, after every spoonful was seized with aphonia and a splitting headache, and when I persuaded her to continue the medicine, after a few spoonfuls the entire head became eryethematous, and weeping, discharge from the nares, with cough, etc., ensued. So belladonna, in the dose of $\frac{1}{120}$ grain, may induce symptoms of poisoning. In cases in which individuals manifest such excessive sensibility to chloroform that a few inhalations prove fatal without any premonitory symptoms, we are powerless, although even in these, artificial respiration must not be neglected. Much stress is laid upon the purity of the chloroform employed, and rightly so; but whether impurity produced by products of decomposition, is dangerous, has not been proved. Chloroform that has been kept long and exposed to the light, always contains free hydrochloric acid and chlorine, and although this may not be dangerous, it should not be employed, for patients can not inhale it, as it immediately induces severe

coughing, burning in the throat and constriction of the larynx. These symptoms, as well as one's own sense of smell, lead us to reject it. Whether some material that is specifically dangerous, is generated in chloroform by long keeping, is unknown; but that chloroform is very variable, both in smell and its effects, no one can doubt who has much to do with it.

Danger may arise in all the stages of chloroform-narcosis. During that of excitement, violent muscular efforts may give rise to apoplexy, especially in individuals with disease of the heart, rigid arteries, or emphysema. Of most consequence in this stage, however, are the contractions of the muscles of mastication and the posterior muscles of the tongue. By means of the stylo-glossi and the glosso-pharyngei, the tongue is drawn spasmodically backwards, pressing the epiglottis down so as to mechanically close the aperture of the larynx. Such patients become blue in the face, and die suffocated, not through the direct action of the chloroform, but from the mechanical privation of air. Such cases have been often observed in the Klinik, rendering it necesary to force open the mouth with Heister's speculum and draw out the tongue. When the narcosis is continued too long, there is danger of paralysis of the heart and sudden collapse. It is a rule not to prolong the narcosis when the upper eyelid allows itself to be raised without any muscular resistance. Individuals in which this can be done only at a late period, or perhaps not at all, and in whom a paralytic condition of the respiration takes place simultaneously with muscular quietude of the extremities (which happens especially in drunkards), require to be watched with the greatest care. There are subjects in whom complete muscular quietude can never be attained. Before the utter stagnation due to paralysis of the heart and respiratory muscles is brought about, there are changes due to the paralysis of the muscles of the face to be observed. The jaw sinks, the features become corpse-like, and the face pale, and we have the facies Hippocratica before us; and so characteristic is the change of physiognomy that, once seen, it can never be forgotten. It is, therefore, of the greatest importance that the face of the patient should be well watched. Another warning sign is, that the blood, during an operation, either ceases to flow from the arteries or is of a dark blue color.

The case we met with yesterday does not, in my opinion, belong to this category, as it did not give the impression so much of a case of intensely aggravated chloroform poisoning as of one of sudden collapse—a view rendered probable also by the very anæmic condition of the individual. This man, twenty-six years of age, but looking much older, had, while drunk, cut his finger with a china pot, and, according to account, lost a great deal of blood. At all events, when he came to the hospital two or three days after, his anæmic appearance was remarkable, and this condition was further shown by his excessive sensibility to pain, leading to the belief that one of the digital nerves might be exposed. It was on this account chloroform was given, and all at first went on as usual. Convulsive movements ensued, and, as during these, neither an examination nor operation can properly be performed, the chloroform was continued, with the object of obtaining the stage

of tolerance. But as soon as the convulsive movements had ceased, the patient assumed the appearance of a corpse. The mouth was opened, and the tongue was drawn out in the belief that closure of the larynx had produced the effects observed. This did no good, and the contraction of the stylo-glossi and the constrictores pharyngis prevented the passage of a catheter into the larynx. Tracheotomy was at once performed, and a canula passed in, but all in vain. The narcosis had lasted a very short time, and, at the autopsy, there was scarcely any smell of chloroform. Evidently, a sudden collapse had occurred, his condition giving the impression of a deep swoon. It is a rare thing for a healthy man to die during syncope, although this happens with old people and during convalescence, and especially after pneumonia. Death from sudden collapse is also met with after typhus. I am under the impression that the present case was one of such collapse, occurring during the narcosis, in consequence of anæmia. Generally, there is not much learned from the autopsies of those who die from narcosis. The blood is pretty constantly found not to be coagulated, and sometimes of a cherry-red appearance. This non-coagulation of the blood gives rise to numerous consequences, which formerly were supposed to be characteristic of death from chloroform, such as hyperæmia of the posterior part of the lungs, kidney, and spinal marrow, etc., which are really post-mortem appearances due to the fluidity of the blood. In the present case, these appearances were present, although the heart and large arteries were strongly contracted, and almost empty of blood. The heart is found in different conditions. In animals it is commonly dilated, especially the right ventricle, but in the present case, as in all anæmic subjects, it was strongly contracted. There is no distinctive sign of death from chloroform, and if an individual were killed by it, and no other non-medical proof of this existed, the anatomist would not be in a position, from the condition of the body, to declare that this had been the case. Even the odor of the chloroform is a worthless sign, for Rokitansky states that the brain especially sometimes gives out an odor exactly like that of chloroform, without any ground for supposing that this substance had been employed.

With respect to the administration of chloroform, the employment of the chloroform inhaler constitutes the best, the quickest, and most convenient mode. The singular idea that a mixture of chlorform and ether is less dangerous than either of these substances used separately, has been abandoned. Above all things, never administer chloroform alone, but always have at least one assistant with you. When there is rattling in the throat, blueness of countenance, and irregularity of breathing, remove the apparatus and throw open the windows and doors so that plenty of air may gain access to the patient, which is further to be aided by forcing the mouth open and drawing forth the tongue —a manœuvre often attended with the best effects. Let the patient, and especially if there are not plenty of assistants at hand, always be in the lying, not the sitting posture. The dashing the surface with cold water or applying ammonia, can only be of service when the narcosis is slight enough to admit of the excitement of reflex movements; but in the paralyzed condition, all such means are only a dangerous loss of

time. Here, artificial respiration must be at once resorted to, and executing this by mouth to mouth, with compression at the lower part of the thorax, is a preferable procedure to Marshall Hall's method. It is true, that in this mouth to mouth procedure, much of the air passes into the stomach; but the plan with all its disadvantages, is found practically useful, and, at all events, resorting to it is better than doing nothing. The access of air may be facilitated by passing a catheter into the larynx, which, in the paralyzed condition, is as easy as after death. A great part of the air passes out again by the side of the catheter, but a considerable portion enters the lungs in tolerable force. When the catheter can not be introduced, tracheotomy should at once be performed, and a large canula passed in. Artificial respiration must be exercised in a regular rythmical manner, and its efficacy as much depends upon the respiratory movements being forcible enough as upon admission of the oxygen to the blood. In this case, artificial respiration was continued for half an hour; but really, after from ten to fifteen minutes of inefficacious efforts, all hope had ceased. The duration of the asphyxia is not, however, always easily estimated; for at such a time the watch is not looked at, and seconds become minutes and minutes hours. Stimulating the phrenic nerve by means of electricity, is undoubtedly a useful means for exciting the respiratory movements; but unfortunately, an apparatus is seldom ready when wanted.

Fortunately, we may regard death from chloroform as a very rare occurrence, and one becoming more rare every year. Reckoning that, during my fifteen years of clinical teaching and the two last years of my student life, I have been present at two administrations of chloroform per diem (which is a low and certainly not an exaggerated estimate), I shall have witnessed twelve thousand five hundred cases of narcosis, and this is the first fatal one I ever saw. We must regard chloroformisation as an operation by means of a chemical agent, as with arsenic, chloride of zinc, etc., and compare its results with those of other minor operations. I am convinced that the mortality statistics after the application of leeches, blistering cupping, and bleeding (through erysipelas, hospital gangrene, tetanus, etc.), is greater than one in twelve thousand five hundred; but no one, on that account, has thought of prohibiting these means, and the use of chloroform can not be prohibited because of these seldom occurring fatal cases. The psychical impression which such a death produces is, by its very suddenness, a very powerful one, and exerts especial influence upon those who have not been accustomed to see men die before their eyes. Unfortunately, we have in surgery only too often occasion to be convinced of the incompleteness and the impotence of our present amount of knowledge. A mere cut of the finger, especially if this opens into a joint or the sheath of a tendon, may give rise to phlegmonous inflammation, which during the last twenty years has caused far more deaths than chloroform. Urged by the patient's vanity, we remove a small tumor from a man's scalp, and he dies of erysipelas, or another dies from tetanus brought on by some slight injury—perhaps only the prick of a thorn; and, as regards the cause and action of these circumstances, we are as ignorant as we are regarding death from chloroform.

But while such cases are sad to reflect upon, they should not, any more than the one of yesterday, lead us to despair in our art and means of investigation, nor to settle down in desponding resignation. Let them act as a great warning cry of nature, rousing us, ashamed of our hitherto pigmy efforts, to renewed action and restless labor.—*Medical Times and Gazette, November* 28, 1868.

CORRESPONDENCE.

BERLIN, NOVEMBER 18, 1868.

It scarcely requires a reference to the past ages of the world, to prove the intimate connection between the art and literature of a country, and its politics. Rome stood forth, the proud Niobe of nations, some two hundred years before Christ, in the supremacy of her power. Greece, Asia, Egypt, lands which, in their day, had experienced the same vicissitudes of rise and decline, lay at her feet. To her mandates were turned the obedient faces of the inhabitants of the earth. Science and art reached a perfection which in many branches has never since been attained. Every field of literature was cultivated. Medicine, which had lain for so many generations concealed by the fearful ignorance and superstition which overclouded her, loosed herself under the fostering hands of government, and shone forth in the full beauty of maturity. Galen, the great master, was hospitably received within her walls, and his doctrines disseminated far and wide. But the golden age of Augustus was succeeded by the tyranny and oppression of his successors, among whom a Nero. It had already become the brazen age. Philosophers were exiled, the treasures of libraries burned in public places, statesmen put to death, the votaries of science oppressed, doors opened to the delusive doctrines of Egyptian mysticism and the superstitious juggleries of a succeeding priestcraft. Subsequently, hordes of barbarians from the north, swept over the land like a desolating simoon, obliterating almost the last traces of civilization. The light of science paled and was extinguished. The history of the world exhibits parallel cases throughout her every epoch. The most powerful is

as it has always been, the most enlightened land. The government of Frederick the Great, has gradually enlarged its borders and strengthened its resources, from its inception on. The lamp of science has ever been preserved in the purity of its lustre upon her altars. Prussia claims to-day, a place high in the first rank among the nations of the earth. The brilliant successes of the late wars have placed her in the very zenith of her power. She possesses, without doubt, the greatest facilities of instruction. America is, perhaps, her superior in the lower branches; but beyond that, America lacks the hand of authority which is empowered to pluck the ever encroaching tares. Charlatanism is in bad savor here, even with the common people. The names of her great men in medicine, as in every other department of science and art, are household words. Everybody knows Graefe and Langenbeck, and every one is familiar with the names of Virchow, Du Bois Raymond, Frerichs and Traube. Their photographs are in every window with those of the King and Prime Minister. The city has mourned for Griesinger, the great authority on nervous diseases, just dead, far too soon. A long illness of some three or four months duration, terminated fatally last month. A fistulous orifice in the lumbar region, with a purulent and urinary discharge, confined him during nearly the whole of his illness to his bed. It was variously diagnosticated by the attending physicians, as pelvic abscess, abscess retro-peritoneal, wandering kidney, abscess of the pelvis of the kidney, &c. The autopsy revealed a retroperitoneal abscess with perforation of the appendix vermiformis and involvement of the ureter; kidneys intact. He was buried with all the honors of the profession, the rector of the faculty, nearly all of its members, and a large number of students, following the remains to the grave. His late work on Infectious Krankheiten, is considered one of his ablest efforts. His place in the hospital is temporarily filled by Dr. Westphal.

The new session has opened at last, with flying colors. Two weeks have elapsed since the announcement of commencement, but with the genuine Teutonic tardiness which is utterly irreconcilable with anything American, the lectures have been delayed. The machinery is ponderous, however, nearly four hundred courses altogether, of which, over one hundred are in medicine. Every department of science and art is represented, all the languages, ancient and modern, religion, theoretical, jurisprudence, music, even riding, dancing and fencing. The libraries, museums, zoological and botanical gardens, are all rendered subservient to instruction. The new anatomical and chemical edifices

approach a palatial splendor; their chief lecture rooms would rival many an opera in the elegance, even luxury of their appointments. The chief medical attraction of Berlin is, the opportunity afforded for the study of pathology. Her reputation in this regard is, perhaps, unequaled in the world. A commodious building, known as the Leichen Haus, erected in a style which might make some pretensions to architectural beauty, stands apart from the others in the handsome grounds of the *Charite*. The basement is the general receptacle, and contains apartments also for the dissection of animals. The regular school for comparative anatomy and veterinary instruction, is the handsome building across the street. The first story contains the Monday morning lecture room and the chambers for the study of microscopy. The upper story is divided into a central amphitheatrical lecture room, the didactic hall, large square room in the right wing, provided with long tables and little railways, for passage of the microscope, and the large room in the left wing, the chemical laboratory. Every Monday morning an autopsy is conducted by Prof. Virchow, *suis manibus*, in the first mentioned room. The body is placed on a revolving table, at which the professor stands, and the students are gathered around on standing platforms, elevating as they recede. This is the most practical, interesting and instructive lecture of the week. Connected with this, is united the proper descriptive pathological course, illustrated by fresh specimens from the cases of the week. The didactic course comprises four lectures a week, occurring in hours at noon. Then a course on practical pathological histology, also by the professor himself, fills the remaining unoccupied morning hours. The lectures on the microscopy of the normal tissues, being delivered by the assistants in the afternoon. Prof. Virchow has also a small ward in the *Charite* which receives his daily visit, so that from morning till high noon he is engaged at the hospital. Politics engages him in the afternoon, during the session of Parliament, as he is an active advocate of the people; at one time so active as to have necessitated a temporary sojourn in a foreign land. He is said to have lately expressed an intention to retire from politics, as peace once more reigns over the land, and stated that he had experienced a contrition for the neglect of his medical works, some fourteen of which he had commenced and left unfinished. He is a man of most indefatigable industry, and seems so to have systematized his life as to have made its every nook and corner of avail. He reaches the lecture room in hot haste and begins his discourse panting. His style can hardly be said to be pleasant—in fact, under a two hour's ses-

sion, rather tedious; his diction is of course polished; there is no attempt at oratory, rhetoric being among the few branches which he has neglected in his early education; but then, eloquence is rare in every field of literature. In Germany, most of the teachers at the University read their lectures from a chair. Du Bois Raymond, the celebrated lecturer on physiology, being among the few exceptions. Virchow is not a believer in Christianity; neither, alas, are most of the great men of Germany. It militates some against natural philosophy. Some of his bitterest satires are leveled against it; not loud, but quiet and deep. He would make an exceedingly ugly opponent to encounter, on this or any other subject.

In person, small, below medium, a peculiar head, flattened behind, its longest diameter between the ears, hair thin, traces of gray, forehead expanded in every direction, small twinkling hazel eyes, mouth small, lips thin, a complexion which in a lady would be called a clear brunette; though fifty, he possesses the vivacity of youth. He celebrated a few days ago the twenty-fifth year of his medical life. In social life, what the Germans call a zugänglicher man—that is, a man of easy access. There is nothing in his appearance or address which would betoken the man; indeed, nature's only gifts seem to have been an indomitable energy and an untiring application—the rest is self-made.

The subject of to-day's discourse is syphilis. Hitherto, we are informed, the outward manifestations of the disease have been the only ones receiving attention. We now know that there exists a whole series of symptoms affecting the internal organs, characteristic of the disease. The brain suffers a softening; the root of the tongue looses its glandular characteristics, smoothes off to a polished surface from atrophy of its glands; a chronic pharyngitis, the result of the increase of parenchymal connective tissues; the tonsil is likewise attacked and becomes almost obliterated; the heart assumes an hypertrophy; the pleuræ present cicatrices on their surfaces, from the contraction and retraction of chronic pleuritis; the liver reduces in size and presents the same cicatrices, in the cases before us, extending completely through the right lobe at its outer third, forming a new lobe; the kidney suffers atrophy, becomes exceedingly pale and granulated on its external surface—the surface of section remains smooth; the atrophy is likewise induced by an increase of the connective tissue, an indurative interstitial nephritis. Melanosis is divided into three classes—melanoma, melanotic sarcoma, and melanotic carcinoma. The first is benign; the two latter, malign tumors. The difference between them is the order or sequence of attack.

A melanotic carcinoma of the eye, for instance, would next attack the glands and then the lungs, before the liver was reached. A melanotic sarcoma in the same position, would maintain no such succession of attack; the liver might be the second object.

It is, of course, impossible in a letter of this heterogeneous character, to present anything like a detailed report of several lectures; so that I must fain be content with the transmission of the novel, in the form of isolated aphorisms or the regular account of individual lectures on some specific subject, which latter shall be forwarded, if any of unusual interest occur.

Cohnheim, Virchow's first assistant, has lately received an appointment as Professor of Pathology at Kiel. His late discovery of the escape of the white corpuscles of the blood from the vessels, has excited the liveliest attention. It has appeared in the last edition of *Virchow's Archives*, some seventy pages. As I had the opportunity of hearing his lecture on the subject during the microscopic course of last session, I shall attempt to send you a condensed account. The white cells, which are always nearer the walls of the vessel, are observed under peculiar conditions, to become stationary and adherent; shortly after, a protrusion in the wall denotes the presence of a cell there; the wall is then ruptured and the corpuscle is seen, partly within and partly without the calibre of the capillary, after which the corpuscle escapes entirely and is connected to the vessel by a fibrous attachment, which is finally separated and the cell floats free: thus the white blood corpuscle, while still within the walls of the vessels, becomes or rather is in the lymphatics the lymph cell and in an abscess the pus cell. The fact of the identity of the three cells, is one of long acquaintance; but the identity of origin or entity, is the new development. If the discovery be verified, it will shake parts of Virchow's cellular pathology doctrine to the center.

Perhaps the finest and most systematic clinic of the session, is that of Prof. Traube, the most American of all the medical faculty. From nine to eleven every morning, the proper propædeutic or initiatory clinic; three days in the week before the whole class, and three days with a third of the class at the bedside. The old surgical clinic room of the *Charité* has been appropriated for the lectures before the class. The professor and patient inside a large balustrade, behind which a single long bench for the students. There are however, two galleries of similar construction above, so that a large number of students are accommodated with the additional advantages of an equally good view for

every one. Never having seen the lecturer before, illness prevented his summer course, we obtained a seat opposite the door to secure a fair opportunity for the formation of first impressions. In the mean time, we take occasion to notice that the little stand in the corner is filled with tubes and tests and divers colored litmus, the stethoscope, Traube's own, a handsome hard rubber cylinder, with movable ear-piece, a small but deep concave, and an exceedingly small bell, in general use throughout the city and in the pocket of every student, the hammer and pleximeter, likewise everywhere employed, with brush and ink for marking purposes. While bewildering ourselves in a vain attempt at the solution of the enigmatical problem of forming an equal for the great minds of the place, from the dull and sleepy material around us, the double door is flung open and the procession enters. Preceded by an attendant with two large mouthed flasks containing urine and sputa, follow four nurses carrying the patient in a handsome iron bed, with covers of spotless purity, and then the professor and his three assistants. He is of medium stature, perhaps fifty-five years of age, rather careworn, somewhat nervous look, hair cut short and combed forward like a monk, a full, prominent, penetrating eye, a recklessness of gait and a slovenliness of attire.

He is evidently master of the situation—his gait informs you that at once—you see it daily on Fourth street among that class of men who consider that they have traveled and are familiar with the movements of things. He is a man who has suffered, and yet, is scarcely a man who has much sympathy for suffering. He carries always a sober mien which is reflected over the class as he enters. A student is called into the arena—he enters without much alacrity—there are evidently some unpleasant occurrences occasionally. The professor takes his measure at once, and having induced in him the uncomfortable supposition that perhaps some portion of his attire is failing, he requests him rather abruptly to inform him the striking features of the case before him. Should he be a man of nerve, it is well, if not, there are cooler and pleasanter climates for a permanent residence. But Traube is a splendid clinician; not a symptom or a feature escapes him; every case receives the most thorough revision. He examines the patient from vertex to toe. He is a panopticist. He is a physician of the old school, animated by the fire of the new. He is right square up to the times. He has served his apprenticeship and his journeyman life as student, assistant and private docent, and has come to his position as master workman, by dint of time and toil.

The case is the Basedow disease, a most exquisite case, the enlarged thyroid, the prominent cornea, the depression of the planes of vision, the impaired movement of the levator palpebræ, the radial tension, the ventricular hypertrophy, and the general congestion of the capillaries, as evidenced by the pink hue of the skin, are all beautifully marked, and then he elicits so handsomely the nervous irritability of the disposition. He views, reviews, recapitulates, and requests a diagnosis—fortunately, it was correctly given. Then follows a slight history of the disease, symptoms, differential diagnosis, prognosis, and treatment. The treatment is, roborant and tonic, quinine and iron, with the proper observance of all those hygienic measures which would quiet the excited nervous system. The treatment of Trousseau, the antiphlogistic, with digitalis, is of all the least successful. He fears that Trousseau, like many of the French physicians, actuated by a desire to be the first to describe a disease, have allowed, on many occasions, their vanity to interfere with their veracity. The etiology, he prefers to leave untouched. So many and so diametrically opposed are the alleged causes, that it is better in these days of great discoveries in physiology, to defer an attempt. That it is a disturbance of nervous centres, is but too plain; but of what character, is a question for the future. Two cases of paralysis follow, one the result of an old diphtheria, and one of syphilitic origin. In the latter case, he speaks of the importance of establishing the existence of secondary symptoms—refers in assistance thereto, to an important discovery of modern times, the glazed and shiny appearance of the post portion of the dorsum of the tongue, as revealed by the laryngoscope. The paralysis of diphtheria is always transitory. As to the relation of a brain trouble, he states that the nearer an extravasation or tumor in the brain is to the periphery, the more complete will be the paralysis, by reason of the implication of a greater number of its fibres. In the present case the complete paralysis of the facial on one side, would indicate the seat of the affection at or near the stylomastoid foramen. Age predisposes to brain affections, the inner coat of the artery thickens, or the caliber fills with fibrin. Endocarditis in its early stages, is a frequent cause of brain emboli. The existence of an embolus in the brain for more than twenty-four hours, would certainly cause paralysis. Brain affections from arterial difficulties, give no alterations in temperature. The use of opium in brain affections, to be very cautious on account of the tendency to narcotism. The Tr. Opii Benz., although one of the weakest is still one of the most dangerous.

In a subsequent lecture were presented cases of icterus and puer-

peral fever. In jaundice, the yellow color of the foam of the urine is a valuable diagnostic symptom. The test for bile in the urine consists in letting fall in a deep wine glass quarter filled with nitric acid, a few drops of the suspected liquid; the play of colors, green, violet and brown, is characteristic. Treatment—mild saline cathartics, baths, &c.

Puerperal fever he divides into three forms: periphlebitic, (here rare); endo-metritic and peritonitic—the two latter often combined. (Virchow often speaks of a diphtheritic.) The occurrence of a pleuritis duplex always renders the prognosis of Feb. Puerper., exceedingly grave. He speaks of the mortality of the disease under either the tonic or expectant treatment as colossal. He is an advocate of the antiphlogistic and mercurial—the mercury by inunction, and this to be immediately discontinued on the first appearance of constitutional symptoms. He applies leeches to the abdomen freely, but allows no after bleeding.

The next hour is devoted to Frerichs. The lecture-room is always crowded, every seat taken and the aisles full. Frerichs himself is a man of very tall stature and exceedingly awkward and ungainly appearance; a face which is nearly half forehead and almost juvenile in expression. He is also far past bodily prime, though still in highest mental vigor; a large, full eye, face perfectly smooth, mouth just a little sensual. He is a man who combines some of the pleasures of life with its pains. Although having occupied a public position for many years, and extended his travels in foreign lands, he is still a man of exceeding diffidence. It is easy to conceive what actual misery it must have cost him before he arrived at even his present posision. He sits on the corner of a table to lecture, and in the interval of its removal for the presentation of a new case, appears in the greatest embarrassment. His hands are in the way and so are his feet. Once seat him, however, and give him material, and he forgets himself completely. He is then in the full possession of the medical *sang froid*. His every word is treasured, for it is the result of years of the ripest experience. His voice is a deep bass, in slow and measured tones, beginning a sentence with a slight elevation and gradually fading off to a sound almost inaudible. Heard for the first time at the back part of the room, it only requires the solemn intonations of an old organ to remind one of the service of the old Baptist church. But it becomes even agreeable in time, presented as it is, with the full *ore rotundo*, in sentences pregnant with richest import, axioms as it were, it is easy to understand the secret of his success. Here, also, every facility for

explanation and illustration exists. The microscopes are placed on the stands, while drawings and specimens are passed around the class. The perfect nonchalance with which he pricks the finger of a patient to ascertain if the drop under the microscope evidence a simple anæmia or a leucocythemia, is a matter of at least surprise to the uninitiated. Every attempt to improve the blood in the latter condition, he informs us has hitherto proven futile, hence the importance of a proper diagnosis. To exhibit the peristaltic movements of the stomach in a case of carcinomatons stenosis of the pylorus, whereby the organ was enormously displaced and in proof that the tumor below the umbilicus was really the distended stomach, he administered a carbonate, followed by an acidulated drink; the effect was almost instantaneous, the movements of the walls under the attenuated integument being palpable to all.

The length of this letter already totally precludes any attempt at a report of further procedures, which I may, perhaps, transmit in a future letter. WHITTAKER.

NEW YORK CITY, DECEMBER 15, 1868.

DEAR JOURNAL: When last we wrote, the sessions at the different medical colleges of this city were about commencing. Now, the lectures are nearly one-half over, and the lecturers are looking forward, with pleasure, to a short period of repose during the approaching holidays. While the students will hail them no less eagerly, as a golden opportunity for writing the dreaded and long-thought-of thesis. If they only knew, as do we who have passed through the mill, how often the thesis that has cost so much labor and so many wakeful nights, is neglected and packed away without ever having been read, they would not feel so much anxiety about it. A thesis does not amount to much, at any rate, in these days, when they can be bought by the dozen in almost any second-hand book store; nor, in fact, does an examination, for too often the poor student, on these awful occasions, has frightened out of him the little that he does know. The system of daily recitations, so often urged in our medical journals, seems to us the most feasible way of ascertaining the true status of the student's acquirements, and it is certainly a most improving and instructive method of driving home the great truths to which the student is daily listening. The system of daily quizzes, is now an established institution in our city colleges, and one from which the inquirer after medical knowledge

will derive great benefit. During the holiday week, many of the students spend their hours in making fine dissections, as their time in the dissecting room (that great store-house of instruction, in which so many distinguished men have laid the foundation of their renown) during the active lecturing season is necessarily somewhat limited, as then the evening is about the only time they have to dissect. Classes are formed during Christmas week, and also at the close of the term, for practical instruction in the various surgical operations that can be performed upon the human body. Subjects are plenty with us, being obtained from the great charity hospitals, and, for a reasonable sum. All have an opportunity of practicing upon them the different amputations, ligations of arteries, operations upon the eye, &c., before they go forth to actual practice and to try their skill upon the living. Dr. Valentine Mott, in all his operations, even in the hight of his illustrious career, and in operations that he had performed over and over again, was in the constant habit of going through the operation with the most scrupulous care and precision upon the cadaver, before he performed it upon the living patient; and so should every good surgeon do if it be a possible thing—and in this city it is.

Ah! what a beautiful example to us young men of the profession, was that aged patriarch, with his lofty enthusiasm for his noble calling, with his pure, high-souled advice, and his fervid eloquence! What an example to us of indomitable energy, of ceaseless perseverance, and never-tiring industry! Well do we remember in our student days, how, on a certain occasion, upon examining some most beautiful and intricate dried anatomical specimens, prepared by himself, we asked him how he ever found time to do such work, amidst the multiplicity of his many pressing duties. "My dear boy," was his reply, with one of his old genial smiles, "these things I did, while others slept!" To us, that answer contained a mighty lesson. His form was bowed with age, and his head whitened with the frosts of many winters; but like the great old patriot that he was, he stood stoutly at his post of duty, till death struck him down. All honor to his memory, and to the many virtues of his life which shed abroad on every hand an external fragrance!

Each winter witnesses more or less change in the lecturing corps of our different medical colleges. New blood is constantly being infused, and some of the veterans in the service are gradually retiring from full service in the field. Last spring, at the Bellevue Hospital Medical College, Prof. James R. Wood resigned his position as lecturer in that in-

stitution, although he still holds his valuable clinics there, and this winter, Prof. Fordyce Barker resigns his chair. He however, like Prof. Wood, much to the satisfaction of students generally, and of his numerous friends in this city, will still continue his clinical teachings. Dr. Barker is an eloquent lecturer, a profound scholar, a genial gentleman, and one of the most popular men in the profession in New York. For a number of years, he has been suffering from a partial loss of voice, occasioned by lecturing while laboring under a severe cold, and this has made public lecturing a great exertion for him. This misfortune, we presume, is the cause of his resignation, which will be a great loss to the college· Dr. Barker spends each summer traveling throughout Europe, and it is a singular fact, that no sooner does he set foot upon that continent than his voice is restored to its natural tone and vigor, so much so, that friends meeting him in some European city, often have congratulated him upon the recovery of his voice. No sooner, however, does he return to this country, than his old hoarseness returns. His clinics are always most entertaining and instructive.

The opening exercises last month, of the Woman's Medical College, which is located at No. 126 Second Avenue, were of a most interesting nature. The session consists of the usual period of five months. The introductory address was delivered by Dr. Elizabeth Blackwell, and was listened to with fixed attention by a large and fashionable audience. In the course of her remarks, she stated that the college comprised nearly twenty female students, and required a thorough three years' course of study. When desirable, it availed itself of both the water-cure and botanic treatment, and has been the first institution in the country to install a Professor of Hygiene. Dr. Blackwell alluded to the increasing liberality experienced by society at large, upon the subject of woman as a medical practitioner, and concluded by the hope that soon all obstacles to her finding occupation in any sphere suited to her powers, would entirely disappear.

Interesting addresses were also made by Hon. Henry J. Raymond, and by Prof. Willard Parker, who warmly welcomed women to medicine, as one of those spheres to which they are peculiarly adapted. A doctor is born, not made, remarked the professor, and is found naturally in both sexes.

Miss Putnam, a daughter of a member of the well-known publishing firm of Putnam & Son of this city, has recently been admitted to her first medical examination in Paris. The Minister of Public Instruction, some time since, opened the gates of the University to her, and

now they are opened to all female medical students. Since she has been in Europe, Miss Putnam has contributed several admirable medical articles to journals in this country.

Several of the charitable institutions of this city, have been lately holding their anniversary meetings. The New York Society for the relief of the ruptured and crippled, held their sixth semi-annual meeting, at their rooms, No. 39 Bible House. There has been contributed ten thousand dollars of the one hundred thousand dollars required to complete their hospital, now in course of erection at the corner of Lexington Avenue and Forty-Second street. Dr. James Knight, the resident physician, stated in his report, that one thousand two hundred and sixty-nine patients had received treatment during the past six months, and that the office of the institution was not large enough to afford, at times, even seats for the cripples applying for relief. Hence, there was great necessity for enlarged accommodation and means to sustain this great charity.

There are, at present, in the New York State Soldiers' Home, (Ira Harris' Hospital), over three hundred maimed and crippled soldiers, collected from all portions of the State, but more especially from this city. This Home commends itself to the consideration of the benevolent and patriotic everywhere, and bespeaks for itself that warm sympathy and material aid to which the men who have sacrificed so much are so justly entitled, and should immediately receive.

Last month, the annual sermon for St. Luke's Home for Women, was preached in Trinity Chapel, west Twenty-Fifth street, by Rev. Morgan Dix, D. D. This institution is located in Hudson street, opposite Grove street, and is well known in certain circles for its care of the aged poor women of the Episcopal faith, and is supported by the donations of the various churches of that denomination in this city.

At the annual meeting of the Woman's Hospital Association of New York, Dr. Emmet's report for the year, was as follows: Admitted, two hundred and twelve patients; discharged, one hundred and sixty-eight; cured, one hundred and thirty; dismissed as unsuitable cases, sixteen; left without permission, eight; not materially benefitted, seven; deaths, six; remaining in hospital on November 1st, forty.

"The governors of the New York Hospital, on Broadway, between Duane and Worth streets, finding the income of the institution inadequate to its support, have determined to lease or sell the property now occupied, which has become immensely valuable, and to obtain a less expensive locality for building. Such a change may be necessary as a

matter of economy; but the removal of the hospital to an extreme part of the island, as is proposed, would greatly impair, if not destroy its usefulness. Just such a hospital is required in the very heart of the city, where it will be accessible in all cases of emergency. We hope this valuable humane institution will not be taken out of the city."

This hospital was chartered as long ago as the year 1771. Contributions were made towards it from London and other places in Great Britain, chiefly at the solicitations and through the efforts of Drs. Fothergill and Duncan. Unfortunately, in February, 1775, when nearly completed, it was almost totally destroyed by fire. Owing to this mishap, and the revolutionary war, the hospital was not re-built and ready for the admission of patients until January 3d, 1791. Since that time, many additions and improvements have been made, such as the South Hospital, erected in 1806, and subsequently demolished and re-built in 1853–55, and the North Hospital, erected in 1841. The grounds are handsomely laid out, and the site high, and well adapted for free ventilation. The main hospital is built of gray stone, in the simple Doric style, and has three stories with a basement. In the third story is the operating theater. This, the principal building, has accommodations for one hundred and fifty patients. From its cupola can be obtained a fine view of New York City, harbor, and surrounding country. The South Hospital will accommodate some two hundred and fifty patients, affording each patient one thousand cubic feet of space. The North Hospital will accommodate about one hundred and fifteen patients. The hospital is under the management of a board of twenty-six governors, elected each year at the annual meeting. There are two surgical divisions, each of which has a resident surgeon, with a senior and junior assistant. There is one house physician who has charge of the medical wards, who also has under him two assistants. For its visiting physicians and surgeons, it has some of the best talent in the city, as for instance, Drs. Willard Parker, W. H. Van Buren, Thomas M. Markoe, Gurdon Buck, &c. The New York Hospital has been principally devoted to the reception of those patients whose diseases were considered curable—with the exception of cases of accidents, which are received at all hours. "The following three classes only are received: *First*—Those without means of payment, who are admitted according to the judgment of a committee on their several cases. Such patients constitute about forty per cent. of the whole number under treatment. *Second*—Seamen, paid for at the rate of seven dollars a week from the "hospital money" collected under the laws of the United

States; and, *Third*—Pay-patients"—male patients pay six dollars per week board, and female patients five dollars. Strangers in the city, suddenly attacked with sickness, avail themselves of the advantages of this hospital. Clinical instruction is given regularly throughout the wards.

In 1796, a library was founded, and now contains between seven thousand and eight thousand volumes, and in 1840, a pathological cabinet was commenced, which has grown to immense proportions.

The two operating theaters, the one already spoken of, in the main building, and the other in the South Hospital, will accommodate three hundred students. "It is thus that this great charity becomes not merely a hospital for the relief of the sick and infirm, but is now recognized as a centre from which is derived a large share of that practical knowledge for which the American physician has become so famous." In this description, and in others that are to follow, we wish to acknowledge our indebtedness for many of our facts, to a valuable work not long since published, entitled "The Charities of New York." This work is a most interesting one, and contains much useful information. But, Mr. Editor, space will not allow us to proceed further, and therefore, wishing you and every reader of the *Western Journal*—especially our fair lady readers—a very merry christmas and happy new year, we will bid you an affectionate farewell.

Yours, very truly,

JAMES B. BURNET, M. D.

CASTLETON, INDIANA, DECEMBER 21, 1868.

DR. PARVIN—*Sir:* I have been interested in reading a report of "A Singular Case," by Dr. Wm. Mason Turner, of Philadelphia, in the December No. of your Journal. Inasmuch as I was once called to treat a similar case—one that not only baffled me, but a number of other physicians—and as Dr. T. asks "what was it?" I will state that the conclusion I came to in my case was, *Cardiac Neurosis*. Had I time I might bring forward quite an array of evidence upon which I predicate this opinion; but like a certain Indiana Quarter-Master once did, I will content myself by simply referring to some of the evidence, leaving Dr. T. and the reader to "straiten it out for themselves."

C. Handfield Jones, on Functional Nervous Diseases, (*Cardiac Neurosis,*) pages 218, 219, 220, cases 102, 103, 104, &c., &c. In the his-

tory of these cases he will find a striking similarity to his. In this connection, I think, had he examined the "old man's" urine, he might have found some assistance, for be it remembered, the "oldest inhabitant" said the "old man" once had "rheumatiz."

I suppose if the Doctor has not pretty thoroughly tonicised the "old man," he will have, if he has not already had, an opportunity of looking *over* his morning paper at him, in another "hullaballoo."

Respectfully,

COUNTRY DOCTOR.

THE HYPODERMIC SYRINGE IN GENERAL PRACTICE.

MY DEAR PROF. PARVIN: When a student of medicine, an anecdote was related from one of the professional desks in the University of Pennsylvania, to the effect that Dr. Physick was once called to reduce a luxation of the lower jaw of a woman who was a common scold; luxated in one of her fits of scolding. Chloroform being then unknown, and the patient very irritable, his efforts at reduction failed; so, prescribing a pint of gin, to be taken in half tumbler full doses every half hour until she was tipsy, he left her, to return again in two hours. Upon his return at the specified time, he found the gin all gone and the woman sober! Trying again to reduce her jaw, a second failure was made. Taking a cigar from his pocket he lit it, and commenced smoking, puffing the smoke in her face, requesting her to take very full breaths. In ten or fifteen minutes she became sick at the stomach, was relaxed, and then he found no difficulty in re-placing the jaw.

The moral of the story was, that it required a good deal more gin to make a regular gin tippler, though a woman, drunk, than a teetotaler, man or woman. But not having added smoking to her other accomplishments, this brought about the necessary relaxation. This was re-called to my mind by reading Dr. Catlin's letter, published in your most excellent Journal for the month of December.

From a somewhat extended experience with the hypodermic syringe, in general practice, having used it perhaps, not less than five hundred times during the last five years, I am positively prepared to assert that people who are not habitual opium eaters, in central Ohio, will not tolerate such doses of morphia as Dr. Catlin uses, without the occurrence of the most distressing sequelæ, in a majority of cases.

If Dr. C.'s patients are not regular opium eaters, or he is not mistaken about the doses used, or the quality of morphia different from that supplied to physicians in this city, then the people among whom his lot is cast, bear larger doses of morphia by hypodermic injection, than those among whom the writer resides; for, if he used such doses in central Ohio, he would speedily reduce them, or there would soon be some proceedings before a coroner in which he would have some personal interest.

Dr. C., in his letter, states that he treated cholera morbus in 1825; therefore, he has been in practice forty-three years certainly, possibly more. and must have attained that period of life when enthusiasm on most subjects has been very much toned down, and all statements contributed for publication and for the instruction of his peers in the profession, should partake of the gravity becoming to advancing life; and yet, though the writer is just a little enthusiastic on the subject of hypodermic medication. When the results of Dr. C.'s experience is contrasted with his own, they are found to differ so widely, as to make it absolutely needful to conclude that Dr. C. is mistaken in some way. And the purpose of his letter is to caution any of your readers, inexperienced in the use of morphia hypodermically, from using the doses he names. They are not only unnecessary, but positively hazardous. It is seldom that the same dose as would be proper and requisite by the mouth, can be used by the hypodermic syringe, without the most unpleasant sequelæ, as great prostration, alarm at the abrupt change of feeling, and prolonged and distressingly sick stomach. My own experience teaches me that one-half the dose by mouth need seldom be exceeded by the hypodermic syringe, unless utterly regardless of consequences.

A very carefully prepared article by the writer, on the subject, was read to the *Muskingum County Ohio Medical Society*, at its meeting in September last, and published in the *St. Louis Medical Reporter*, for the first October following, which may doubtless be had by any desirous of knowing the results of a somewhat extended experience.

A small monograph, entitled "On the dynamics, principles and philosophy of organic life—an effort to obtain definite conceptions of 'How do medicines produce their effects?'" will be published by Mr. P. M. Pinckard, No. 510 Pine street, St. Louis; and by Messrs. Balliere Brothers, New York; and by Messrs. Balliere, London and Paris, about the first of January, 1869, written by your present correspond-

ent, which, among other things, traces morphia by hypodermic injection into, through and out of the human system, trying to show what it does and how it does it, a copy of which will soon reach you, for criticism and review. Z. C. McELROY.

ZANESVILLE, OHIO, DECEMBER 22, 1868.

BIBLIOGRAPHY.

THE TRANSACTIONS OF THE AMERICAN MEDICAL ASSOCIATION.

Instituted 1847. Vol. XIX. Philadelphia: Printed for the Association, 1868. Pp. 497.

The National Medical Congress met in Washington last May, and had an interesting and instructive meeting. The next meeting is to be held in New Orleans, beginning on Tuesday, the 4th day of May. No session of the Association has ever been held in New Orleans; and for that and other reasons we may expect a large attendance, notwithstanding the remoteness of that city from the residences of those who have been the most constant attendants in past years.

President Gross' address is the first paper in the volume. The President very properly regarded himself as bound to look over the interests of the Association, and make such recommendations as, in his judgment, might tend to increase its usefulness, and add to its dignity and importance.

His first recommendation was, that more care be exercised in the admission of members. Personally he would be very liberal in this behalf, but the habit of admitting almost anybody that applied had been complained of, and, it was thought, had kept some old and influential members of the profession at a distance.

He recommended a more critical editing of the volume of Transactions, so as to keep out papers that had no substantial merit of originality.

He reviewed the subject of Medical Education, urging concert of action on the part of all the schools in amending the present course of study.

He advised the establishment of means to educate persons to the profession of nursing; he suggested that efforts be made to have a suitable medical man appointed in every judicial district, to assist the authorities in getting at the truth when medical facts and theories are involved in any suit at law; he desired to see something like reason and justice have a voice in fixing the rank and pay of surgeons in the navy; he thought great good would come of the establishment of a naval medical school; he was anxious that the Association should devise a method for preparing and publishing a register of physicians for the whole country; he earnestly advocated the organization of societies for the relief of the widows and orphans of indigent medical men; he wished to see the Association lend its influence toward the institution of veterinary colleges; he was of the opinion that the organic law of the Association should be altered so as to have the President elected by ballot instead of, as now, merely confirming the selection of a committee; he was opposed to what he termed the stringent restrictions placed upon the social aspect of the Association by a vote at the annual meeting at Cincinnati; and, finally, he was impressed with a conviction that the annual meetings were too short to insure the highest good they were capable of conferring.

We are more and more convinced of the propriety and good sense of this address, and the Association did wisely in appointing committees to investigate many of these points, and report to the next annual meeting.

Report of the Committee on the Rank and Regulations of the Medical Staff of the United States Navy. In this short paper the chairman, Prof. N. S. Davis, states that he furnished the Heads of Departments and members of both Houses of Congress with a copy of the address of Dr. Wood, made to the Association last year.

Report of the Committee on Medical Ethics. Dr. H. J. Bowditch made the report, closing with two resolutions: First, that we should look to the qualifications of those who sought professional fellowship with us, and ignore *sex* in deciding the point. This resolution was indefinitely postponed. But the Association need not hope to get rid of women doctors in this way. They may indefinitely postpone the subject, but it will definitely come back until they have the moral courage to meet the issue squarely, and define their position to the world.

The second resolution was in reference to Dr. Homberger, who was expelled with great good will.

The Committee on Prize Essays received four papers, but none of them were deemed worthy the prize.

Report of the Committee to Revise the Plan of Organization, was laid over for consideration next year. It proposes many important changes in the organic law of the Association.

Report of the Committee on Medical Education was made by Prof. A. B. Palmer, chairman, who expresses his disapprobation of what was proposed by the convention of teachers in Cincinnati in 1867, and in lieu thereof, presents a plan of his own concoction that he deems feasible, and feels sure would accomplish the end desired.

The Committee on Medical Literature began their service by requesting all the publishers of medical books and journals in the United States to send to the chairman "a copy of all medical books, pamphlets, essays, monographs, periodicals, reports, lectures, proceedings of societies, etc.," that they might issue, as early as convenient after publication. Up to the time of writing the report, no publisher had found it 'convenient' to comply with this simple, not to say modest, request. By some means, however, not clearly defined, the committee came to the knowledge of the existence of thirty-five journals, which they name by title, and of the publication of one hundred and eighty-nine books and pamphlets, which they give the title of, also. The committee declare that it was a pretty good year for medical publications, but a very poor period for sending them around to committees.

Report on Insanity, by Chas. A. Lee, M. D., is a scientific consideration of the subject, giving the proportion of the insane to the whole population in various countries, etc. He considers the insane in the States of this Union severally, and the provision made for them, and finds it inadequate. He points out a better and less expensive plan of caring for the insane than that now in vogue in this country.

John B. Chapin, M. D., contributes a paper *On the Provision for the Chronic Insane.* He argues that the State is as much bound to care for its chronic insane as for its acute, and, like Dr. Lee, advocates a simpler and more economical plan of providing for most of them in communities on a large farm.

Report on Topography, Climatology and Epidemic Diseases of West Virginia, by Dr. E. Hildreth. West Virginia is a State of mountains, and has a great deal of topography and climatology, but not much epidemic disease. It is full of minerals and mineral springs. We notice that in 1856 nearly sixty-two inches of rain fell in the western part of

the State, and in 1863 but about thirty-seven inches. Quite wide extremes.

A short and interesting *Report on the Climatology and Epidemic Diseases of the Dist. of Columbia*, is made by Prof. Antisell. Prof. A. thinks consumption especially rife in Washington City—not among the permanent inhabitants, but among the department clerks who come from the rural districts.

Report on Medical Topography, Meteorology, and Epidemic Diseases of Texas, by T. J. Heard, M. D. This opens with a brief account of the general subject, and then treats at great length of the epidemic of yellow fever in 1867, The mean annual average of rain fall for eight years, 1856–65, was 30.67 inches.

Dr. Condie's *Report on the Diseases of Pennsylvania*, presents nothing peculiar, but the Doctor thinks consumption is relatively on the increase.

The Conveyance of Cholera from Hindostan through Asia, to Europe and America, illustrated by four fine diagrammatic maps, is quite intelligible and very likely true.

A Series of Plans for the Collection and Statistical Arrangements of Facts in Regard to Climatological and Sanitary Conditions of the various States, were prepared by Wm. R. Thoms, M. D. There can be no doubt that the time has fully arrived when the Am. Med. Ass. ought to adopt some uniform method of having its statistical and scientific reports of this character made. Whether the plan presented by Dr. Thoms is the best, we can not decide, but the Doctor has paid much attention to these affairs, and seems to take hold of them *con amore*. The past volumes of the Transactions contain immense papers on these subjects, but so irregular and confused in their arrangement as to be but of very little value.

Report on American Medical Necrology, made by Dr. C. C. Cox, records the death of eighty-eight of the members of the Association which had come to his knowledge since the last annual meeting. The chairman had given such obituary notices of them as he was able to obtain—some pretty full, others a mere mention of time of decease. During the year, many eminent men of the profession went to their final rest.

Dr. J. S. Hildreth of Illinois, read the *Report of the Committee on Ophthalmology*. The object of his paper is to arouse attention to the claims of ophthalmology upon the profession, and does so by showing the advances made in this branch of medical science, and what is re-

quired in order that diseases of the eye may receive the attention they demand from the profession. This demand is to be met, "*First*—By increased accommodations for this class of patients, the present being entirely inadequate. *Second*—By providing for a more general, thorough instruction." The author thinks that the instruction given on this subject in our medical schools, entirely insufficient, and that a general understanding of ophthalmology should be required by all candidates for the degree of Doctor in Medicine.

Dr. L. A. Sayre of New York, presented a *Report on the Treatment of Club-Foot without Tenotomy*. Dr. Sayre holds that in the vast majority of cases of club-foot, the essential lesion is paralysis and not spasm of a certain muscle or group of muscles. The correctness of this idea being admitted, the indications for treatment are, "*First*—To restore the foot to its normal position, and to so retain it; and *Second*—To seek to develop the paralyzed muscles, that they may at last be sufficient of themselves to counteract those acting in opposition." He insists that the earlier we begin the treatment, the more surely and more rapidly will success follow. Various methods of treatment are noticed and objections to them pointed out. In the majority of congenital deformities, if taken immediately after birth, the hand can readily bring the foot into its normal position, while it can be easily retained there by the simple application of *adhesive plaster*. Full directions for applying this are given. Cases occur in which the muscular rigidity will not yield readily to manipulation; in these, a constant tractile force becomes necessary. For keeping this up, the plan suggested by Mr. Richard Barwell of London, is considered by far the best. In this plan, the elastic force of rubber tubing is employed. Full directions are given in reference to the plan of treatment.

Dr. Sayre believes that in most cases, tenotomy is not only useless, but positively injurious—that only in those cases where the muscles heve become permanently shortened or the fasciœ have become contracted as the result of inflammation, is tenotomy justifiable.

An improved club-foot shoe is illustrated and described, and a number of cases reported in detail, illustrative of Dr. Sayre's plan of treatment.

We regard this report as a valuable one, and believe that it is well calculated to lead to a more philosophical treatment of club-foot than that usually instituted.

Dr. Gurdon Buck presented *A New Method of Reconstructing the Lower Lip, after its Removal for Disease, illustrated by Two Cases of*

Epithelioma. With the accompanying drawings, Dr. B. has made a very plain presentation of a very neat and satisfactory operation.

A New Treatment for Congenital Talipes, by Dr. I. N. Quimby, consists of the application of adhesive straps and a roller, when the child is from three to four weeks old.

The Treatment of Syphilis by Hypodermic Injection, is recommended by Dr. L. Elsberg; but we question whether the method has any special advantages.

Dr. P. F. Eve's *Safe and Effectual Operation for the Radical Cure of Varicocele*, consists of cutting away of a part of the thickened scrotum, and, if necessary, tying the enlarged veins with animal ligatures.

A HANDBOOK OF VACCINATION.

BY EDWARD C. SEATON, M. D.,
Medical Inspector to the Privy Council. Philadelphia: J. B. Lippincott & Co. 1868. Pp. 383.

For two generations no separate work on vaccination has issued from the press. It is true that nearly every standard work on the practice of medicine has treated the subject more or less fully, but still much has been left unsaid that was imperiously demanded for the full cultivation of the student in this branch of medical science.

As the consequence of this state of affairs, there is now existing among practising physicians, a great want of a clear, well-defined and unwavering idea of what vaccination is, and how far it can be relied on to prevent variola. To one who has made no inquiry in this direction, this declaration may seem like a wanton and unsupported charge against the profession. But let any one investigate the premises, and he will be surprised to find how many practitioners in good standing there are who have no well-settled convictions whether it were better to vaccinate a child within the first year of its age, or wait until it be five; nor are they sure whether vaccination is a certain protection against variola; whether we should re-vaccinate; whether it is possible to tell, by examining the cicatrix, the amount of protection; whether the virus recently from the cow is better than that long descended through human systems; whether scrofula may be transmitted through vaccination, or, worse still, syphilis; and have no definite conclusions on many other points relating to vaccination, whereon they should be

satisfied, if possible, both for the ease of their own consciences, and the welfare of those who are committed to their professional care.

Now, here is a manual on vaccination that begins at the beginning, and pursues the theme systematically to the end. In its fourteen chapters, one hundred and fourteen sections, and then various sub-divisions, the reader will find everything pertaining to the subject fully, but not tiresomely, discussed, and even the busy practitioner will discover the numerous sub-divisions so clearly head-lined that he can, in a moment, refer to any part of the subject he may desire.

Let us hope that this manual will find its way to the library of every physician who has not already fully studied vaccination in all its relations, and that it will prove the harbinger of that better day when the priceless boon given to mankind, through the instrumentality of Jenner, may be perfectly understood, and its real merits fully appreciated. J. F. H.

A TREATISE ON PHYSIOLOGY AND HYGIENE, FOR COLLEGES, SCHOOLS AND FAMILIES.

BY J. C. DALTON, M. D.,

Prof. of Physiology in the College of Physicians and Surgeons, New York: with Illustrations. New York: Harper & Brothers. 1868. Pp. 399.

It is gratifying to know that our common schools and colleges have within their reach a work on physiology, written by the best author in that branch of medical science who uses the English language.

There can be no doubt that Prof. Dalton has done more to give a correct knowledge of physiology to medical students than any preceding author, and we find he has brought the same scientific accuracy the same good common sense, into this little work, that is so marked a feature in his more elaborate treatise.

He has always manifested a remarkable aptness in the force and simplicity of his language to illustrate the ideas he wishes to present, and in the work before us, he has lost nothing of this good reputation.

He has avoided the use of professional terms in this school-book as far as possible, and at the end of the volume has added a glossary to explain such as could not be dispensed with.

The book is divided into four sections: I. The mechanical structure of the human body; II. Its nutrition; III. The nervous system; and IV. The developement of the body.

There are eighteen chapters, each followed by a series of questions pertinent thereto, the whole illustrated by sixty-seven wood-cuts, admirably adapted to the end in view.

We hope to see this excellent book introduced into, and adopted by, our common educational institutions at an early day. J. F. H.

INTRODUCTORY ADDRESS, DELIVERED BEFORE THE CLASS OF THE MEDICAL COLLEGE OF OHIO, TUESDAY, OCTOBER 6, 1868.

BY THEOPHILUS PARVIN, M. D.,
Professor of Medical and Surgical Diseases of Women.

This address will commend itself to every right-thinking man, as a chaste, earnest, truthful effort to present the real status of the physician; to declare the end that all should seek, and the means whereby that end may be attained.

We are not of those who think the physician is a better or a wiser man than his fellow-men; that he is not appreciated by the community; that he makes sacrifices which pass unnoticed; and that he performs much service that goes unrequited. On the contrary, we regard doctors as a fragment of the human family, who are just as good, and no better than a like fragment taken from the same walks in life, and trained to any other business. It is not the calling that makes the man, but the faithfulness with which one performs the duties and fulfills the responsibilities that pertain to the position he occupies, that seals his manhood, or marks him for reprobation.

It is because Prof. P. declares, "It is my desire to show that medical study and practice meet the highest purpose of earthly existence," and then, with artistic skill, draws the picture of the humanly perfect physician, that we so much wish that every one could have this ideal before his eyes continually, and never feel satisfied with himself except when striving to attain to its excellence.

Some one has said that the study of medicine tends to produce atheistical notions; but to us it seems a preposterous idea; the study of the starry heavens themselves does not more surely lead to the conviction of one omnipotent, allwise, everlasting God, than does the study

of medicine. After enforcing this view, the speaker gives us this sententious phrase: "*An undevout physician is mad.*"

The address teaches us, too, that the study of medicine expands the intellect, enlarges and enlightens our moral nature, cultivates our sense of the beautiful, and brings us into harmony with all that is noble, just and true. And certainly the practice of our profession should stimulate our benevolence, increase our humanity, excite in us humility, banish all idleness, mental and physical, and fairly fill our souls with charity, the greatest of human virtues.

But, alas! how few of us have lived up to our privileges, and given domicile in our souls to these enumerated virtues! How many of us have failed to act the censor to ourselves, severally, and, instead of introverting our vision and searching out, condemning and amending our own shortcomings, have busied ourselves with seeking out the foibles of our professional neighbor, and striving to make mountains out of his molehills, that in their dark shadows we may have some chance to hide our own imperfections. That such ignobility exists among us is nothing against the science or the art of medicine, but everything against the individual who has failed to be inspired by its tendencies. Perhaps some of us would be better if the perfect ideal were more frequently brought home to our observation; let us, therefore, give thanks to the author of this address for the bright picture he has drawn, and make a hearty welcome to the lesson of improvement he has given us. *

THE OPIUM HABIT, WITH SUGGESTIONS AS TO THE REMEDY.

Published by Harper & Brothers, New York. Received through Bowen, Stewart & Co., Indianapolis, Indiana.

This is a patch-work book. The first seventy-six pages are the experiences of the unknown author in his successful attempt to abandon the use of opium; then follow some two hundred and fifty-nine pages from De Quincey,* Coleridge, Fitz Hugh Ludlow, with narratives, in reference to the use of opium, of William Blair, of Randolph, Wilberforce, etc., etc. We certainly can approve the wisdom of the selections, for they are both pertinent and interesting. Take

*We notice that some of our contemporaries write very fluently of De Quincey, but misspell the name, making it De Quincy.

the book as a whole, and we heartily commend it to both lay and professional readers.

Not the least interesting portions, though for many years familiar to us, are those relating to De Quincey and Coleridge. It is somewhat remarkable that these two men of such wonderful endowments and culture, between whom there existed for years an ardent friendship, should both have been opium-eaters, and in each the habit induced by originally taking the narcotic for the relief of physical suffering. The genius of the "rapt one of the God-like brow," for thus Wordsworth speaks of the wonderful Coleridge, attracted De Quincey when quite a young man to him, coming with something of that old spirit of discipleship which Carlyle so berates the present age for being deficient in; even his residence in the "Lake Country" of England, a region of romantic beauty, was determined on partly that he might be near his great master. There is still standing, or at least there was standing in 1852, when with a knapsack upon our back we visited that part of England, the house in which De Quincey lived, and where we believe his terrible struggles to emancipate himself from the dominion of opium-eating occurred—struggles which in spite of his own statements and of popular belief to the contrary, *were in vain*. On this point we are glad to find the author of this book quoting Mrs. Gordon, the daughter of Prof. Wilson, who in the life of her father, states that while De Quincey asserted to the last he had abandoned his pernicious habit, it was only modified—never abandoned. When in Edinburgh in 1864, we received from *one who knew De Quincey intimately and at whose house he was a frequent visitor, a similar statement—he would beg for laudanum at night, and then continue his literary labors under its inspiration until the dawn; pursued by bailiffs to be arrested for debt, he would seek pecuniary favors which he would never have required had he properly cared for his patrimony, or indeed faithfully performed all his literary engagements, and carefully husbanded their results.

Coleridge, on the other hand, did reform, and in the calm evening of his days was wholly exempt from the vice which for many years had marred his usefulness and his happiness, and made him so shamefully negligent of his duties as husband and father.

Let a man study the lives of these two men if he would justly appreciate the terrible curse of opium-eating, even when indulged in by

*Miss Blackwood, daughter of the original publisher and sister of the present publisher of Blackwood's Magazine.

those whose richly stored minds and wonderful genius could elicit the highest pleasure and the most magnificent visions possible under such indulgence. He will thus be all the better fitted, should he be in peril of the habit, to trample it in the dust, and all the better fitted too, to warn others who may be treading the verge of a fearful abyss from whose depths so few are ever permanently rescued.

One day, this by the way, however, we hope to have the time to show that medicine owes somewhat to Coleridge, more especially as it pertains to his theory of life, a theory which, with some modifications, we believe, has within a few years been adopted and advocated by one of the leading London physicians. T. P.

A TREATISE ON THE PRINCIPLES AND PRACTICE OF MEDICINE; DESIGNED FOR THE USE OF PRACTITIONERS AND STUDENTS OF MEDICINE.

BY AUSTIN FLINT, M. D.,

Professor of the Principles and Practice of Medicine, in the Bellevue Hospital Medical College, &c. Published by Henry C. Lee, Philadelphia. Received through C. P. Wilder, Indianapolis.

The second edition of "Flint's Practice," was issued only two years since, and now the third edition, thoroughly revised, is given to the profession. Such a demand for this work is unequivocal evidence of the high appreciation entertained for it on the part of physicians, and also would seem to render needless all critical consideration of it. The previous editions have received hearty commendation in this JOURNAL, and now we can but reiterate those praises, adding that this last edition evidences the careful revision of its author, so that the work is brought fully up with all the recent advances in medicine. We heartily trust that its able, eminent and most industrious author may be spared to see many subsequent editions of this, the great crown of his professional life. T. P.

OBITUARY.

PARIS, ILLINOIS, 1868.

DIED, in this place, on Tuesday, November 24th, after a brief illness, of congestion of the stomach and bowels, Henry W. Davis, M. D., in the forty-second year of his age.

Dr. Davis began the study of medicine in Carlisle, Indiana, with his uncle, Dr. Helms, and concluded while attending Medical College in Baltimore, as private student of Prof. Samuel Chew, M. D., and graduated at the same college in the spring of 1852. In 1854 he located in this place, and began the practice of his profession (associated with Dr. John Tenbroeck,) which he pursued with great credit and satisfaction to himself and his patrons until April, 1861. On the breaking out of the rebellion, he entered the service as a private, company E., twelfth Illinois infantry volunteers. Shortly after reaching Springfield, he went before the State Board of Medical Examiners, and was made a surgeon of volunteers, and immediately became a member of the board, which position he held until, by his request, he was appointed surgeon of the eighteenth regiment Illinois infantry volunteers, with which he served until made assistant surgeon United States volunteers, and assigned as Inspector of the sixteenth A. C.

In 1865 he was promoted to surgeon United States volunteers, and assigned to duty as Medical Director, Department West Kentucky, with head-quarters at Paducah; where he continued until the close of the war.

Since Dr. Davis became a citizen of this State, he has been notably identified with all medical organizations of county, district and State, and his name is recorded in each as the author of valuable contributions to their medical archives.

From the effects of a dissection-wound, received while on duty at Little Rock, Arkansas, he was disabled from engaging in the general practice of medicine; but he gave his attention to surgery, in which he excelled, and to which he was specially devoted. Few men enjoyed more of the confidence and admiration of his associates than Dr. Davis, and none died more lamented for his professional, literary and social accomplishments.

At a meeting of the class of the Medical College of Ohio, the following resolutions were adopted as a mark of respect for the memory of William H. H. Austin, a fellow-student, who died of typhoid-fever, on Wednesday, December 16th, 1868, between the hours of eight and nine A. M

Whereas, It has pleased Him whose mysteries are past finding out, to remove from our midst our classmate, William H. H. Austin, in whom we recognized a faithful student, genial companion and christian gentleman. Therefore, be it

Resolved, That in the death of Mr. Austin the class has lost a good and much respected member, and the community in which he lived a much esteemed citizen.

Resolved, That while we submit to the will of Him who ruleth all things, we deeply sympathize with the friends of the deceased—we tender them our sincere and unaffected condolence in their sad bereavement.

Resolved, That a copy of these resolutions be presented to the parents of the deceased, and that they be published in the *Western Journal of Medicine*.

F. A. POWELL,
G. F. THOMIN,
W. E. DE COURCY,
E. J. GALBRAITH,
Committee.

B. W. SULLIVAN. *Secretary.* O. H. SAXTON, *Chairman.*

MISCELLANY.

BARON JAMES DE ROTHSCHILD.—The great financier had much to do with our profession. Dupuytren owed to him a great part of the large fortune which he left his daughter. The great surgeon treated the great financier for a fractured thigh, and Rothschild paid him one hundred thousand francs for his attendance. Moreover, Dupuytren left his fee in his patient's bank, where it multiplied enormously by participating in the good fortune of a house that never knew reverses. To the five million francs which Dupuytren left, Rothschild's one hundred thousand francs contributed not a trifle. Dupuytren knew this well, and was terribly mortified when he learned that Astley Cooper had left a fortune of eleven million francs, the whole of it acquired by practice. M. Rayer was, until his death, the physician as well as the friend of the Baron, who persuaded him to buy, when it could be had at a low figure, the beautiful hotel of the Rue de Londres, which has since quadrupled in value. Rothschild has been the efficient patron of many of our *confreres*, especially those of his own persuasion, MM. Madl and Gruby among others. In his later years he fell into the hands of the homœopathists. The Paris sight-seeing public had been terribly disappointed at not seeing the splendid funeral procession it expected. It was of the humblest kind; but that this has not resulted from parsimony, the liberalities which have been showered upon the poor of Paris by the Baron's widow testify.—*Union Medicale.*

METEOROLOGICAL REPORT FROM THE INDIANAPOLIS ACADEMY OF MEDICINE,

BY W. J. ELSTUN, M. D., METEOROLOGICAL COMMITTEE.

SUMMARY OF ALL OBSERVATIONS FOR THE AUTUMN OF 1868.

AUTUMN, 1868.		SEPTEMBER.							OCTOBER.							NOVEMBER.							Means and Totals for Season.
		Day.	7 A. M.	Day.	2 P. M.	Day.	9 P. M.	Day.	Means and Totals.	Day.	7 A. M.	Day.	2 P. M.	Day.	9 P. M.	Day.	Means and Totals.	Day.	7 A. M.	Day.	2 P. M.	Day.	9 P. M.	Day.	Means and Totals.	
Barometer freezing point.....	Min...	22	29.00	22	28.96	8	29.05	22	29.03	7	29.01	7	28.96	27	29.10	7	29.05	18	29.03	25	29.01	25	28.95	25	29.05	.....
do. do.	Max,..	17	29.64	17	29.57	16	29.63	17	29.57	17	29.80	17	29.76	17	29.75	17	29.77	23	29.69	23	29.63	23	29.64	23	29.63	.....
do. do.	Mean..	..	29.33	..	29 29	..	29.31	..	29.31	..	29.41	..	29.36	..	29.36	..	29.37	..	29.37	..	29.33	..	29.33	..	29.34	29.34
Thermometer.....	Min...	26	35.5	24	46.5	25	41.5	25	45.7	23	25.5	25	43.0	17	30.0	17	34.3	24	25.0	17	29.0	19	26.0	19	28.3	.....
do.	Max...	12	70	8	81	8	73	12	73.8	7	63.5	7	71.0	30	66.5	2	66.1	8	59.0	3	63	8	66	8	61.0	.....
do.	Mean..	..	56.3	..	67.5	..	58.5	..	59.7	..	44.1	..	59.8	..	47.5	..	50.5	..	35.9	..	47.4	..	39.9	..	41.5	50.6
Pressure of Vapor.....	Mean..	..	0.409	..	0.475	..	0.445	..	3.443	..	0.204	..	0.307	..	0.276	..	0.277	..	0.189	..	0.218	..	0.205	..	0.204	0.308
Rel've Humidity (100 being satur'on)	Mean..	..	88.6	..	69.3	..	87.0	..	61.2	..	79.4	..	58.6	..	82.7	..	73.3	..	85.2	..	65.3	..	81.2	..	77.2	70.6
Clouds.—No. times no clouds visible.	.....		10		3		14		27		8		6		15		29		29		3		11		16	72
No. times entire cloudi'ss.	.....		13		10		9		32		7		5		9		21		14		14		12		40	93
No. times partial cloudi'ss.	.....		7		17		7		31		18		20		7		45		14		14		7		35	111
Mean am't of cloudiness (scale 10)..	.....		5.50		5.83		4.20		5.18		5.13		4.77		3.68		4.54		7.07		6.57		5.13		6.25	5.32
Whole day of entire cloudiness.....	.....		....		....		....		2		....		....		.....		2		....		....		.....		8	12
Whole day without cloudiness.....	.....		....		....		....		1		....		....		....		4		....		....		....		0	5
No. times rain fell.....	.....		....		....		....		9		....		....		....		6		....		....		....		3	18
No. times snow fell.....	.....		....		....		....		0		....		....		....		0		....		....		....		2	2
Am't rain & melted snow in inches..	.....		....		....		....		5.31 in.		....		....		....		1.16 in.		....		....		....		1.16 in.	8.13 in.
Amount of snow in inches.....	.....		....		....		....		0		....		....		....		1.16 in.		....		....		....		1.25 in.	1.25 in.
Winds.—No. times.....	W.....		0		0		0		0		0		0		0		0		0		0		0		0	0
do.	N. W..		10		9		14		33		6		8		11		25		14		8		7		29	87
do.	S. W..		7		15		4		26		5		15		9		29		11		18		18		47	102
do.	E.....		0		0		0		0		0		0		0		0		0		0		0		0	0
do.	N. E...		3		1		1		5		6		0		5		14		0		0		1		1	20
do.	S. E...		8		5		9		22		14		5		9		28		4		4		3		11	58
do.	N.....		0		0		0		0		0		0		0		0		0		0		0		0	0
do.	S.....		0		0		0		0		0		0		0		0		0		0		0		0	0
do.	O.....		1		0		2		3		0		0		0		0		0		0		0		0	3

A DROPPED FEE.—A celebrated surgeon was called in consultation, a few days since, to the house of Count B., who slipped a louis d'or into his hand as he was leaving. This was poor pay, and our surgeon is no lover of poor pay. Making a grimace, he let his louis fall, and the Count stooped down, picked it up and restored it to the Doctor. The surgeon, however, stooped down in his turn, and pretended to be looking for something. "What do you seek, Doctor?" was the question. "I am looking for the other."—*Presse Belge.*

QUACKS AND QUACKERIES.—It may be expected from what I have already said, that I shall forthwith proceed to call in question the consort of the people with quacks; or pass an anathema on quacks and quackery individully and collectively. From this I abstain. Consort of the community with quacks is so obviously the result of ignorance, that if the most moderate share of attention were given to the subject, if a tithe of the attention I have prayed on behalf of the profession itself were given to the subject, communion with quacks and their foolish arts would naturally cease. As to the quacks, to notice them were to elevate them. Belonging strictly to the worst of the criminal classes, they are moved by no sentiments which the most acute criticisms could touch. A professed gambler may have sense of honor, a pickpocket may have skill, a professed burglar may have courage; the professed quack has the sins of them all, the saving qualities of none. He is, because he is permitted, a forced necessity of morbid minds. One thing only would I note in his history as most wonderful, viz: that the grand disseminators of human knowledge, the grand teachers of moral truths, the proprietors of the fourth estate allow him unblushingly to deface their fair pages with his falsehood, his snares, his open loathsome sin. Day by day the press, in daring faultless language, and sentiment, exposes vice and purifies the thought of the world; day by day, in the greater number of its organs, it sells itself to the advertisement of immoralities worse than the worst it endeavors to remove.—*From Dr. Richardson's address to the St. Andrews Medical Graduates' Association.*

EDITORIAL AND MEDICAL NEWS.

OUR CONTRIBUTORS have been so generous that but little space is left for any words from the editor.

We are sure that our readers will readily judge this the best number of the WESTERN JOURNAL OF MEDICINE ever issued. And we trust that the future numbers of the JOURNAL shall be equally good, if not still better. Next month Dr. Woodworth of Fort Wayne, whom many of our readers know as one of the ablest and most scholarly physicians

in the State, promises an article on *Tuberculosis;* we have already received an elaborate essay on *Hospital Gangrene* by Dr. Hudson of Cincinnati, and a report of *Case of Injury to the Head* by Dr. Haymond of Monticello, and a very able paper upon *Effusions into the Pleural Sac, and their Treatment by Paracentesis*, by Prof. Coleman Rogers of Louisville, Kentucky. Such is part of the bill of fare for February.

Now may we ask our subscribers to do a few things in behalf of the JOURNAL?

First—Let them not be content with being subscribers, but contributors as well. Every one can add something to the stock of medical knowledge. Let us have reports of cases, brief abstracts of the proceedings of medical societies, discussions of medical opinions, criticisms of medical books, et cetera.

Second—Be not only subscribers and contributors, but induce your professional friends to follow your example. An increased subscription list will make the JOURNAL more valuable to every reader. A little exertion would give us within a month five or six hundred more subscribers; and we most earnestly request this exertion on the part of our friends.

Third—Prompt payment of subscriptions wonderfully facilitates the prompt issuing of the JOURNAL. Where gentlemen can not pay until the end of the year, or even then—and we know some such instances—we cheerfully furnish the JOURNAL without any reference to the time of pecuniary compensation.

And now, let us assure our friends if they are true to their part, the Editor will not fail in his. Annoyances, trials, cavilling criticism, springing from ignorance or personal malevolence, serious pecuniary losses—these are among the thorns that have been thick-set in our pathway. But on the other hand, the generous commendations of other journals, the numerous letters of praise that we have received from distinguished as well as from obscure members of the profession, from medical teachers, as well as from country practitioners remote from the great medical centers, from medical men in various parts of the land—to all such we desire to give our heartiest thanks—these give us strength and hope. We believe that the WESTERN JOURNAL OF MEDICINE has a mission—a work to perform in the profession, and that each year will witness its attaining a larger fame and a wider usefulness. Knowledge, truth, right and philanthrophy—these are immortal, while envy, jealousy, ignorance, misrepresentation and slander, must sooner or later perish in ignominy.

PROFESSOR GOBRECHT'S introductory to his winter course of lectures at the Medical College of Ohio, contained an interesting narrrative of his recent Atlantic trip, and also somewhat of his London experiences, especially of his meeting with Mr. Wilson and some other London celebrities. Prof. G. thus spoke of *sea-sickness:*

This brings me to speak of *sea-sickness. What is it?* I can not fully accord with Darwin that it is "a disturbance of brain consequent upon the *unusual impression* produced upon the *vision*, by the motions of the vessel." This may, in some instances, be the case, but from an experience of four crossings of the Atlantic, I am of opinion that the nausea *precedes* the dizziness and is *not* a consequence thereof. As an early friend of mine (C. S. Rand) who had seen much of ocean, once said, "The stomach ought to be hung on gimbals," like a mariner's compass, you know, so that it always preserves its horizontal and perpendicular . Doubtless he was correct, as far as he went, but he should have included the *liver*, Some persons are *never* sea-sick. Here disturbed vision is of no account. Others, no matter how often they have been at sea, are invariably sea-sick, *unless* the liver is first cleared, when they escape. Constipation, from torpid liver, followed by reversed peristaltic action, throwing the bile into the stomach, will produce nausea and vomiting, whilst the heavily involved sympathetic system, by its connection with the cerebro.spinal, induces the dizziness:

All for want of *gimbals.* So called *sea-legs* are gimbals.

First—The antero-posterior motion is made at both hip-joints, aided by the knees.

Second—The lateral motions, by a compound movement of a *single* entire limb.

When these movements alternate or are combined, we have *sea-legs* or *gimbals.*

The remedies for sea-sickness must, then, be mainly *preventive*, viz: cholagogue cathartics and the rapid attainment of sea-legs. And, should the stomach be obstinately irritable, demulcents, with chloric ether by the stomach to produce local anæsthesia of the terminal branches of the gastric nerves, whether sympathetic or cerebro-spinal.

Prof. G. concluded his lecture as follows:

Gentlemen, do not forget to be courteous, like these noble Englishmen, to all true professional men wherever you find them; for we are all knights of a professional Round Table, not unlike that of King Arthur; for when the order was founded, "Then rose the king and spake to all the Table Round, and charged them to be ever true and noble knights—to do neither outrage nor murder, nor any *unjust* vio-

lence, and always to flee treason. Also, by no means ever to be cruel, but give mercy unto him that asked for mercy, upon pain of forfeiting the liberty of his court forevermore. Moreover, at all times, on pain of death, to give all succor unto ladies and young damsels; and lastly, never to take part in any wrongful quarrel for reward or payment." And to all this he swore them knight by knight.

Then he ordained that every year, at Pentecost, they should all come before him wheresoever he might appoint the place, and give account of all their doings and adventures of the past twelvemonth.

And so, with prayer and blessing, and high words of cheer, he instituted the most noble order of the Round Table, whereto the best and bravest knights in all the *world* sought afterwards to find admission."

And now, gentlemen, let me draw *my* good sword *Excalibur*, from the hand of the unseen servitor of the Lady of the Lake, (for us the goddess of health, Hygiea), *and* with it deal such blows against ignorance and pretension as may rival those of King Arthur with his, against horrid giants, who slew other knights, but prevailed not against him and his charmed steel.

And when the gift in return for the presentation of the sword comes to be asked on her behalf by you, may each of you be armed, and ready to claim, *not* a *favor*, but a *right*, and to make good his claim by such actions in the joustings of the final tournament, that he shall go forth *knighted*, with a towering crest, a spotless shield, a lance well set in rest, ready to do battle for humanity distressed—ever ready to lay new trophies before the knights of the Round Table of our noble profession, which I hope the most of you will soon be called to join.

Dr. W. J. Elstun, has been appointed Second-Assistant Physician of the Indiana Hospital for the Insane—a most worthy selection. With Dr. Everts as Superintendent, and Drs. Hester and Elstun as Assistants, the Hospital could not be under better medical care.

Mrs. Sutton, wife of Dr. George Sutton, of Aurora, Indiana, died on the 11th of last month. The sympathies of Dr. Sutton's numerous professional friends are with him in this sad affliction.

Hereditary Tongue-Tie.—M. Mignot, of the Hôpital de Chantelle, observes that hereditary influence may be observed in small details as well as in the general disposition of organs. It has not been remarked upon by authors in relation to the duplication of the mucous

membrane termed the frænum linguæ, which, existing only in a rudimentary state in some children, is considerably developed in others. He met with a lad fourteen years of age, who was a distinguished pupil at one of the lycées, and spoke without difficulty. Having occasion to examine his mouth, he found the tongue kept down to the buccal floor of the mouth in consequence of the short and thick frænum which extended to its point. Unable to pass the alveolar arch, the tougue had, by its constant pressure, pushed this forwards so that the incisors were projected externally, becoming also somewhat slanting, and separated from each other by a considerable interval. When he tried to put the tongue out it curved backwards, striking against them. The lad's mother had precisely the same defect, producing with her some difficulty of speech. Out of four of her children, three were born with the same state of the frænum.—*Gazette Hebd., November* 6.

Bromide of Potassium in the Nursery.—Scarcely any modern remedy has enjoyed such favor among practitioners, and been the subject of such extensive research, as bromide of potassium. Its effects have been vaunted in a considerable number of maladies where it is necessary to exert a sedative action upon the nervous system—for instance, epilepsy, croup, headache, &c. M. Moutard-Martin, a nosocomial physician of Paris, now informs us that it has proved a most useful remedy in his hands for combating certain infantile diseases, and has been of especial service in producing a condition of tranquility in children who are much agitated by disease, and in procuring rest to infants who are deprived of sleep. The suffering which some children undergo from want of sleep, even when not otherwise ill, and the distress to which they put their nurses or parents, are so great that any remedy having, like the one in question, the property of inducing needful repose, must be most welcome both to practitioners and parents. M. Moutard-Martin states that when every other remedy—such as the warm bath, orange-flower water, and the infusion of cherry—has failed in such cases, the bromide of potassium has given the most remarkable results. There are also other cases in which its employment is very valuable in infantile therapeutics. The nervous erythism which attends dentition, and which manifests itself by a condition of excitement, cough and sleeplessness, is often abated by the employment of the medicament; and M. Moutard-Martin is confident that its timely and proper use may even ward off attacks of convulsions. In many cases its action is very prompt and decisive. It should be admistered to very young children in weak doses of from five to twenty centigrammes, and should be withheld in cases of diarrhœa.—*Lancet, Dec. 12th*, 1868.

We have so often occasion to refer to the proceedings of the Académie de Médecine that our readers may like to know a little more of its exact constitution. The Société Royale de Médecine and the famous Académie de Chirugie having disappeared during the storm of the Revolution, and the want of a learned Medical body being felt at the Restoration, the present Academy was instituted by royal charter in

1820, though not formally opened until 1824. Of the one hundred and fifty one original foundation members, part nominated by the crown and part chosen by the Academy, only four now survive. The Academy now consists of one hundred titular members, distributed into eleven sections—viz., Anatomy and Physiology, ten members; Medical Pathology, thirteen; Surgical Pathology, ten; Therapeutics and Medical Natural History, ten; Operative Medicine, seven; Pathological Anatomy, seven; Obstetrics, seven; Public Hygiene, Legal Medicine, and Medical Police, ten; Veterinary Medicine, six; Medical Physics and Chemistry, ten; Pharmacy, ten. There are also nine "free associates," twelve "national associates," and fourteen "foreign associates;" each of these may be increased to twenty members. Moreover, there are one hundred and twenty "national correspodents" to be reduced to one hundred and sixty-one "foreign correspondents," to be reduced to fifty.—*Times and Gazette.*

ENTIRE removal of the tongue for Epithelioma of that organ was performed by Dr. Fenwick, on Friday, the twentieth November, at the Montreal General Hospital. The patient was a gentleman from Canada West, who came to Montreal to seek advice touching a disease of the tongue, which had been pronounced to be Epithelioma. The operation as performed was speedy and bloodless, being that described by Mr. Nunneley of Leeds. An incision was made in the median line between the chin and hyoid bone, and the genio hyoid muscles separated. A long curved needle, to which was attached the chain of an *ecraseur* was then introduced into the mouth, through its floor, and close to base of the tongue; this was pushed over the tongue as far back as possible, the tongue being forcibly drawn out of the mouth by a piece of strong thread which transfixed its substance. After applying the chain and strangulating the organ, the operator proceeded to ablate, and the organ was severed in nine minutes and a half. The case has progressed most favorably, the patient returning home, a distance of one hundred and ninety miles, on the twelfth day after the operation.—*Canada Medical Journal, December*, 1868.

CHINOVIC ACID.—This is a resinous acid contained in all cinchona barks. Its physiological effects have been partially examined by Dr. G. Kerner, in a paper treating mainly of its therapeutic value (*Wiener Med. Wochensch.*, 43; and *Practitioner*, No. 2, 1868, p. 127). He finds that it adds greatly to the tonic effects of bark, and that it is not liable, like quinia, to cause "cerebral congestion."—*Journal of Anatomy and Physiology, November*, 1868.

DIGITALIS.—Dr. Constantin Paul, the able editor of the last edition of Trousseau's *Traite de Therapeutique*, has published a research on the influence of digitalis on the pulse (*Bulletin General de Therapeutique*, Tome LXXIV, 1868, p. 193), in which his principal results were obtained by the use of sphygmograph. He thus states his conclusions: Digitalis, in small doses, generally diminishes the frequency of the pulse; in large doses, it increases it. When digitalis is exhib-

ited in such doses as to produce its hyposthenic effects, it lowers the arterial tension; and the contrary effect may, possibly, be produced by very small doses, as some investigators have asserted. Finally, it is probable that digitalis raises the arterial tension when it diminishes the frequency of the pulse, and that it lowers this tension when it increases the number of the pulsations.—*Ibid.*

Om Trikinernas naturliga forekommande, af Axel Key, Professor i Pathol. Anat. vid Karolinska Institutet. Prof. Key contributes a paper on the natural occurrence of *Trichinæ*, his object being, by pointing out the mode in which the pig becomes affected, to facilitate the prevention of the diffusion of the disease.

It would appear that the trichina spiralis never occurs in birds, fishes, amphibious or invertebrate animals, and that these can not even be experimentally infected. On the other hand, all the mammalia are, with more or less difficulty, capable of being infected. Nevertheless, trichinæ are fortunately not so widely diffused in nature as might be expected from this fact, many animals being protected from trichinosis, not only by the difficulty of infecting them, but also by the nature of their food. It is quite certain that trichinæ are not conveyed to animals in any kind of vegetable food. In addition to men and swine, the animals which have been found *spontaneously* affected with trichinæ, are rats, cats, foxes, polecats, martens and hedgehogs. There is no doubt, however, these dangerous parasites occur also in other carnivorous animals not yet fully examined. The ruminants seem to be scarcely susceptible of trichinous infection. Prof. Sjöstedt succeeded, nevertheless, in infecting a goat and a sheep. He thinks it important that to these animals the infected food should be given in a fluid form, or cut up in small portions in water, so as to prevent rumination, which probably prevents infection. The author believes that the chief source of the infection of the pig is the rat, in which latter animal the trichina is very common. He says it is ascertained that pigs eat rats, whether they find them dead or catch them living, and he shows that it is precisely the animal infected with and lamed by the disease, that will most easily be caught. Hence he infers that the extirpation of the rat, and its exclusion from the pig-sty, will be the most efficacious prophylactic means.—*Ibid.*

A LAD who was dying from exhaustion after an operation performed at the Palermo Hospital, is said to have been saved by transfusion of blood from the veins of two students.

POISONING BY NICOTINE.—M. Tardieu has remarked the curious fact that animals killed by this poison always fall on the right side.—

THE WESTERN JOURNAL OF MEDICINE,

(*Formerly*, "CINCINNATI JOURNAL OF MEDICINE.")

Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

VOL. IV. INDIANAPOLIS, FEBRUARY, 1869. No. II.

EFFUSIONS INTO THE PLEURAL SAC, AND THEIR TREATMENT BY PARACENTESIS.

BY COLEMAN ROGERS, M. D.,

Adjunct Lecturer on the Science and Practice of Medicine, University of Louisville, Louisville, Kentucky.

Not long since, two cases of chronic pleurisy with effusion, were under my care, in which it was thought advisable to perform the operation of thoracentesis. In both cases there were unmistakable physical signs of a large pleuritic effusion, and though the urgent dyspnæa, so often present, was absent in these cases, the pallor, anæmia, and general debility, showed plainly that the vital function of hæmatosis was seriously interfered with. In both of them, constitutional remedies had been faithfully tried, but of no avail, and the operation was performed as a *dernier ressort*, with a view either to a permanent cure, or as a mere palliative measure.

The first case operated upon was that of a young unmarried lady, aged about twenty-five years. The chest was tapped on four separate occasions, at her own request. A large purulent collection was evacuated at each sitting, much to the mitigation of her symptoms. At the fourth tapping, the *paracentesis of necessity* had taken place, and I made a counter opening at the point recommended by Malgaigne.

This patient calls in to see me occasionally, and although it has

been nearly three years since the first tapping was performed on her, she still holds her own, with a fistulous opening in the mammary region of the left side. I am satisfied that life has been prolonged and rendered comparatively comfortable in this case, by the performance of the operation.

The other case operated upon, was that of a man aged twenty-eight years. A thick, glutinous, fibro purulent material was drawn through the canula, by Bowditch's suction apparatus, to the amount of nine pints by measurement. He expressed himself as feeling greatly relieved by the tapping.

I have lost sight of this case entirely, but have no doubt that if the operation could not have effected a radical cure, it certainly prolonged and rendered life more comfortable.

It is remarkable that in a number of subjects, the great pressure upon the lung, of a copious pleuritic effusion, does not produce more manifest dyspnœa. Be this as it may, it is a fair physiological inference, that when the function of one lung is so largely compromised, healthy nutrition and sanguification must fall below par, so intimately dependent are they upon the proper performance of respiration.

The operation of empyema, paracentesis thoracis, thoracentesis, or tapping the chest, lays just claim to being considered one of the oldest in surgery, performed as it has been from the remotest days of antiquity. It owes its origin, it is said, to a mythological legend, which tells us that Jason, seeking death in the midst of battle, received a lance wound in the chest, and was thus artificially relieved of an empyema. Traced as it can be, certainly, from Hippocrates downwards, through all this long series of years, it has afforded a theme for animated discussion as to its merits and demerits, and as to the proper cases, and indications for its performance. It would be a work of supererogation on my part, to even attempt giving a resumé of the opinions of the different authorities, during its earlier history, for it can be truly said that they differ widely on almost every point. The cases imperatively demanding it as a means of saving life, those in whom it would only serve as a palliative, furthering other therapeutic agents brought to bear, the place of election, the mode of operating, and the possible danger and consequences of air being admitted into the pleural cavity, have been subjects of angry discussion in days gone by.

Of late years, however, its utility in many cases, has begun to attract the notice of observers, and accumulated experience attests the fact that it should no longer be regarded the *anceps remedium*, as

formerly. A modern author has remarked that it is a measure which has frequently proved successful, and that too in a disease which is generally, if not always, beyond the influence of medicine, and too often beyond the power of nature to remove. When we reflect that it is a procedure at all times easy of execution, productive of little pain to the patient, generally followed by immediate relief, and has in numerous instances been crowned with complete success, it is surprising to find the great opposition it has met, and still continues to meet with. If any surgical operation had been found upon long and faithful trial to uniformly fail, we certainly would have just cause for regarding it with distrust, or for discarding it entirely; but when we reflect that this one, performed as it has been in a vast number of cases, since the days of Hippocrates, with successful results, we ought, *perforce*, to arrive at a far different conclusion. It numbers among its advocates the great names of Townsend, Hamilton Roe, and Hughes, and Laennec, and as we approach our own times, those of Walshe, Valleix, Vidal de Cassis, Velpeau, Trousseau, Flint and Bowditch, with a host of others, of nearly equal celebrity, as pains-taking and impartial observers.

In considering this subject, I have thought that the following division of it might be made:

First—Those cases in which the operation is imperatively demanded with a view to saving life.

Second—Those cases in which, though life is not immediately threatened, health is seriously impaired by the presence of the effusion, and the operation is indicated, to further other therapeutic means, after faithful but unsuccessful efforts have been made to produce absorption.

Third—Those in which, from other complications, such as tuberculosis and cancer of the lung, the operation may be performed, not with the object of effecting a permanent cure, but only for its temporarily beneficial influence.

Fourth—Those cases in which the operation is contra-indicated.

Under the first heading, I place cases of acute pleurisy with effusion. It is well known, that very often in this affection, death has occurred from a copious and rapid effusion, producing apnœa or suffocation, after all the most efficient therapeutic agents have been brought to bear, either to quell febrile excitement, or to favor absorption of the effused fluid. Indeed, in many instances, the stages of pleuritis follow so rapidly upon each other, that the effusion seems to have taken place

almost at the very onset of the attack, and the life of the patient placed in extreme jeopardy thereby. To wait *now* for the effects of mercurialization, blood-letting, and other so-called antiphlogistics, to trust to the actions, uncertain as they sometimes are, of digitalis, squills, salines, and other drugs of the diuretic and purgative class, and to annoy him with sinapisms, blisters, &c., while he is in the very jaws of death by suffocation, when a simple puncture of the chest would not only palliate the distressing symptoms and prolong life, but may effect a permanent cure, seems to me opposed to the dictates of common sense and extremely unphilosophical. Such cases as these have been operated upon, immediate relief has followed, and yet we have the question asked: Would they not have recovered without it? Can we not as reasonably make the inquiry: Would they not have died without it? Addison was a staunch opponent of the operation under all circumstances, and it seems to me that all his opposition was derived from the observation of a single case. Being called in consultation to see a case of acute pleurisy, with all the rational and physical signs of a copious effusion, and the subject seeming in imminent danger from suffocation, thoracentesis was proposed as a means of relief. Addison opposed it vehemently, and persisted in the use of the ordinary means to procure absorption. The case, it seems, ultimately recovered. Certainly this isolated instance should not militate against the procedure, for where we meet with one such favorable termination, many others will terminate unfavorably. Even if this were not so, what harm could have arisen from early puncture, so soon as the signs of suffocation were developed? It may be answered that the introduction of air into the cavity of the pleura, would prove a source of danger, by the conversion of a serous into a pyogenic membrane. That this danger is more imaginary than real, will be mentioned farther on. But even granting that the serous effusion is thereby converted into a purulent one, statistics prove that the *immediate* danger to life is not at all augmented thereby. Cases are relieved as promptly, and life prolonged as certainly, in patients whose chests have been tapped, and pus removed at the first sitting, though ultimate recovery is not as certain as in those cases in which pure serum is evacuated; for the corpuscular element of inflammation, its unfitness for a high state of organization and repair, together with the impoverished condition of the subject's general health, preclude the possibility of ultimate restoration to health. Trousseau, however, remarks that the per centage of recoveries is

nearly as great in those cases in which pus has been evacuated, as in those in which clear serum is withdrawn.

That pure, uncomplicated pleurisy with effusion, does, in the great majority of cases, progress favorably, or tend to recovery under ordinary treatment, is undoubted, but it is none the less true that a vast number of the chronic cases, where the effusion persists, and lung is enveloped and bound down by fine adhesions, so as to be incapable of expansion, are the results of too much temporizing, and too long deferring the operation of tapping.

Space will not allow me to quote authority on the points above considered. Numerous are the advocates of this procedure in the cases under consideration. Valleix, Trousseau, Sedillot, Stokes, Flint, Bowditch and others, give us the weight of their authority in favor of it; not upon theoretical grounds solely, but bringing to bear upon the subject, the stubbornness of facts and statistics. The language of Flint is emphatic, while Bowditch may be regarded as its boldest and most enthusiastic advocate. The tabulated statements of other authors might be quoted, all tending to prove the gratifying results following the operation in acute pleurisy, but space will not permit it. Reference is simply made to Hamilton Roe, Trousseau, Valleix, Archambault and Beau. From these, it appears that the operation has been performed in acute pleuritis at all ages, with successful results. In almost every instance when it was performed at an early stage of empyema, or inflammatory hydrothorax, it was successful, and failed to cure in those only in which it had been too long deferred. Many of these cases, indeed, attest the fact that the success of the operation is *directly* in proportion to the shortness of the time which intervened between the accumulation of the fluid and the time of its performance, and that the chief cause of its failure was its being postponed until too late a period.

The columns of medical journals have been in days past, and at the present time are, filled with reports of successful results following this operation of thoracentesis in acute pleurisy with effusion. Isolated cases are thus noted and statistics accumulated from the hospital and private practice of American, English and continental observers, brought forward. These, to my mind at least, conclusively establish the fact that in acute pleuritis with copious and rapid effusion, threatening death by apnœa, when ordinary remedies have failed to procure removal of the effused fluid, paracentesis should be resorted to either as a means of saving or prolonging life. It should be regarded, indeed,

as one of the most powerful weapons that conservative medicine can wield against an affection, at times, so fatal and so rebellious to treatment.

Under the second heading are placed cases of chronic pleurisy with effusion—those either essentially or originally chronic, or those which result from an acute attack. It may be remarked *en passant*, that acute and chronic pleurisy often merge so insensibly into each other, that it is frequently difficult to mark the boundary line between them; for in many instances, the mere question of time will not solve the difficulty. In one instance, the pain, dyspnœa, and febrile excitement, will last for weeks before the subsidence of urgent symptoms. In another, the effusion, though still remaining, will give rise to only occasional pain, with dyspnœa on exertion, and slight febrile exacerbations. In still another form, the effusion will be ascertained by physical exploration only, the pain, dyspnœa, &c., as a rule, being absent. All of these forms, however, have one distinguishing mark in common, and that is, that the disorder of the general health proceeds *pari passu* with the interference with the vital functions of circulation and respiration caused by the effusion. The two latter forms are properly denominated sub-acute and chronic pleurisy. The sub-acute when unattended to, or uninfluenced by remedies, often merges into the chronic form. Empyema, pyo-thorax, or suppurative pleurits, are included under this heading, as one of the varieties of the chronic affection.

In the treatment of chronic pleuritis, we should be guided by two important indications, viz: *First*—To make use of those therapeutic means which experience tells us are beneficial in favoring absorption of effused products. *Second*—To sustain and invigorate the powers of the system. In fact, we should adopt just the line of treatment that we do in acute pleurisy, though in a modified form and degree.

To satisfy the first indication, vesicants and iodic applications to the chest, with salines, diuretics and alteratives may be used. Bloodletting and mercurials, should never be resorted to in this affection on account of the anæmia and general cachexia, which are so generally present.

The second object is best fulfilled by paying proper attention to the general health and the conservative functions of assimilation and of nutritrion. For these objects, tonics, vegetable and mineral, exercise in the open air, with avoidance of exposure, and the action of cold, and the proper observance of all other hygienic regulations. As Flint has remarked, cases which show but little improvement, either as regards

their general condition or physical signs, when too much dependence is placed on absorbent remedies alone, immediately begin to change for the better on a tonic and supporting regimen. Absorbent remedies long continued, are apt to debilitate. The second object must not, therefore, be lost sight of, in our desire to affect disappearance of the effusion by sorbefacients.

But both tonics and sorbefacients often fail of their object, and at this juncture, paracentesis becomes our only resort.

I believe I am correct in stating that the opinion of the ablest authorities is almost undivided on the propriety, indeed, the necessity of this operation, after other measures have failed to procure absorption, and when urgent symptoms due to pressure arise. As it has the sanction of many of the great names before mentioned, in acute pleurisy, so has it in the affection we are now considering. It is in these cases particularly, that Flint and Bowditch speak in terms so encouraging.

Hitherto, the operation, in the opinion of many, was thought to be indicated only when dyspnœa is either constant or recurrent, when, after the prolonged use of sorbefacient and other remedies, the effusion, together with the exhaustion, anæmia and general depression of the vital powers still remained—when the effusion, in other words, is plainly beyond the influence of remedies. Then the procedure is advised, on the principle inculcated by the trite observation of Willis—*dummodo vires constabunt, præstat remedium anceps experiri quam nullum.*

Flint and Bowditch have, however, by their teachings, greatly extended the sphere of its beneficial influence. These observers, reflecting that this disease is very often beyond the power of medicine to relieve, and that the continuance with use of therapeutic agents, which experience has found to be of no avail, having a tendency only to diminish the ultimate chance of success, until the effusion becomes so excessive and the patient's strength so undermined by drugs as to retard or prevent the possibility of a cure, are of the opinion that thoracentesis should not be brought into requistion as a *dernier ressort* simply, but be performed in many cases where the effusion still persists, though there be no marked interference with respiration and derangement of the general health.

To quote the language of Flint, "It is a question which has of late been much discussed, whether it be not advisable to puncture in cases in which the chest is dilated with liquid, although the patient be not in great distress or danger. It is clearly an object to get rid of the liquid, and the point to be decided is, whether it is better to effect

that object indirectly by purgatives, diuretics, &c., or to resort to direct means, that is, to puncture and withdraw it. I can testify from a limited experience, to the innocuousness of the operation, after the plan introduced by Drs. Wyman and Bowditch, the relief which it affords, and its value as a means of rescuing patients from a condition of imminent danger to life. And the conclusions of Dr. Bowditch are not only sustained by his large experience, but are consonant with common sense. If, by an operation trivial with respect to pain, or any evil effect, and easily performed, the liquid effusion may be withdrawn at pleasure, it is certainly to be preferred to measures which are indirect, not very reliable, requiring considerable time, and producing more or less disturbance of the system and debility."

Dr. Henry J. Bowditch, in an article published in the *American Journal of the Medical Sciences*, January, 1863, says: "I have performed thoracentesis one hundred and fifty times on seventy-five persons, during the past twelve years, besides being witness to ten other cases. I now give a brief resumé of my experience. I have never seen the least permanent evil ensue from any of the operations, and but slight temporary difficuly as pain, dyspnœa, stricture, cough, &c. This, I think, sufficiently proves the innocuousness of the operation, by means of the exploring trocar, and suction pump, as suggested by Dr. Wyman, of Cambridge, Mass. I was once compelled to tap a patient, himself a physician, eight times in six weeks, and to operate on a lady nine times during eight and a half months, the first being to save her from death from orthopnœa, when she was four months pregnant. But of the whole seventy-five patients, twenty-nine recovered completely, and apparently in consequence of the operation. In all these cases, the tapping seemed the first step towards recovery. I do not pretend that the operation will cure every case in which it is employed, but feel confident that, in my hands, it has been the means of saving many lives; and I believe that several patients within my knowledge, who have died whilst under the care of other physicians, might have recovered, had it been resorted to. I consider the operation so simple, that I would as soon perform it as draw a tooth or vaccinate a child."

Dr. B., in a later paper, advocates the procedure, even when the dyspnœa is not very urgent, or the general health not much impaired. In a letter written to me on this subject, I find that he has, at present, increased the number of his operations to two hundred, with the same ratio of success.

Dr. Hughes, in Guy's Hospital Reports, series ii, vol. ii, states that

"the operation was performed in twenty-five cases, in some once, in others several times; of these cases, thirteen may be fairly stated to have recovered, so far as regarded the effusion into the pleural cavity; two may be justly mentioned as having at least partially recovered; ten have ultimately died of other diseases, generally connected with that, for which the operation was performed, but entirely independent of its performance."

Dr. Brady, in an article upon this subject, published in the *New York Medical Journal* for March, 1856, reports the results of one hundred and thirty-two operations, collected from various sources. They are thus stated:

Recovery complete in twenty-nine cases.

Relief obtained in fourteen cases.

Death in thirty-seven cases, (not the result of the operation.)

Effects null in one case.

Result not known in one case.

It must certainly be admitted that language is hardly strong enough to establish the benefits of this operation in the cases under consideration, if statistics do not greatly err.

Under the third heading are placed cases of empyema, complicated with, or having for their cause tubercular or cancerous disease of the lungs, or with organic heterologous changes in the pleural membrane. Though under such circumstances permanent relief can not be expected from the operation, on account of the great underlying morbid conditions, palliation of distressing symptoms and prolongation of life, may be effected by it. In the promotion of *euthanasia* it is therefore useful. If, however, we are disposed to agree with Bennett and others, in the opinion that pulmonary tuberculosis is by no means an incurable affection, the operation may even here prove to be something more than a mere palliative measure—may be even followed by a cure. Laennec was of the opinion that we should not abandon all hope of cure, even when there exists so serious a complication as tuberculosis; provided there be no evidence of cavities in the opposite lung.

In mechanical hydro-thorax, the result of organic disease of the kidneys, liver, or heart, the operation holds out but little prospect of permanent relief, on account of the progressively fatal tendencies of its anterior and causative morbid conditions, though distressing symptoms may be temporarily mitigated and life prolonged by it. This form of effusion is, however, seldom so copious as to give rise to symp-

toms demanding thoracentesis, and is generally amenable to other treatment.

Under the fourth heading, bloody effusions following gun-shot wounds of the pleura or lung are properly placed. The idea was first suggested by Baron Larrey, the elder, that extravasation of blood into the thoracic cavity, would of itself serve as nature's plug, and prevent further hemorrhage with its attendant syncope and exhaustion. Paracentesis is, therefore, contra-indicated here, until the hemorrhage has ceased, and all danger from its effects passed by. Larrey states this period to be at about the tenth or fourteenth day.

From what I can glean from authorities, it seems that the age of the patient bears no direct relation to the result of the operation, infancy and old age being attended with as encouraging success as adult life. It would seem that more success attends its performance, when the conservative functions of digestion and nutrition are well performed, when the patient is of fair constitution, and the effusion moderate in quantity and recently formed. On the contrary, the prospect of success diminishes when the effusion is of long standing and accompanied by deteriorated general health.

In respect to quantity of the effusion, though if very large, it diminishes the chance of ultimate cure, it does not seem, in many instances, to have precluded success, for recovery has followed the evacuation of several quarts. Larrey was successful after withdrawing fifteen pints. In another successful operation performed by Dr. Archer, eleven pints were drawn off at the first tapping.

The length of time which the effusion has existed, has an important bearing on the success or failure of tapping. When it has existed for a long period, and the lung is rendered incapable of expansion, after the removal of the superincumbent fluid, on account of being plastered over with fibrinous deposit, and bound down by dense, tough, leathery adhesions, thoracentesis, although it may serve as a palliative by removing pressure through the mediastinum upon the opposite healthy side, can not, in the very nature of things, be followed by complete recovery. This state of things results frequently from too long deferring the operation, and it may be stated that it is just the condition which has given rise to so much opposition to the procedure, from many writers.

Reasoning analogically, we may inquire as to whether the operation for strangulated hernia, is not generally regarded as a safe one, and attended with enough success to justify its performance in all cases

requiring it. But suppose we temporize and defer it until sphacelation of the gut ensues, must we then, in the future, ignore it entirely, and regard it as an opprobrium of the surgical art, because in these desperate cases it happens to be unsuccessful?

As to the nature of the fluid withdrawn, and its bearing on the result of paracentesis, something might be said, though I can glean nothing definite on this subject. The observations and statistics of Bowditch, contained in his one hundred and fifty cases, are, however, of some value. He states that "out of the seventy-five, the fluid obtained at the first operation was serum, in twenty-six of which, twenty-one made good recoveries. If afterwards the fluid became purulent, I have noticed an almost certain fatality to attend the change. Pus flowed at first in fourteen cases—seven of these recovered and seven died. A sanguinolent fluid at the first puncture, thin and of a dark red color, not coagulating, I consider almost certainly fatal. But when the fluid becomes of this color, only at the second or any subsequent puncture, I deem it of comparatively little importance. A mixture of bloody, purulent fluid, at the first operation, is usually fatal. A fetid gangrenous fluid is very rare." In cases where no fluid was obtained, Dr. B. says: "In seven cases I got no fluid whatever. The failure was probably due to the cautious and slow manner in which I plunged the trochar between the ribs, carrying thus the false membrane of the pleura costalis before the instrument, instead of piercing it, so that it really never entered the fluid." Dr. B. also states that other times, he has no doubt but that an error in diagnosis was made, when there was simply an unexpanded lung, covered by thick, false membranes, causing as much flatness on percussion as if there was fluid present.

The danger of the introduction of air into the cavity of the pleura, during paracentesis, has long occupied the attention of medical men, and given rise to not a little discussion. The opinion of the great majority at the present day, is that, though the long continued and oft repeated contact of air with the pleura, may cause increased irritation, and possibly putridity of its contents, the transient introduction of it is innocuous, so far as these effects are concerned, but that it may be detrimental, and as little as possible should be allowed to enter, on account of its affording an obstacle to the rapid and free expansion of the lung, after the removal of the effusion. Cases are on record, in which immediately after the operation the signs of pneumo-thorax were developed, showing that air was certainly introduced, and yet they were followed by complete recovery. The experiments of Nysten and

Speiss, clearly indicate that air transiently applied, exerts no deleterious influence on the contents of the chest, and that its removal may be entrusted to the agency of the absorbents.

If the fear of the introduction of air in small amount into the chest, is to deter us from operating in certain cases, we should never resort to the procedure at all, for there is no expedient that has, or can be devised, to altogether prevent it. Air must, and always does, enter the chest during paracentesis. It can not be prevented by any means. If air did not enter, or we could possibly prevent its entrance, none of the effusion would flow outwards, and our main object, relief from pressure and distension, would be defeated. The flowing in of air, is an indispensable condition for the flowing out of the fluid.

Shall the opening of paracentesis be closed or left open? No rule which will apply to all cases, can be laid down on this point. In cases of acute pleuritic effusions, or in those chronic ones, where the fluid is found to be serous, and when we hope to relieve by the single tapping, the opening should be closed and hermetically sealed. In cases where purulent material is discharged, and we are satisfied that re-accumulations will take place from time to time (as is the rule) after the operation, requiring several tappings, the wound should be left open, kept open and not allowed to heal. This is to be advised for very good reasons. The opening thus left, by establishing drainage, will prevent a re-accumulation, and allow the lung to become unfolded. If the opening is closed, operations at different points will have to be performed at each fresh accumulation. Air, of course, will then enter in large quantities. If the opening is closed upon this air, it is left free to prevent expansion of the lung, to set up its irritations with consequent putridity and offensive accumulations, without a vent. In short, if air must pass in, give it and its consequent offensive materials, chance to pass out.

To effect this object perfectly and neatly, the drainage system suggested by Chassaignac, and so concisely described by Mr. Poland in Holmes' System of Surgery, will be found very convenient and available.

The question has been discussed, as to whether *all* the fluid should be evacuated at one sitting, or removed at successive intervals. Townsend, Laennec, Stokes, Todd Thompson and others, decide in favor of the latter procedure, whilst Bowditch and Flint advise, except under peculiar circumstances, that as much fluid should be removed as flows freely and uninterruptedly through the canula. What advan-

tages accrue from *multiple* evacutions, in all cases, instead of *one* complete one, does not appear clear to my mind. In some cases, however, when from the great debility of the subject, it is found that a large and sudden evacuation, by removing a long accustomed support of the thoracic viscera, might cause syncope with quite serious shock and depression, the removal of small portions of the fluid at intervals, in sufficient quantities to palliate urgent symptoms, would certainly be the more prudent procedure.

When from the long contact of air with the pleural cavity, or from other causes, the discharges become putrescent and offensive, or with the idea that a new diseased action can be established in the chronically inflamed and pyogenic membrane, authorities are for the most part agreed, that simple and medicated injections are not only innocuous, but of great utility. They may consist, either of simple warm water, or water holding in solution, drugs of the alterative and detergent class, such as chlorine, bromine, iodine, chloride of zinc, permanganate of potash, &c. The researches of Pasteur, utilized by Lister, as to the uses of carbolic acid, in surgery, point to that agent as being the most effective we could use in this class of affections—as an injection to be used in aqueous solution, or suspended in oil or glycerine. The opening of the operation might be covered over with a paste of the same, made with glycerine and whiting.

For performing the operation, cauterization, the simple incision, and the incision with the trochar and canula, have been recommended and used.

Cauterization has justly become almost obsolete, and repudiated by modern surgeons. Besides possessing no advantages over the simple and less tedious methods of operating, it is much more painful and harassing to the patient. As recommended by Walshe, however, in cases where the collection points externally, and patients are possessed with a dread of cutting instruments, the caustics may be made use of.

The simple incision is now but little used, on account of its affording so incomplete an exit to the passage of the fluid, and at the present day, the incision with the trochar and canula are in general use. Wyman's suction pump apparatus, so much used and so highly recommended by Dr. Bowditch, is a most ingenious contrivance. By its use, we allow but a very small amount of air to enter the chest, and by its great suction power we are enabled to draw out again what little air may enter. We are, also, enabled by it to draw out thick, consistent, stringy collections which would with difficulty flow through the ordi-

nary unassisted canula, Authorities, generally, make division for the exit of the fluid into the *place* or *empyema* of *necessity*, and *the place* of *election*, according as the collection points externally by perforation of a costal lamina, nature's method; or where the surgeon is at liberty to select a point, for the introduction of instruments in puncture.

As soon as the external tumor becomes well defined, it is advised by most observers to puncture and evacuate the collection at its most dependent part, in order to avoid the possible danger of caries of the rib, together with burrowing of the fluid in the formation of long and intricate sinuous passages. But when auscultation elicits the fact that the collection is not confined by adhesions, and that there can be no danger of wounding the lung, a counter opening may be made. A valuable suggestion is offered by Prof. Flint on this point; he says: "If a perforation be at a point so far above the bottom of the sac that only a portion of the fluid is evacuated, more or less constantly remaining below the point of perforation, a counter opening should be made."

Authorities differ as to the *place of election*, or the point to be chosen for the introduction of the trochar, in cases where we have that choice. Laennec, having in view the possible danger of transfixing the diaphragm, or wounding the liver, spleen and other important abdominal viscera, and from the fact that in his own observation, "the upper lobe adheres to the ribs more frequently than any other part of the lung, and that the lower lobe is frequently attached to the diaphragm, while adhesions seldom exist at the central part of the chest," prefers the space between the fifth and sixth ribs. This can be made the most dependent part, by inclining the patient towards the affected side.

Stokes advises that the operation be performed higher up than is usually recommended, for the following reasons: "The lower situation is not better for facilitating the flow of fluid, for it can, and has taken place from different parts of the chest." He argues that in most case where the *empyema* of *necessity* occurs, the tumor forms in the third or fourth inter-space, near the sternum and clavicle, and in the axilla. He draws a fair analogical conclusion from this, inasmuch as nature seems to indicate a high operation.

Townsend and Walshe favor the views of Stokes. French authorities, as a rule, headed by Velpeau, prefer the third intercostal space for the left, and the fourth for the right side, assigning nearly the same reasons for the selection that Stokes and others do. Malgaigne

advises us, in order to avoid the arteries and the diaphragm, to select the middle third of the contour of the chest, at the third or fourth interspace, counting from below upwards. In fat and well developed persons, as regards the exact point to be selected, he remarks that, "as a proximate guide it will be found about six fingers breadth below the inferior angle of the scapula."

Bowditch prefers, as the most appropriate spot for puncture, "the space between the ninth and tenth ribs, on a line let fall from the angle of the scapula." He states, also, that in selecting an inter-costal space on the postero-lateral portion of the chest, he chooses one "on a level with the lowest point at which the respiratory murmur can be heard in the healthy lung of the opposite pleural cavity."

Whenever and wherever we operate, two things should always be borne in mind, viz: To avoid wounding the diaphragm and the intercostal artery, and to select that point which will give complete and free access to the flow of fluid.

CASE OF EXTENSIVE FRACTURE OF THE SKULL—RECOVERY.

BY W. S. HAYMOND, M. D., MONTICELLO, INDIANA.

The patient, Benjamin J. Peterson, aged thirty years, was injured in the following manner: On the 27th day of last August, while reaching over the tumbling shaft of a threshing machine, in the act of oiling some part of the machinery, the clothing of his right arm was caught by the shaft, dragging him upon it, and causing him to revolve with it. His forehead was drawn down upon the upper knuckle of the shaft, near the cylinder, and carried around in its revolutions through the narrow space which separates it from the body of the machine, a distance not greater than the shortest diameter of an average adult head. A bolt of iron about three-fourths of an inch in diameter, passed through the knuckle, one end of which projected an inch beyond its surface. The projecting end of this bolt, in its rapid revolutions, was brought to play directly upon his forehead, while he was revolving with the shaft.

The accident occurred at ten o'clock A. M., and his injuries remained undressed until my arrival, four hours later. All the scalp of

the right side of the os frontis, with a portion from the temporal bone was separated from the skull, and hung in bruised and torn fragments upon his right cheek, revealing the existence of a large fissure occasioned by the removal of osseous structures. The lower line of the fracture extended from a point in the median line of the os frontis, to a point a few lines beyond the temporal ridge, on the right side, running with the supercilliary ridge, and nearly parallel with the orbital arch. From the commencing point in the median line, the fracture extended almost directly upwards the distance of an inch, thence parallel with the lower line to the temporal ridge. The fracture on the fourth side was about an inch in length, and chiefly to the right of the temporal ridge.

Here, then, was a portion of the skull, nearly rectangular in shape, about three inches in length, and an inch or more in average width, broken into fragments, some of which were carried away by the bolt of iron, but a larger number by some peculiar action of the mechanical force, were turned edgewise and buried in the brain to a depth of from half to three-fourths of an inch. Some of these fragments were set in perpendicularly and others obliquely, and all completely separated. The membranes, within the space occupied by the fracture, were torn to pieces and almost entirely destroyed, leaving the lacerated brain naked.

In removing the fragments of bone a small quantity of brain, amounting to about a teaspoonful, escaped. It is not improbable that some of the brain was lost at the machine, which corresponds with the statements made by some of the bystanders. But this quantity, if any, was undoubtedly not great. In addition to the severe injury of the head, the patient's right arm was fractured in the middle of the os humerus, and severly bruised around the fractured region.

Notwithstanding the extent of the fracture of the skull and its complications, the patient did not, at the time the accident occurred, manifest the slightest mental disturbance, nor has he since. As soon as he was cut loose from the shaft, he remarked that his "right arm was broken," and was able to walk to the house, a distance of about sixty yards.

Treatment in the first place—a careful removal of the fragments of bone. These, as before stated, were all buried in the substance of the brain. They were discovered by exploring with the finger, and, when found, removed with the forceps. During this somewhat painful process, the patient, (who is by nature a merry fellow,)

continued to talk in his usual pleasant and witty manner, and without appearing to manifest serious concern about his dangerous condition. He declared "it was the worst scrape he ever got into;" but his chief uneasiness was about his arm. He was very desirous of having it "fixed up right," so he could work again.

After removing the broken pieces of skull from the brain, and clots of blood, the lacerated scalp was drawn over the chasm, and the edges closed by sutures and adhesive strips. A dressing of charpie was applied, which was retained in place by compress and bandage. Pulse sixty per minute. Ordered his head to be kept cold, and sulph. magnesia ℥ss. to be given. Applied splints to his arm.

August 30.—Patient quite comfortable, though complaining some of his arm. Pulse eighty-four. Rested well through the night without anodynes. Has manifested no signs of mental disturbance. Bowels unmoved. Ordered sul. mag. ℥j to be given; cut his hair off close to the scalp, and applied ice contained in a bladder to his head.

August 31.—Patient in fine spirits, and his mind clear and undisturbed. Right eye closed by swelling from inflammation of the injured parts. Pulse ninety-six per minute. Cathartic operated efficiently. Prescribed ant. et potas. tartras $\frac{1}{16}$th grain., every four hours, with tinct. virat. viride gtts. viij., calomel and jalap āā grains viij., to be taken at the hour of bedtime. Continue ice to his head.

September 1.—Patient cheerful. Pulse eighty. Removed dressings from the head, which was followed by a copious discharge of purulent matter. Applied dressing of oiled lint. Continue the antimony and veratrum.

September 2.—Pulse sixty-six. Removed several sutures. Pus escaping freely from several places. Patient in his usual cheerful mood, and very hopeful.

September 3, 4 and 5.—Patient continues doing well. Pulse has ranged from seventy-six to sixty-eight. Treatment continued.

September 6.—Patient doing remarkably well. Discontinue all internal treatment except cathartics. Pulse sixty-six.

September 8.—Patient improving. Pulse sixty-six. Bowels costive. Prescribed mercurial cathartic, to be followed, if necessary, with sulph. mag. The scalp is healing slowly in several places. Owing to the extent and nature of the injuries received by the soft structures, it was impossible to obtain enough to cover all parts of the skull from which they were removed; but with some difficulty the fragments were joined so as to afford a covering to the exposed brain. A portion of

denuded skull about an inch square, above the fractured region, was left uncovered.

September 9.—Patient in fine spirits, and telling anecdotes for the amusement of his friends. Pulse sixty-six.

September 11.—Pulse sixty-six. Pus discharging freely through the orifices in the scalp. No union yet among the fragments of the scalp.

September 13.—Considerable quantity of thin pus escaping from a small circular opening at the lower border of the fracture. Union slowly taking place in several points of the scalp. Stimulating applications applied to edges of the scalp, to encourage the growth of granulations. Ice intermittingly continued to the head. Pulse sixty-five.

September 15.—Pulse sixty-six. Scalp united in all places over the fracture, except the round opening at the lower border. Granulations advancing very slowly in the margin of scalp surrounding the denuded skull. Applied to it with a camel hair pencil a mixture of equal parts of cantharidal lotion and oil of turpentine. Patient remains totally free from pain about the head—has had no headache since he was hurt—is cheerful and comfortable, and in the full enjoyment of his mental faculties.

September 17.—Pulse sixty-eight. Patient improving rapidly. Bowels well purged from cathartic of sulph. mag., taken yesterday. Granulations springing up from the pericranium in the center of denuded bone and the margin of surrounding scalp.

September 20.—Pulse seventy-two. Healing process advancing more rapidly. Patient able to walk about his room—was carried to-day on a sofa, to another house about half a mile from the cabin where he has been confined.

September 23.—Patient sanguine of recovery; in fact, has never entertained any other opinion. Pulse seventy-five. Some improvement manifest.

September 26.—Rapid improvement. Pulse normal. Appetite good. Edges of scalp covered with healthy granulations, and those on the skull increasng. Slight discharge of healthy pus from the small opening at lower edge of fracture. Union of the fractured humerus has not taken place, though the arm has ceased to be painful.

October 1.—Patient was removed home, to-day, in a carriage, a distance of eight miles, and continues to do well. Is able to go about.

November 2.—Saw the patiént to-day—had a slight chill yesterday, which has no connection with his injuries—feels well enough to-day.

Discharges of pus from the fracture ceased entirely about three weeks and head healed up in every place. Imperfect or delayed union in the fractured arm. Ordered splints to be removed daily, the arm to be gently rubbed, and tincture of iodine to be applied about the fractured region. Prescribed mur. tinct. Ferri, gtt. xx, to be taken three times a day.

December 10.—Patient called at my office to-day, after a ride of ten miles in a wagon. Head entirely well—arm firmly united, and recovery complete in all respects, except that he has not yet obtained perfect use of his arm, but undoubtedly will in a reasonable time.

The fortunate result in this case was, perhaps, greatly due to the opening at the lower part of the fracture, which afforded a free outlet from the floor of the brain for the discharge of the products of inflammation. There have probably been many cases of recovery where a larger quantity of skull was lost than in this case; but perhaps few where fracture to such extent was associated with severe lesions of the brain and its membranes, without the occurrence of any mental disturbance whatever. The patient is now in excellent health and experiences no ill effects from the injuries to the head, except a slight sensation of uneasiness when stooping, caused by the brain pressing against the integuments.

ON LITHOTOMY OF THE GALL-BLADDER.

BY GEO. C. BLACKMAN, M. D.,
Professor of Surgery in the Medical College of Ohio; Surgeon to the Samaritan Hospital, Cincinnati, Ohio, etc., etc.

Some ten years since, with Prof. Comegys, we had an opportunity of examining a female patient, who was passing through a spontaneous opening in the abdominal walls biliary calculi, of various forms and dimensions. During a period of a few months, not less than ninety-six were thus discharged, after which the fistulous opening closed, and the patient has ever since enjoyed excellent health. The above case, in connection with one reported by Dr. J. S. Bobbs of Indianapolis, (*Trans. Ind. State Med. Soc.*, 1868,) in which he opened a tumor presenting "just inside the right iliac bone," and removed a number of biliary calculi, has induced us to collect such cases as we could find

scattered in various writings, as well as to trace the history of the earliest proposition to resort to the knife.

In the first volume of J. L. Petit's *Traite des Maladies Chirurgicales*, Paris Ed., 1790,* at p. 293, we find a chapter entitled, Parallel between Retention of Bile, and Calculi in the Gall-Bladder and Retention of Urine and Stone in the Bladder, (*Parallele de la retention de la bile et des pierres de la vesicule du fiel, avec la retention, d'urine et les pierres de la vessie.*) He remarks that by means of this analogy we emancipate ourselves (*nous nous emancipons*) so to speak, to perform what has not before been attempted. He refers to three cases contained in his *Memoire* upon this subject read to the "*assemblee publique*" in 1733, (*vid. Mem. de l. Acad. Roy. de Chirurgie*, 1733), in which a distended gall-bladder, having been mistaken for an abscess, was opened either by puncture or incision, causing the death of two of the patients, as he belived from the extravasation of bile, and the effect of this substance upon the viscera (*l'action de cette liqueur sur tous les visceres.*) These cases, he remarks, are sufficient to show the zeal of young surgeons who are always ready to use the knife, even when adhesions have not formed between the distended gall-bladder and the abdominal parietes. But as one of the three did escape with life, he insists that the fatal results in the other two should not render us too timid in resorting to this proceeding in which the result was more fortunate in consequence of the adhesions which had formed and which were sufficient to guard against the extravasation of the bile. He states that when the patient has had frequent and severe attacks with inflammation over the seat of the tumor, we have a right to infer that adhesions have formed. In such cases, if the retention of bile is likely to cause the death of the patient, he would advise the puncture of the tumor with a trocar, as his colleague, M. Mery, had often done in cases of retention of urine. In proposing to enrich surgery with the new operation of lithotomy of the gall-bladder, he admits that so far as the parallel, in detecting with the sound biliary calculi in the urinary bladder, must frequently fail, nevertheless, when biliary calculi are known to be present, and adhesions have formed, then lithotomy may be performed without danger. It is in these cases, he remarks, that the skillful surgeon may show his genius, (*peut montre son genie.*) If the tumor has been punctured through the same opening, a proper sound may be introduced, the calculi detected, and in the following manner extracted: The puncture having been made with a trocar and

*The first edition was published in 1774. This last edition was supervised by M. Leone.

canula, the former is withdrawn and a portion of the fluid allowed to escape. A long button-pointed probe, sufficiently flexible to be brought in contact with various portions of the gall-bladder, is then introduced through the canula, and if the stone be detected, it is withdrawn, and without removing the canula, which serves as a guide, with a sharp bistoury both the integuments and the gall-bladder are divided to the extent deemed necessary. The forefinger of the left hand is now introduced into the cavity of the gall-bladder, the calculi felt and with suitable forceps extracted. Petit adds that the above is sufficient to present the reader with his idea of this new operation—"do I say new? It is not new, for Madame Fibergeau submitted to two operations after an interval of several months. She suffered from retention of bile in the gall-bladder. Believing it to be an abscess, it was opened, and the wound remained fistulous. Several months after the puncture, she submitted to an operation to close the fistula. A stone the size of a pigeon's egg was found at the bottom of the fistula—that is to say, in the gall bladder—which was withdrawn with the forceps. Was this not an operation for the extraction of a stone, and done "*en deux temps*," as several other surgeons have performed lithotomy for the removal of urinary calculi? How many patients have perished because the nature of their disease has not been detected, or if detected, because the surgeon has been too timid to attempt their rescue by the measure I have proposed?" He then gives us in full detail such cases as he has been able to find recorded, where the autopsy demonstrated that the operation might have been performed.

The first case was in the practice of M. Leauté: A man æt. 45, who for a long time had been suffering from hepatic derangement, with intervals, however, of good health, at length gradually wasted away and died. A tumor formed by the gall-bladder, filled the right hypochondrium, having the form of a large cucumber. It pressed the liver, stomach, omentum and colon, against the diaphragm, and the thickness of the liver was diminished. The distended gall-bladder was adherent to that portion of the liver which covered it, whilst the anterior part was firmly attached to the peritoneal lining of the abdominal parietes. Leauté opened it, when a large quantity of a very limpid fluid, but viscous and bitter, escaped, after which he extracted sixty calculi of various forms and dimensions.

The next case occurred to M. Dargeat: A female æt. 66, for several years had been subject to hepatic colic, and *mouvements de vapeurs, hypocondriaques*, when a hard tumor appeared on the right side of the

abdomen, and increasing, extended toward the anterior and superior spines of the ilium. The tumor presented itself during a period when the patient seemed to be enjoying excellent health. Neglecting herself, however, she had a relapse of her former troubles, and sought medical aid. The symptoms—violent colic, nausea, fever and wakefulness—were not supposed to have any connection with the abdominal tumor, which to the touch seemed to involve only the integuments, or the abdominal parietes. The patient was bled, and other measures adopted which gave her temporary relief; but for nearly three years she suffered from a renewal of these troubles. At length, the abdominal tumor began for the first time to become painful. Poultices were applied for two months, when a spontaneous opening occurred.

After discharging for several months, and causing the almost total disappearance of the tumor, the fistula became closed. For a long time it alternately opened and closed, until, at last, the patient, with her old attack of pain recurring so frequently, became exceedingly emaciated and died. A probe passed into the fistulous orifice—to which the patient, while living, would not consent—penetrated more than five inches, passing obliquely toward the gall-bladder, which was not of its ordinary form, but divided into three well marked cul-de-sacs, in which calculi were lodged. An elongated band connected the gall-bladder with the abdominal parietes. It was in the form of a cord, and a fistula extended through it from the gall-bladder to the external orifice.

A third case was in the practice of M. de la Peyronie, which presented many features in common with those already reported. Through an opening spontaneously formed, large quantities of bile and numerous calculi were discharged. The fistula having become obstructed, a sound was introduced into the gall-bladder, when another stone escaped with the bile. Two years afterwards, although the fistula remained open, the patient was in the enjoyment of excellent health.

From the above facts Petit concludes that in similar cases, should the symptoms return, caused by calculi retained in the gall-bladder, the fistula should be dilated by means of prepared sponge or other means, and the calculi withdrawn, as had already been done by skillful practitioners. That if the symptoms should depend upon inspissated bile retained in the gall-bladder, the latter should be washed out with appropriate injections.

He next quotes the case reported by M. Saurau. In this the patient suffered for a long time from biliary trouble; an abscess finally

gave exit to the contents of a tumor, formed by a distended gall-bladder. While the fistula remained open, the patient would be comfortable; but when closed, her sufferings were severe. Saurau, with a sound, detected a hard body, which appeared to be situated over the muscles of the abdomen. He made an incision which enabled him to lay hold of this foreign body, which he found adherent, but which was finally detached and extracted. It proved to be a biliary calculus four inches in length and three in circumference. Having completed this operation, he discovered another canal leading to the opposite side, extending beyond the linea alba to the left hypochondrium, but giving rise to no appearance of a tumor. He introduced a sound some three inches, and found a second calculus, which was reached after making the proper incisions, and withdrawn. Through the opening in the right hypochondrium, for some days, bile mixed with pus escaped; but the progress of the case was favorable, and in about two months the patient was perfectly cured.

(*To be continued.*)

STILLINGIA IN SYPHILIS.

BY DR. J. C. M'MECHAN, CINCINNATI, OHIO.

In the *American Medical Recorder* for April, 1828, (vol. xiii, page 312,) Dr. Simons recommended the use of stillingia in secondary syphilis, in place of mercury. This article, at the time, attracted considerable notice, and the drug came into popular use. Doctors Lopez and Frost also wrote in favor of its use and confirmed the views of Simons in regard to its efficacy in syphilis.

For the past few years, owing to some unaccountable reason, it has been seldom prescribed.

We have used the drug in a certain form of syphilis, and with the finest results, and have seen Dr. Dawson, Surgeon to the Cincinnati Hospital, prescribe it frequently, with the most marked effect, when other remedies had failed.

The form of syphilis in which it is most useful, is secondary, where the symptoms of tertiary are just beginning to manifest themselves, but it is also useful later in the tertiary form, in combination with iodide of potassium.

In secondary syphilis, in broken down subjects, mercury is, of course, objectionable, and if administered, can not be carried to the point where it would have a marked effect upon the syphilitic eruption. If mercury can not be administered, there are but few remedies left to prescribe, and the principal ones, perhaps, are sarsaparilla, and iodide of potassium. The latter remedy is very good in the tertiary form, but in the secondary, it has been found almost inert, having but very little, if any, effect upon the eruption. Sarsaparillá, at one time, had quite a reputation, and it was next to impossible for a patient to recover without its administration. It is now seldom administered, except for its moral effect, unless outside of the regular profession. Now, in primary, we have iodide of mercury, (and in healthy subjects it is the proper remedy in secondary), and in tertiary, the iodide of potassium. But here is a vacancy, what is the remedy in secondary when the patient is broken down in health or when mercury has been used without effect? There is but one remedy in the materia medica that can fill the vacancy properly, and that one is stillingia. For broken down patients with the syphilitic eruption, to patients on whom mercury has had no effect, and to patients in whom the bones have become affected and the secondary manifestations still continue, let this remedy be given:

Case I—Jno. L——, laborer, aged twenty-five, came under our care August 10th; had primary disease eighteen months previous to this time; suffered greatly from the eruption; general health very poor. Put upon tonics, and in conjunction with them, stillingia. In one month, the eruption almost disappeared.

Case II—Ferdinand G——, aged twenty-two, applied for relief July 25th; had the eruption in various parts of the body, and bones of the nose were necrosed; the parietal bone of the right side was also undergoing necrosis. For the eruption, prescribed stillingia, and for the tertiary symptoms, iodide of potassium; he also took supporting and tonic remedies, and a little surgical interference was necessary in regard to the dead bones. In a few weeks he was much better, and he is still improving in his general health. At present, the eruption has entirely disappeared.

The best preparation of the drug is the stillingin, and of this, two grains can be given three times a day. Of course the drug is not to be relied on to the exclusion of other remedies, such as tonics, iron and supporting remedies, but is to be used in conjunction with them.

BELLADONNA IN HOOPING-COUGH.

BY DR. B. S. WOODWORTH, FORT WAYNE.

I heard Brown-Séquard say, in a speech or lecture before the American Medical Association, at Baltimore, a few years ago, that hooping-cough could be cured in three days by belladonna. But that in order to do this, it would be necessary that the physician should stay in the house of the patient and watch the effects of the medicine. I took notes of this lecture at the time, and on the first opportunity, I prescribed belladonna in doses that I had not previously dared to do. I became convinced, however, that this drug was signally efficacious in hooping-cough, and I have never failed since that time, to give the medicine, not only in hooping-cough, but in many cases of cough among adults, that seemed to depend principally upon nervous derangements. A recent epidemic of hooping-cough in this city has given me an opportunity to witness the effects of belladonna in a larger number of cases than I have previously witnessed it; and I have no more doubt of the specific influence of it than I have of that of quinine in intermittent, or of ergot in producing contractions of the uterine muscles. By the way, although some have denied that the specific effects of the latter are certainly to be relied upon, I must truly say that I *never*, after a practice of thirty years, knew it to fail.

In the present epidemic I have treated about fifty cases—all but one were uncomplicated with other diseases. The exceptional case, a child four years old, had capillary bronchitis, and possibly very circumscribed pneumonia, and for several days death seemed imminent, but recovery took place. Most of the cases had had the usual symptoms of bronchitis for several days before I prescribed for them—in short, the disease was fully developed. I began by prescribing the extract in as large doses as I thought the patient would bear, and increasing it at every successive dose until the pupils were fully dilated, and then kept them dilated, being careful to tell the friends to watch the effect and omit the medicine in case any dangerous symptom supervened. I have never seen any ill effects from it. In a majority of the cases that characteristic scarlet flush or efflorescence appeared, and with it an abatement of the cough, or of its spasmodic character. In a few cases I gave opium with the belladonna, or alternately. In that case the dilation of the pupils will not be witnessed, if they be given

in about the medium dose of each—they balancing (not neutralizing) each other. I believe it is now generally conceded, that those narcotis, which we call mydriatics, are antidotes (or *nearly* so) to those that produce contraction of the pupil, and *vice versa*. But, perhaps, more experiments, or experience, are wanting to verify this. I, however, think it probable that we may find it advantageous to prescribe the two together sometimes, thus avoiding the bad effects of either, while the good are obtained. This is no new principle in medicine, I am aware, and for a long time I have acted on that principle in reference to quinine and opium—considering one an anti-congestive, while the other is congestive in its effect.

Now, although I have not proved that Brown-Séquard's saying that hooping-cough can be cured in three days, I verily believe it can be greatly cut short, and that there is no more need of hooping-cough continuing for months, than there is for ague continuing an indefinite length of time, when plenty of quinine can be found.

HOSPITAL GANGRENE, AS IT APPEARED AT THE CLAY AND CRITTENDEN U. S. A. GENERAL HOSPITALS, AT LOUISVILLE, KENTUCKY.

BY J. Q. A. HUDSON, M. D., CINCINNATI, OHIO.

From the latter part of the month of September, 1864, to the latter part of January, 1865, the writer, as Acting Assistant Surgeon U. S. A., had charge of the gangrene wards of the Clay General Hospital till the middle of November, 1864, and of the Crittenden General Hospital the remainder of the period, at Louisville, Kentucky.

About the middle of November, 1864, the occupants of the Clay Hospital were removed to the Crittenden, the former being abandoned by the Government for hospital purposes.

The latter was built by the government upon the most approved plan for convenience, cleanliness, ventilation, water and light. There was nothing peculiar or unusual in the weather at this station, during the period above mentioned. The summer and fall of 1864 were remarkably pleasant, the atmosphere dry and the temperature equable and regular. The city physicians reported the health of the city unusually good.

Hospital gangrene had been prevailing for some time previous to my connection with these hospitals, principally at the Totten General Hospital, the Clay General Hospital, and at the Jeffersonville General Hospital, at Jeffersonville, Indiana, opposite Louisville, but it was rarely seen at the other hospitals at this point, or in the vicinity of Louisville, probably from the fact that at these hospitals there were fewer wounded in proportion to the whole number under treatment, than at the hospitals named. The hygienic condition and management of the Clay and Crittenden Hospitals, were excellent. Everything necessary for the welfare and confort of the sick and wounded, in the way of food, medical supplies, and attendance, clothing, &c., was furnished in abundance.

In order to secure a plentiful supply of pure air and free ventilation, the gangrene cases of the Clay Hospital were located in tents a few rods east of the hospital building.

There were six ward buildings at the Crittenden, ranging east and west, and the most easterly was selected for the gangrene ward. This was done to secure the favorable influence of the prevailing winter winds from the west and north-west, to keep the deleterious action of the gangrene poison from the other wards.

In order to prevent the diffusion of the poison, the bandages, lint, and all material used in dressing, were carefully collected and destroyed. No instrument or vessel used in the gangrene wards, was allowed to be used in other wards or for other patients.

No variety of wound, mild or severe, was exempt from the disease. The same was true as to individuals. It attacked the old as well as the young soldier, the robust as well as the debilitated—no condition of age, temperament or health, was exempt among the wounded. Many there were among the wounded that were not affected; but the disease seemed to have no preference for any particular class or condition of persons.

Nearly all the cases of hospital gangrene, were in wounds of the lower extremities. This fact has been noticed by several writers on this disease. As far as the Clay and Crittenden Hospitals are concerned, this circumstance may be explained. A large proportion of *all* the wounds were of the lower extremity. I am inclined to believe that this statement is true of all military hospitals.

Symptoms and Course.—*In the majority of cases* the commencement of the attack was indicated by a change in the state of the wound. The usual bright red color of a healthy granulating surface, assumed

a pale hue. The surface became comparatively dry. The discharge diminished in quantity and became thinner and sanious in quality.

Inflammation and tumefaction of the margin of the wound and of the parts in its vicinity, accompanied with some pain in the swollen parts, especially on the least movement of the limb, occurred.

The tumefaction is sometimes very great and extending some distance from the wound—very much resembling œdema.

The skin at the margin of the sore is hard and everted, and a reddish blush frequently extends a short distance from that margin, especially if the inflammation is excessive. If the inflammatory action continues, the red margin becomes dark, and finally, black like ordinary gangrene.

Besides the pain that accompanies the swelling and inflammation, there is generally a stinging pain on the surface of the wound itself, which is said to be peculiar to this disease. This last symptom is not always present, but is generally so in the inflammatory cases. Concurrent with or soon after the development of the foregoing symptoms, the wound takes on those peculiarities which constitute the disease—hospital gangrene. In some cases, the entire wounded surface becomes of a whitish gray or ashen color, appearing very much as though a false membrane covered it. In other cases, this change commences at one, two or more points, on the surface of the wound, the morbid action extending from these points till the entire sore is completely covered.

The color of this coating is not always the same. In most of the cases that I saw, it was of a dirty ashen hue—it may be yellowish white. In cases where there is great vital depression, both general and local, the coating may be quite dark. When this coating is formed, any part of the surface of the wound can be touched without sensation or pain. This dead structure is intimately adherent to the living parts below. It can be swayed to and fro by catching it up with the forceps; but it can not be detached, at least at the onset of the attack, or until nature begins to separate the dead from the living tissue, and the former is slowly detached in the form of a slough.

The wound now emits a peculiar disagreeable fetor, which is said to be *sui generis*, and is one of the characteristics of the disease.

The larger number of cases were ushered in with the local inflammatory action above described, yet in a few instances this was absent, and neither general nor local disturbance indicated diseased action.

The surgeon, in dressing the wound, finds a healthy granulating surface giving off laudable pus. A few hours subsequently, possibly

at the next dressing, he finds the gangrene over a part or the whole of the sore. At the same time the patient experiences nothing unusual in the part, and the general system may be apparently in good condition, all the functions of assimilation, secretion and innervation naturally performed. Inflammation may supervene upon this local change, yet in some instances there is hardly any, if any, increased action in or around the wound.

Where the disease makes rapid progress, and especially in extensive wounds, with high inflammatory action, the discharges are mixed with dark bloody matter, and the slough is darker, frequently resembling ordinary gangrene. This condition of the wound is generally accompanied with a low state of the system, and depressed local vitality, and often has a fatal termination. This disease seems to have a strong affinity, so to speak, for the cellular or areolar tissue. It attacks this structure and destroys it in every direction, taking the wound as the starting point, undermining the integument, separating the muscles and destroying the sheaths of vessels and nerves. In a neglected case, or in one that is inveterate and does not yield readily to the action of remedies, the surgeon will find that the skin (although of a natural healthy color, except near the margin of the wound,) is separated from the parts beneath by the destruction of the superficial fascia, and the probe can be slid under it for some distance from the border of the wound. In nearly every case the separation extends six to twelve lines, and I have seen it extend several inches. In one case the entire skin of the lower half of the leg was disconnected from the parts beneath. In another case the areolar tissue of the leg seemed to be completely destroyed from the knee to the ankle, separating the skin and muscle. The vascular tissue does not seem to be very liable to be affected by it, though instances are on record in which fatal hemorrhage has occurred from the sloughing of large vessels in hospital gangrene. I am inclined to think that the death of the vascular tissue arises rather from the destruction of the areolar or connective tissue of the vessels, cutting off their vascular and nervous supply, rather than from the direct action of the gangrene upon the vessels themselves.

I believe the same is true of the integument. The skin does not seem to be much affected, at the margin of the wound. When, however, the fascia beneath the skin is extensively destroyed, it will die, but its death is more like ordinary sphacelus or mortification, than like hospital gangrene. The areolar and muscular tissues are the structures

upon which this disease *principally* acts, and its action upon other tissues *directly* is, in my opinion, a matter of some question. Unless the surgeon examines the wound carefully with the probe and forceps, he will not be aware of the extensive ravages of the disease. The gangrene will appear to be confined to the wounded surface alone; but, upon using the probe cautiously and carefully, it may be found that the areolar tissue is destroyed for some distance beneath the integument, between the muscles, and in the course of the vessels and nerves.

The local symptoms in very extensive and serious wounds, as in gun-shot fractures, are generally different in some particulars from the foregoing.

After the battles at Franklin and Nashville, Tennesee, during the winter of 1864–'5, a great many of the wounded of those engagements were sent north by railroad to Louisville and Jeffersonville. It seems strange to write it, but it is nevertheless true, that a number of soldiers with comminuted gun-shot fracture of the femur or tibia, were sent to Louisville during the coldest weather of that winter, over a rough railroad. They had the pleasure of riding in box-cars, without stoves or other means of warmth save the blankets and bedding sent with them. The Crittenden Hospital received a number of these poor fellows. Some of them had hospital gangrene when they arrived, and others were afterwards attacked. I need hardly say that many of them died.

In these cases there was a profuse discharge of dark and bloody matter from the wound. Portions of the surface were dark and bloody, and offensive grumous matter was constantly oozing from it.

There was great general and local depression—the vitality of the wounded part seemed partially destroyed, and extensive sloughs occurred from sphacelus and hospital gangrene combined, and the patient died either from exhaustion or from the supervention of some low form of fever.

In regard to general symptoms, or those arising from a disturbance of the general system, it may be said that there was no uniformity. In many cases the system did not seem to be in the least affected by the existence of gangrene, and during the whole course of the disease all the bodily functions were in perfect action—the pulse, respiration, sleep, appetite, secretion and excretion, all natural and healthy.

In the majority of cases, however, there was greater or less general disturbance, sometimes preceding, sometimes cotemporaneous with,

and in other cases following the local disease. The general symptoms were in some cases slight, consisting of headache, acceleration of pulse, loss of appetite, &c., &c., which soon passed away if the local disease was subdued. When these milder symptoms prevailed, the disease was generally amenable to treatment.

In other cases the general symptoms were severe and marked, especially in the severe and obstinate cases. Pulse permanently frequent—one hundred or more per minute, tongue coated with a whitish or yellowish fur, headache, fever, bowels either sluggish or too loose, perhaps diarrhea, occasional or constant delirium—in short, all the general symptom that indicate a poisoned condition of the blood. This febrile state often resembled, in every particular save the local deposits of pus, the disease described by surgical writers as pyæmia, and was probably caused by absorption of the poisonous matter from the local diseased part. Where the constitution was thus seriously affected, it was observed that the local disease was difficult to eradicate, and it seldom yielded till there was an amelioration of the general symptoms.

There seemed to be no regular correspondence between the local and general symptoms. I have observed severe general symptoms in slight local disease, and again, slight constitutional disturbance, with severe local gangrene. In most instances I think that the severity or mildness of the constitutional affection depends upon the state of the system at the time of the attack. Those who were weak or debilitated from any cause, scorbutic, or affected with diarrhea, were more apt to have serious general symptoms, and *vice versa*.

Other conditions being the same, that is the condition of health, strength and power of resistance, the general symptoms corresponded generally (not uniformly) with the extent of the local disease.

In those cases which terminated fatally, a low form of fever usually existed for some days previous to death, in many instances, as before stated, resembling pyæmia. The pulse ranged at or above one hundred per minute, with hardly an appreciable variation during the twenty-four hours.

The tongue was covered with a thick yellowish coat, inclining to become dark and dry, sordes accumulated upon the teeth and gums. The mind sympathised with the low state of the system. The patient seemed to have no concern as to the results—was stupid and apathetic, and a low form of delirium was often present. Diarrhea often existed,

and in extreme cases, there were involuntary evacuations of the urine and fæces.

The skin and conjunctivæ became jaundiced. This latter symptom I saw in but two cases, both of which were fatal.

Before leaving the subject of symptoms, it would be well to notice that the disease is apt to recur in certain constitutions. This peculiarity has been repeatedly observed by surgical writers. We had a number of cases who were returned to the gangrene ward from two to six times, after being each time freed from the disease.

In some of them the disease was very obstinate and difficult to subdue—the treatment extending through several weeks. None of these cases were fatal; and there was very little or no general systematic disturbance, and the disease seemed to be wholly local, but of an inveterate character.

These recurring cases were mostly in individuals of the phlegmatic temperament. I should judge that at least one-sixth of our cases were attacked more than once.

CAUSES AND NATURE.—The cause of this disease is still involved in obscurity. There is no doubt in regard to its contagious nature when once developed; but whether every case originates thus it is difficult if not impossible to decide. My own opinion is that the disease may be produced under a certain combination of circumstances not perfectly understood, and when once developed it may be propagated by contagion, and when the morbid principle is strong, and circumstances and conditions exist favorable for its concentrated action, it may be propagated by infection or through the medium of the atmosphere.

We know that gonorrhea may originate *de novo*, and afterwards be communicated by contact; and it is not impossible that hospital gangrene, (and possibly many other contagious and infectious diseases), may in like manner originate by the existence of conditions favorable for it, and without the previous existence of the gangrene poison.

It has existed as an epidemic both in military and civil hospitals.*

The local morbid action is essentially a molecular death of the part affected.

The tissue dies not *en masse*, but little by little, particle by particle, extending indefinitely, unless checked by nature or the skill of the surgeon.

*See *Am. Jour. Med. Sci.*, vol. x, 1832, p. 47, et Seq.; also, *Lond. Med. Chir. Rev.*, Aug., 1829, p. 371, et Seq.

Is the disease a local disease, or are the local phenomena merely manifestations of constitutional action?

Authorities are still divided on this point, and many of our best writers (among them S. D. Gross) consider the disease constitutional.

How are these cases to be explained in which there is an entire absence of constitutional trouble?

Hennen, who believed the disease a constitutional one, and relied almost wholly upon general remedies in its treatment, even to the exclusion of a valuable local remedy that was introduced by one of his brother army surgeons,* (I allude to the use of arsenic,) says, "In this distressing state of our hospital, some few constitutions resisted the febrile action altogether; some had *extensive local disease without any general affection.*"

We may reasonably suppose that when this disease originates wholly by infection, and *without the existence of a previous wound on the person who receives the infection*, that the general system would be first affected.

If the disease occur as an epidemic, as it undoubtedly has done, we may have those differential peculiarities, in the different epidemics, just as is observed in other epidemic diseases.

In some epidemics of hospital gangrene, the system may be always implicated, while in another there may be very little constitutional trouble, or the system may be affected in a limited number of cases. With the knowledge we now have of hospital gangrene, as it has occurred from time to time during the present century, it seems to me to be the hight of absurdity to affirm that this disease is *essentially constitutional.*

A pathological principle, or even an hypothesis by which it is proposed to explain a particular disease, is unworthy of the regard of sensible men if it does not embrace *all* cases of the particular disease it is designed to explain.

In regard to the character of the constitutional disturbance, when it exists, it may be said that the tendency was to a low form of fever, adynamic in character. This has been generally observed by writers on this disease; yet it is not always the case. Hennen states that towards the close of the epidemic which he observed, the fever became marked and open, pulse strong and hard, severe inflammation in and around the wound. The synochal character of the disease was so evident, that blood-letting was employed with successful results. The

*Military Surg., Edinburgh Ed., 1818, p. 238.

lancet wounds did not take on diseased action.* Would we not anticipate gangrene in the lancet wounds, if the disease was constitutional?

In so far as the hospital gangrene at the Clay and Crittenden Hospital is concerned, I am of the opinion that it was a local disease, from the following reasons:

First—The entire absence of general symptoms in many cases.

Second—The want of correspondence between the general and local symptoms, when both existed. In some cases, there was serious constitutional disturbance, with slight local disease; in some other instances, *vice versa*.

Third—The existence of gangrene in one wound, while another wound in its immediate vicinity would be unaffected by it.

Fourth—The greater success resulting from the use of local, as compared with general remedies, even in cases where there were serious general symptoms.

DIAGNOSIS.—But little need be said on this point. Writers are disposed to be particular to point out the difference between the sloughing scorbutic ulcer and hospital gangrene. The difference is so wide and marked, that the labor is lost. We might as well be careful to note the particular symptoms that distinguish epilepsy from gonorrhœa.

Some recent writers in our medical journals, have fabricated two kinds of hospital gangrene—the false and the true, the former said to occur in depraved, scorbutic subjects. The disease may occur in scorbutic or scrofulous, or in syphilitic subjects; but in so far as its real nature is concerned, and in all that relates to its local treatment, it is true, genuine hospital gangrene. This division into two kinds, false and true, is a distinction without a difference. The greyish, yellowish white, or brown slough attached to the wounded surface, not formed by any local application of the surgeon, will sufficiently indicate the malady, and may be considered the diagnostic symptom.

PROGNOSIS.—Since a vigorous local treatment has been generally practiced in hospital gangrene, it has been much less fatal than formerly.

When there is serious constitutional trouble, particularly of the nervous and circulating systems, the prognosis is not favorable. This state is noted by stupor or delirium, and a persistently frequent and quick pulse, at or above one hundred per minute.

If, in conjunction with serious general symptoms, such as stupor or

*Hennen's *Mil. Surg.*, pp. 245 and 246.

delirium, frequent pulse, dry, coated tongue, &c., there is a bad state of the wound—extreme sloughing and destruction of tissue, and especially if local remedies have little or no power to check the progress of the gangrene, the prognosis is very unfavorable and the termination will probably be fatal.

The old, debilitated soldier, those debilitated from any cause, such as loss of blood, diarrhœa, are bad subjects for this disease.

The co-existence of a scorbutic, a scrofulous, or a syphilitic taint, especially the first, is an unfavorable complication.

It may be stated as a rule, that there will be little abatement of the local disease while the constitutional symptoms are strongly marked.

In some instances, these depend upon the local irritation and inflammation, and speedily subside when they are removed. The young, the robust, those not affected by other maladies, of course resist the diseased action more strongly, and in these the prognosis is more favorable.

When the constitutional trouble is slight, we may anticipate a favorable termination. Even in quite extensive wounds, if there be mild general symptoms, and if the disease seems readily to yield to local remedies, we may have strong hope of a favorable result.

(TREATMENT *in the next number.*)

THE VESSELS AND NERVES OF FIBROUS AND FIBRO-CARTILAGINOUS STRUCTURES.

[This, though some two or three years old, we suspect has escaped general professional attention, and therefore we re-publish it. T. P.]

M. Sappey has communicated to the Academy of Sciences the results of his investigations on the vascular and nervous supply of articular fibro-cartilages, tendons, and aponeuroses.

1. *Articular Fibro-cartilages.* Authors state that these structures possess neither vessels nor nerves. M. Sappey, however, says that he has been able to ascertain the presence of both. Among the articular fibro-cartilages, those of the knee are the most vascular. The vessels at first proceed parallel to the bundles of connective tissue, giving off a large number of branches at various angles, which anastomose and form a network. The vessels reach the middle part of the cartilage, sometimes even the vicinity of the edge. The arteries have at first their three coats; their ultimate ramifications end in loops which spread over the two surfaces of the fibro-cartilage, and are arranged in the most elegant and varied manner. The veins follow the course of the

arteries. In the fibro-cartilages of the other parts, the vessels pass from the circumference towards the centre to a depth of about one-tenth of an inch, and end in arches surrounding the centre, which is entirely destitute of blood-vessels. The periarticular fibro-cartilages are much more vascular, and do not in this respect differ from periosteum, of which they may be considered as an offset. The vessels are arranged in the same way as those of the inter-articular fibro-cartilages. The fibro-cartilages receive nerves, part of which accompany the vessels, while part follow a separate course. Those which follow the vessels are frequently separated from them, and sometimes cross them at a right or acute angle. At some points, the nerves are larger than the vessels. They anastomose, and form plexuses with unequal, often very fine, meshes.

2. *Ligaments.* Vessels enter the ligaments in very large numbers. They lie in the interstices of the fasciculi, which they surround with anastomoses,. They gradually subdivide until they reach the surface, covered by synovial membrane, where they form an extremely rich network. In the capsular and some other peripheric ligaments, the deepest layers, hitherto considered by many as almost completely destitute of vessels, are, on the contrary, very vascular, the vessels being distributed almost as in the skin. All the ligaments receive a large supply of nerves; some even more than the skin of the trunk and limbs, their supply being rather comparable to that of the fingers and toes. In their course, the nerves send off a number of branches and minute twigs, forming plexuses, which most generally accompany the vascular plexuses, but are sometimes isolated. The nerves become subdivided until they are reduced to one or two tubules, so that they seem to end in free extremities. M. Sappey does not assert they do so; he can not say that the isolated tubercles do not become united with others.

3. *Tendons.* Vessels and nerves are a little less numerous in tendons than in ligaments, but are arranged in the same manner.

4. *Aponeuroses.* In all the fibrous envelopes of the muscles there are ramifications of arteries and veins, accompanied by nervous filaments; the latter being sometimes larger than the vessels. Two orders of nerves are met with in the aponeuroses. Some, having run a longer or shorter course in the fascia, leave it and end in the subaponeurotic structures; while others, especially destined for the fascia, form frequent anastomoses, as in the ligaments and tendons.—*Gaz. Med. de Paris*, 2 June, 1866.

TREATMENT OF EPILEPSY.

Dr. Hermann Beigel, in concluding some papers on the *Pathology and Treatment of Epilepsy*, (*Lancet*, December 28th,) speaks as follows:

There is, perhaps, no other disease in which the physician can do

more good to his patient than in epilepsy. In many cases he is able to effect a *cure*, by which term I mean the patient's not having fits for years. If we see cures of epilepsy every week published in the journals, and see further that some writers fancy the patients to be cured because the fits do not make their appearance for several weeks, then we may rest assured that such an author has other motives in publishing his case than that of advancing science and serving the truth.

In the majority of cases, the physician is able to improve the patient's condition, in a great measure, by turning very long fits into slight ones, or by causing the interparoxysmal time to be much longer. Mr. Barry, late house-surgeon to the Metropolitan Free Hospital, has watched a case with me, which was of very great interest in a therapeutical point of view. The patient was a woman aged forty-eight. Six years ago she had been attacked with fits, and had "scores" of them every day—at least twenty in twenty-four hours. During the whole six years she was only once free of them for four days. She must, therefore, have had six thousand fits altogether. When I first saw her, she had an attack in my consulting room, and I confess it was the most terrible attack I have ever witnessed. She was treated by means of hypodermic injections of morphia, and in the week after the injections, she had only one attack. The injections were repeated twice a week, and when the attacks were turned into "faintings," as the patient called them, which recurred about three or four times a week, and did not cause her to fall, she did not return to the hospital any more.

Of the whole number of my patients, forty-six remained sufficiently long under treatment to warrant an opinion of the efficacy of the drugs applied. Of the number just mentioned, fourteen were cured, twenty-six have improved, while in six the treatment had no effect. A case which I am inclined to look upon as *cured* is the following: The patient was twenty-one years old, a shoemaker by trade. The grandfather had several fits, but the patient was in good health until three years before he came under my care. At that time he came up from the country, in order to see an execution at Newgate, which made such an impression on him as to bring on epileptic fits after a few hours. In these fits he lost consciousness, and was very much convulsed. For two years he was sometimes free from paroxysms for several months, and then again he had several attacks in the course of a day; six months, however, before he was admitted an out-patient to the hospital, he was seized several times every day. He was likewise treated by means of hypodermic injections of morphia, which were continued for a long time. After having been free from attacks for about twelve months, he requested me, in 1865, to discharge him, in order that he might go in search of employment. A few months ago his father came to the hospital, and from him I learned that his son, who is now in the country following his trade, had never had a fit since he left the hospital.

As to the remedies used by me for the treatment of epilepsy, I have tried nearly all drugs which have been recommended by different authors, including urari or the arrow poison of the Indians, so strongly

recommended by a few continental physicians, which, however, has failed in my hands.

But there are two drugs in which confidence may be placed, viz: bromide of potassium and hypodermic injection of morphia. It is now a well-known fact, that the former, when used in very large doses, has the power of postponing the paroxysms, and, in some instances, to make them disappear altogether. Hypodermic injections have the power of producing the same result in a much shorter time. It is very difficult to explain why the action of morphia is different when given internally and when applied hypodermically, but that such is the case has been confirmed by reliable observers.

ON MARKINGS OR FURROWS ON THE NAILS AS THE RESULT OF ILLNESS.

BY SAMUEL WILKS, M. D.,

Physician to Guy's Hospital.

The fact that the traces of a past illness may be found on the nails is probably known to many in the profession, as it is one with which I have been well acquainted for many years. Constantly meeting, however, with medical men to whom it is unknown, I take the liberty of bringing the subject before their attention, hoping that the experienced will pardon the intrusion for the sake of those to whom the fact is unknown. I can not at present lay my hands on works of reference, but I believe the subject has been alluded to by English and foreign authors. On taking up the book on "Skin Diseases," by the late lamented Dr. Hillier, I find the following casual allusion to it:—"Cross furrows are often seen on the nails. It has been suggested that these are due to an irregular growth of the nail from disturbances of health, the thinner portion being formed when the patient is out of health, and the thicker parts in the interval." My own distinct knowledge of the fact that the nails become altered in disease was obtained many years ago, when a non-professional gentleman observed the circumstance for himself, and was so much interested in it that he referred the matter to a distinguished natural philosopher. It was after a severe attack of diarrhœa, which caused almost as much prostration as Asiatic cholera, that he discovered a white line or depression at the roots of the nails. Having formed a pretty accurate idea of their rate of growth, he was convinced that the markings corresponded with the date of the illness. I may state that these marks are caused by a slight furrow, which is found more especially on the middle of the nail, and more distinct on that of the thumb. They point, no doubt, to a sudden arrest of the nutritive process during the time of the illness, and herein lies the interest of the observation. In cases of fever

we know that the most profound changes take place in all the tissues of the body. In scarlet fever, for instance, the whole of the epithelial surface within and without the body is affected, and, as a result, we may witness a desquamation of the cuticle, falling of the hair, and separation of the nails. When the fever is at its height, we can have then little doubt of the changes taking place in the tissues, and can feel no surprise that the nails show evidence of the former conflagration. As the patient recovers, and a new cuticle forms, and the hair begins to grow, the nail proceeds to shoot forward afresh, and it is not long before the latter exhibits a transverse furrow, indicative of the previous illness. It is possible, therefore, to ascertain the date of the attack. Physiologists say that the thumb-nail grows its whole length twice in a year, and thus it follows that if the furrow be found in the middle of the nail, the illness occurred three months before. This fact may then serve for a limited period, like "foot-prints on the sands of time," as some additional proof of a previous serious illness. For instance, a patient with a cardiac disorder stated that he had had an illness three months before, and on his nails some transverse markings were found; also another suffering from phthisis, said that his illness resulted from an inflammation of the lungs, occurring a few weeks previously, and on his nails, also, some distinct lines were discovered. That a severe diarrhœa could produce such a cessation of the nutritive process as to exhibit its effects on the nails is a fact for which I should have been unprepared had it not been apparent to the eyes. It is one, however, of extreme interest. I have never made the subject one of accurate clinical observation; but if I can induce my clinical clerks to record a few cases, the readers of *The Lancet* shall be furnished with the result.—*Lancet*, January 2d.

PROCEEDINGS OF MEDICAL SOCIETIES.

PROCEEDINGS OF THE GRANT COUNTY MEDICAL SOCIETY.

This society met pursuant to previous adjournment, in the office of Drs. W. & C. Lomax, in Marion, on Tuesday, November 24th, 1868. The President being absent, Dr. Shively was elected President *pro tem.* A quorum being present, the minutes of the previous meeting were read and approved for record.

The name of Thomas C. Kimball, M. D., of Xenia, Miami county, was presented as a candidate for membership. Having the credentials required by the constitution, he was unanimously elected; when he

signed the constitution, paid the assessment and was declared a member of the Society.

Business requiring early consideration being in order,

Dr. Kimball asked and obtained leave to bring before the meeting for examination and opinions of the members, a case of enlarged parotid gland in an athletic, robust man, aged about forty, and a farmer by occupation, who gave the following history of the case:

Some twelve years ago a small tumor the size of a hazel-nut, was observed posterior to the angle of the lower jaw. It was hard, painless and movable, giving no suffering of any kind. It gradually and almost imperceptibly increased until it has attained nearly the size of a turkey's egg, causing some inconvenience to the free use of the jaw, and to opening the mouth widely; attended at times, and especially on taking cold, with a dull uneasiness in the tumor. It is quite protuberant, irregularly nodulated; the point first noticed as a small tumor, stands out as if an outgrowth from the body of the disease. The whole mass is hard, heavy and movable beneath the skin and upon the subjacent parts. The progress of growth, he thinks, has been increasing for some time past. The health has generally been good, excepting that for the last four years he has been subject to attacks and relapses of ague, from which he says he is considerably reduced in flesh, and has recently observed a more dingy sallowness of the countenance than in good health. Has never heard of any cancer in any of his family relations. The case has never been submitted to treatment.

Having gone through with the examination, opinions were given as follows:

Dr. Charles—From the length of time this tumor has existed, its slow growth, having only attained the dimensions of two inches in length and about one and one-half inches in its transverse diameter, in a progress of twelve years, its entire freedom from pain or adhesion to the integuments, the general good health of the subject, and absence of ancestral proclivities to malignant disease, would lead to the conclusion that this was a benign tumor. As to its precise nature, he was not prepared to give a very definite opinion. It was, probably, an encysted tumor, not cheesy in texture he would think from its feel, but possibly fibrous, which might degenerate into a malignant disease. Upon his first examination he thought the tubercle occupying the most prominent point of the tumor was merely an enlarged lymphatic gland which had become involved, or, perhaps, the first to take on disease. But on a more careful examination, he found it firmly adherent and

having the appearance of a real outgrowth from the main body of the disease.

As to the treatment, he should not have confidence in anything but the knife. And this might be attended with more or less danger. He could not determine by his examination, whether it had formed adhesions to the parts on which it rested or not. But from its adjacency to the carotid artery and jugular vein, would fear those vessels might be involved, which would seriously complicate an operation for its removal. In view of the difficulties and hazards of the operation on the one hand, and the slight inconvenience to the patient, and the slow growth of the disease on the other, would advise non-interference for the present; but a careful watching of its condition and progress, so that should it assume a decidedly threatening appearance, it might be removed at once, and before the difficulties of the operation should be materially increased.

Dr. Kimball said this man had called upon him to treat the tumor, a few days since; but having consulted many different physicians, and received a great variety, as well as discrepancy of opinions, he had concluded to bring him before the Society and hear the opinions of the members, before making out a prescription. It was his diagnosis that the disease consisted in an enlargement of the parotid gland, and would be difficult to remove by absorption or a surgical operation either. But he was thinkiug of first trying a course of discutient treatment for its reduction, and when this was thoroughly tested, should it fail to arrest the growth, would then resort to the knife.

Dr. C. Lomax—After a careful examination, had no doubt of the disease consisting of a morbid growth developed in the structure of the parotid gland. As to the real character of the growth he was not well satisfied. While the general good health of the subject, the absence of pain in the tumor, (it being neither tender nor sensitive under pressure,) would indicate that it was one of a benign character, scrofulous perhaps; but its slow growth, nodulated surface, heavy, indurated feel, and the known tendency of diseases of this form to take on malignancy, would lead him to suspect this to be the true nature of the present disease. As long as it remains dormant, would advise that it be let alone. Would do nothing which might light up active inflammation. Avoid handling or examining it, and everything which would tend to develop active disease. Should this occur, however, and the general health suffer from the force of pain and enlargement of the tumor, would then resort to extirpation.

Dr. Hess—Thinks this is an enlargement of the parotid gland of malignant character. That little tumor on it is a diseased lymphatic; would have no confidence in any attempt to discuss it; would do nothing unless it became painful, or should grow rapidly, when he would remove it with the knife; thinks it is external to the large blood-vessels, and may be removed readily and safely.

Dr. Williams—Said this is a case to which we should, for several considerations, attach more than ordinary importance. In the first place, we have a useful man and a most worthy citizen, who can illy be spared in the community where he lives. While we should ever feel under moral and professional obligations to render the best aid our science can furnish in every case entrusted to our care, there are some in which the moral and social bearings of the patient are calculated to awaken the most lively interest in his behalf, and this case seems to be one of that character. There is another consideration which imposes no small weight of responsibility upon the medical adviser, growing out of the peculiar nature of the case and the special stage presented. The locality of the tumor shows it to be an enlarged parotid gland, while the history of its development, the slow growth, the hard and lobulated feel, and the tissues involved, preclude the shadow of a doubt of its malignant character. The dusky, dingy countenance, the loss of flesh amounting to fifteen or twenty pounds below his ordinary weight, the uneasiness complained of when the tumor overlaps the angle of the jaw, and in mastication and forcibly opening the mouth, all go to confirm the opinion given as to the nature of the case, as well as to foreshadow the fearful condition at no great distance in the future. He concurs in the opinion generally expressed, that the only rational hope of relief is in extirpation with the knife. But most of the gentlemen propose postponing the operation to a period when the suffering of the patient and failing health may demand it as a measure of relief. He would ask why should the physician advise delay when everything in the case teaches him that the issues of life and death may turn upon an early operation? The adhesions and complications are now so limited as to present comparatively but trifling embarrassment to its removal. And the operation would not only be more easily performed, but with less risk to the patient and much greater promise of security against a future return of the disease. Should it be permitted to run on, with all the depressing influences which the dread of mind accompanying its progress will unavoidably produce, until it has involved the neighboring parts, the difficulty and danger of the opera-

tion will have been greatly augmented, while the chances for an ultimate recovery and a permanent cure will be correspondingly diminished. Should the patient live for any length of time, the operation will finally have to be performed. With these views of the case, he should feel it an imperative professional duty to advise the patient to submit at once to the operation, at the same time, giving him as full and fair a statement of the probable course and termination of the case as possible, leaving the responsibility of a final decision of the matter with the patient himself.

Dr. Pugh—Thinks there is no doubt of the tumor consisting of an enlarged parotid gland, and also, that it is of malignant character; would expect an operation for its removal would be a difficult one, but would have no faith in any other remedy.

Dr. Corey—Has nothing to add in relation to the part involved, or the real character of the disease. Thinks, however, the dusky hue to which reference has been made, may have been the result of bilious derangement, as the man states he has been subject to the ague for the last four years. He should certainly not attribute it to the ravages of a cancerous diathesis upon the constitution. As to treatment, should agree in opinions already given. But with regard to the time, would feel inclined to wait until evident inroads upon the general health or the rapid growth of the tumor, should demand it. The progress of the disease has been slow so far, and there has yet been no decidedly marked increase in its rate of development, and there is comparative freedom from pain, without special inconvenience from its size, and the operation required to remove it, even in its present condition, being a serious one, as important parts are necessarily involved, would lead him to adopt a compromising course, and let it alone as long as it should confine itself to anything near its present condition. And he would advise whoever should attempt its removal, to prepare for a big operation.

Dr. Shively said, the disease is located in the parotid gland. The dusky skin, the slow growth and lobulated condition of the tumor, the firm texture and uneven surface were sufficient reasons to his mind for the conclusion that the disease was malignant. Indeed, he could have no doubt of it. His only hope would be in an operation; and the sooner the better. Should it be performed early, and the patient be restricted to the Twitchell regimen, he might live many years. But if delayed until the health runs down, all the difficulties and dangers will be increased, and the operation a failure. We all have witnessed

the fatal consequences of delay in similar cases; and also the happy results of timely operations. From all of these considerations, he would urge an early removal of the tumor by an operation.

Dr. W. Lomax said, he agreed with gentlemen as to the nature of the disease, the parts affected, and also as to the only treatment which promises any permanent advantage. Yet as to the propriety of an immediate operation, he could not feel so clear. There can be no question that an early operation would be more favorable to a complete and permanent cure, than one deferred until the disease had assumed an active and progressive condition. At present it appears to be in a quiescent or dormant state. The outlines are well defined; and the whole of the diseased mass could, probably, be readily removed, and that with but little sacrifice of sound tissues. The prospect, too, for a permanent cure is good, infinitely better than where the disease is active and spreading. For a mere surgical exploit, the conditions are peculiarly propitious. There will never be another period in the progress of the case as much so. But there is another standpoint from which the case may be surveyed. It traverses the balance-sheet of advantages and disadvantages, and casts its verdict with the preponderating scale. Some of the issues appropriate to this calculation are positive and fixed, and the others are hypothetical, and of value proportioned to the probabilities with which they are invested. Of the former class may be considered the paralysis of the eye-lids and side of the face, corresponding to the operation, which would inevitably result. Although the disability might have no tendency to shorten the natural duration of life, it would entail an inconvenience far more grevious than anything yet suffered from the disease itself. The relief which a confidence in security against dying of cancer will bring to the mind of the patient, will depend upon the constancy with which, in after life, he may continue to believe himself once the devoted prey of that fearful malady. Whatever that might be should go to offset any unpleasant consequences resulting from the operation. But it was his observation that real or fancied injuries, professionally received, were more indelibly fixed in the memory of our patients than any immunity from suffering which is strictly prospective, however well-grounded in rational and scientific faith it may be. And, however successful the operation, it will be almost certain, ultimately, to bring the censures of the patient upon the physician who performs it. This is one of the small persecutions inseparable from our profession, and should not enter largely into the motives of the conscientious physi-

cian in settling a question of this magnitude. He was not sure but that the signs of active, malignant degeneration had been overrated by gentlemen who thought they saw an urgent demand for an immediate operation. The dingy complexion and loss of flesh, to which so much importance had been given, might depend, as Dr. Corey supposed, upon the ague to which, during the last few years, he has been subject. Were it the result of cancerous cachexeia, lighted up by this local trouble, he should expect greater suffering in the tumor itself than has ever been experienced. There having never been any pain or tenderness of account, nor manifest increase in the rate of growth, would lead him to hope the disease might remain dormant for years to come, and possibly until the patient might be carried off by some other malady. The inconvenience of his present condition is nothing compared to those which the most successful operation would inevitably produce. He would, therefore, recommend that it be let alone as long as it remains in a passive state. Should it become painful, and assume an active development, he would advise its prompt removal And, as is common in such cases, many professional opinions have been sought and a great diversity given, he would specially caution him, when he submits to the operation, not to intrust himself to the skill of those expert doctors who have declared it to be as simple, as speedy, and as safe as the emasculation of a pig.

Dr. Drayer was not satisfied whether the tumor was malignant or not. From its slow and gradual growth, he would be inclined to think it is not. But it might be liable to degenerate into malignancy at any time—does not know what is the cause of it. Should it grow no faster in the future than it has done in the past, the subject would have to be an old man before serious inconvenience would be suffered. He would, therefore, advise that it be let alone, unless more grave symptoms should arise, when it could be treated accordingly.

Dr. C. Lomax wished to inquire at what stage of cancerous affections the dusky hue of the skin made its appearance, and what caused it.

Dr. Williams replied, that it was when the constitution itself yields to the force of the disease. The cancerous poison destroys, to some extent, the red corpuscles of the blood; the tissues, in consequence, become reduced and shriveled; and both tissues and blood are deficient in vital force and activity.

Dr. Kimball stated that the patient was desirous to have his case treated, and requested to hear the opinions concerning it.

The president suggested that he be allowed to come before the

meeting, and that the secretary give a brief summary of opinions as expressed in this discussion, which was done.

Dr. Williams, from the committee on the subject, reported that the case and drawers for preserving the books, papers and other property of the Society, had been contracted for and would soon be finished and ready for use.

The treasurer reported a balance in the treasury of $370.70, which report was received and approved.

Dr. Shively reported a case of a large abdominal tumor, resulting in death. It was removed in a post mortem examination, and weighed forty-seven and a half pounds.

On motion, the secretary was ordered to furnish the proceedings of this meeting for publication in *The Western Journal of Medicine.*

The meeting adjourned, to meet again on the third Tuesday of January, 1869. WM. LOMAX, *Secretary.*

CORRESPONDENCE.

FORT WALLACE, KANSAS, DECEMBER 31, 1868.

DEAR "WESTERN JOURNAL:" A fac-simile of your pleasant self for December, has been received, and, as usual, examined with the satisfaction it invariably brings. I will say that, next to *The American Journal of the Medical Sciences, The Half-Yearly Abstract,* and *Braithwaite,* it ranks with them, and is quite the peer of the *Lancet,* and the *Medical Record, The Medical News and Library,* and *The Medical and Surgical Reporter,* all these several periodicals being furnished by the Medical Department of the United States Army.

For months past, in fact since last August, when the Indian war for 1868 began, it has been my thought to give you, monthly, items concerning gun-shot and arrow wounds, many of these having had my supervision. Regret that this duty was left undone is, however, all the apology I may offer, excepting the present mention of some of them, as follows:

Duty with various scouting detachments, out from this fort, during September and October, gave me rare opportunities to witness not only the strange and exciting warfare with our wild red brothers, but also the various character of wounds incident to such warfare.

It was my pleasure in September last, to have been one among the first to the relief of the party of Brevet-Colonel (now Brevet-Brigadier General) G. A. Forsyth, United States Army, that was attacked by overwhelming numbers of the savages, on the Arikare fork of the Republican river, distant north north-west from this fort one hundred and thirty miles. In the bravery of desperation, the assaults of the red-skins were repelled with deadly loss to them, while the Colonel's party suffered severely. The circumstances surrounding these brave fellows after the fight, were of such nature as to have materially influenced the character and results of the wounds, and are of sufficient importance to rehearse. On the day of the fight (the 17th of September), the subsistence stores taken out by the Colonel's party, were all exhausted and beleaguered by the savages. For three days they were forced to live on the flesh of their dead horses and mules, all of which had been killed in the first day's fight. After the third day, for five more weary, interminable days, waiting for relief, their only food was the putrid flesh of these animals, and a few joints of the wild cactus, to be found near by. So great was their loathing of the spoiled food, that they made efforts to shoot the prowling wolves at night for sustenance instead. They, however, killed but one of these, which scarcely made a taste around for the famished men. Beside all this, they were kept in constant vigil by the proximity of the savages, and were exposed to several chill and rainy nights. We reached them September 25th, and their altered appearance and hollow voices betokened their peril from famine.

Of this party four were killed outright or survived but a few hours; another one died the evening of our arrival, after amputation at junction of middle and lower third of femur, for extensive destruction of its extremity, and the knee-joint; and one other died within two months after arrival at this post, from a wound involving the knee-joint. Of the fourteen others wounded, eight of them are yet invalids, or cripples for life; while in several diffuse abscesses and tendencies to septicemia were present. In all of them, excepting three very slightly wounded, recovery is very tedious. Colonel Forsyth himself suffered with the rest, and remains at this post, bed-ridden, by a fractured tibia, parts of which have necrosed, and been removed, while the solution of continuity still exists.

During this fight an arrow struck a man on the left frontal protuberance, and could not be removed by a stout comrade. A moment afterwards, however, a pistol-ball grooved the scalp adjacent, and car-

ried the arrow several paces distant. This was one of the slight wounds mentioned—the man recovering in a few weeks time.

In the month of November, another party out from this point had a fight, in which our loss was four wounded, three severe arrow wounds, and one gun-shot wound, of the breast, all of which speedily recovered, while five Indians were killed and several wounded.

Aside from the above, quite a number of interesting cases from civil (?) life, as the result of whisky, or of accident, have been treated hereabouts; and the generally good results of all must be attributed to the salubrious climate of this region. Apropos of this I must mention a *case* occurring in November last, viz:

Was called to Sheridan, (railroad terminus, fourteen miles distant,) by telegram, November 23d; patient, a Magdalen Lizzie, æt. nineteen years; wounded in a drunken row, by a "border" ruffian; found a comminuted fracture of neck and head of left humerus; saw the necessity of and made an exsection, removing head of humerus and fragments, altogether three inches in length; improvising my assistants from the pistol-girded roughs at hand; was forty minutes from beginning the exhibition of chloroform; some oozing of blood, but no active hemorrhage; lips of incision approximated by interrupted sutures. Was hastily called (all this at night) an hour and a half afterwards, when I found that a dangerous hemorrhage had occurred. Patient almost exsanguine; removed sutures at once, and found the ooze deep down in the bullet's track; the anterior circumflex had been carried away by the missile; my efforts to secure it were in vain, when I resorted to the only means at hand and *crammed* the chasm full of old muslin torn into shreds; over this a compress and roller bandage; exhibited morph. sulph. grs. *ss*, and remained until towards morning, when I secured some rest.

November 24, 7 A. M.—Patient resting well, with no bleeding, but with an almost imperceptible pulse; sent to Fort for liq. ferri. persulph; it came at four o'clock P. M., when I removed compress and stuffing, and saturating a good piece of sponge with the styptic, I repeatedly mopped out the wound, filling up afterward with fine charpie, and applied roller from the hand up; left morphine to be taken for pain or sleeplessness, but thought she would die that night.

Saw her November 26th; doing well; pulse good, but weak; appetite also good; replaced soiled charpie with new, and reapplied roller, leaving more morphine, with directions as to diet, &c.

November 28.—Wound in splendid condition, and patient rap-

idly improving; removed charpie, washed out the wound, and brought the edges together with one suture and adhesive strips; applied simple water dressings, and gave tr. ferr. chlor., gtt. xii, thrice daily.

December 2.—Getting well rapidly; brought the edges of wound still more closely together, and applied simple dressing as before.

December 10.—She is up and about; wound healed and well united, excepting a small depending wound, from which comes a slight discharge of healthy pus, and she has already resumed her former vocation, on the sixteenth day of her injury.

December 25.—Is well recovered, and plying her vocation quite as formerly, (I am told,) and it is said that she is quite in demand and popular, by reason of her injury and abstinence during recovery.

With this, I am, very truly yours,

J. W. FITZGERALD, U. S. A.

THE NEW MEDICAL LAW OF OHIO.

EDITOR WESTERN JOURNAL OF MEDICINE—*Dear Sir:* As our last Legislature was pleased to adopt some measures looking to the elevation of the standard of the profession of medicine and the protection of the citizens of Ohio from empiricism; and, although, probably, recognizing that such interests rest in the hands of regular medical colleges, still, for the encouragement of worthy persons whose circumstances have, thus far, prevented their graduation, they have reposed a trust in the country medical societies throughout the State, which it is presumed they will not abuse, please permit me to give you a synopsis of the action taken by the Scioto County Medical Society.

A committee of three, with one alternate, was appointed as a board of examiners, and instructed to grant certificates to those only who practiced medicine in accordance with the code of ethics as laid down in the constitution of the American Medical Association, and are, after a rigid examination, found duly qualified to practice medicine, surgery and obstetrics, and urge that the interests of the profession demand their graduation in some regular medical college, at their earliest convenience; and also, that they shall grant "certificates of limitation," in proportion to the correctness of the answers given to the questions asked, and *no* certificate given for a longer period than that of two years.

Such a course, it is deemed, will effectually carry out the objects of the law, by compelling the ignorant pretender to renounce his practice, and act as a constant incentive to the worthy, but poor practitioner, for his earliest graduation. Respectfully yours,

M. S. PIXLEY, *Secretary.*

PORTSMOUTH, OHIO, JANUARY 6, 1869.

CINCINNATI, JANUARY 7, 1869.

EDITOR WESTERN JOURNAL: *Laus Deo!* Cincinnati has at last a hospital worthy of the city and the times, and will soon have forgotten the "old Commercial," and the temporary occupation of "St. Johns" and the "Orphan Asylum." As you know, it was intended to have had a part of the new building ready for use by the first of October last; but there was delay in the completion of the Ann Street Sewer, and the finishing up of the thousand and one "last things" that had to be done before patients could be admitted, so that the dedication was deferred from time to time. But to-day the house was formally transferred by the Hospital Commission to the Board of Trustees, and to-morrow night will find the sick comfortably located in their new quarters.

As seven hundred and fifty thousand dollars of the city funds have been expended upon this noble charity, it was very properly concluded that the public at large ought to have an opportunity of seeing the result of such liberal expenditure, so the doors were thrown open at eleven A. M., and for hours a steady stream of men, women and children poured through the wards and passages. Mere curiosity took most of them there, but to some, doubtless, it was a visit to the place that would receive them when next they were sick. The formal exercises were held at two P. M., in the amphitheater, which was densely crowded with representatives of all classes in the community. After the opening "Gloria in Excelsis," Mayor Wilstach, on behalf the Hospital Commission, transferred the keys of the building to the Board of Trustees, appropriately remarking upon the just pride that the city felt in her new hospital, and concluding as follows:

"I have the honor, by virtue of my position as Mayor of the city and President of the Hospital Commission, to transfer to your hands, as Trustees of the Cincinnati Hospital, this building and its appurtenances, trusting that you will so guide its destinies, that in the future all the people may truthfully say: 'Well done, good and faithful servants.'"

Dr. David Judkins, as representative of the Board of Trustees,

received the keys, and gave a brief history of the hospital from its establishment in 1864, to the present time, showing how and when from the "old Commercial," that forty-seven years ago was, "by law, hospital, poor-house and insane asylum," there had grown out the Infirmary, Longview Asylum, and the present six hundred-bed Hospital, and showing further the necessity of ample accommodations for the sick.

"There are, at this time, in our city, somewhere between eleven and thirteen thousand men and women, mechanics, clerks, shopmen, &c., without families, whose homes are in boarding-houses, and who, while health is afforded can manage to live with comparative comfort; but when sickness seizes them, they suffer for thorough means of relief, occupying, perhaps, a small room in a cheap boarding-house, the mistress of which has not the time to spare from her toil to pay them such attention as is essential to their relief and care—no time to watch at the bed-side, none to devote in preparation of proper food, ventilation of rooms and their proper cleanliness can not be attended to. In short, they do not and can not receive such attention as will promote prompt relief and speedy cure. Here is a home for this class of persons where all these things can be found, and at the same time secure the ablest medical skill in the treatment of their maladies, and not as paupers either, for we shall be prepared with proper wards and apartments for such as are able to pay their expenses."

As the hospital was now in the hands of its proper Governors, and ready for its legitimate use, there was an especial appropriation in the invoking, at this stage of the exercises, the protection and blessing of the Great Physician, in prayer by Bishop McIlvaine.

Dr. John A. Murphy, on behalf of the Medical Staff, followed in an able address, reviewing the history of the hospital, the efforts made from time to time to secure proper and ample accommodations for the sick, and the obstacles that had so often been thrown in the way of those who had endeavored to get rid of the old and unfit building; in conclusion, assuring the gentlemen of the Board that "your medical staff who has sympathized with you, supported and assisted you to the best of its abilities, in your labors, again thank you, and pledges itself here to-day, to be with you in the future in carrying out in this home the wishes of all good citizens—the relief of the sick and the comforting of the wretched."

As the oldest member of the Staff, and one long associated with medical teaching and practice in the city, Dr. M. B. Wright spoke for the profession; referring to the history of the hospital and those prominently connected with it in the past; showing the necessity and propriety of the erection of this "magnificent temple to the cause of humanity," pointing out the class of persons that would be benefitted, by its provisions, and indicating the "delicate, yet stern responsibili-

ties resting upon" those connected with its administration. "Among these is the selection and continuation of a conscientious and competent Medical Staff. In an address delivered by an honorable citizen at the laying of the corner stone of this edifice, is the following sentence: 'Let there be here the expression of the purest philanthrophy, embittered by no sectarian prejudices, controlled by no narrow code of medical ethics, but exhibiting to the world the daily manifestation of the truth that diversity of opinion may be tolerated with safety if the mind is left free to combat error, no matter where it exists—by whom it may be promulgated.' To these sentiments I yield my unqualified assent, and I am rejoiced to know that the motives and efforts of the profession are controlled only by human suffering. It is no band of gipsies pitching tents here and there for personal gains. It walks the earth, scattering blessings everywhere and to everybody, and is covered by nothing less than the great dome of heaven. It guarantees the widest latitude of opinion, and imposes no restriction on practice. 'There is no narrow code of medical ethics' requiring the administration of any particular medicine or amount of dose. On the contrary, all are left free, in the exercise of a calm, enlightened judgment. There is inscribed on the banner of the profession in living light, 'Progress.'"

With the conclusion of Prof. Wright's address, the exercises were over, but during the remainder of the afternoon, a crowd still lingered about the building, inspecting and admiring. The completed portions of the hospital, (the administration buildings and western pavilions,) will be occupied to-morrow, affording accommodations for about three hundred patients. The eastern pavilions will not probably be ready for occupation before the first of May next. *

DISCUSSION ON DIPHTHERIA, BY THE CINCINNATI ACADEMY OF MEDICINE.

I have read the discussions by the Academy upon several subjects, as published in the *Lancet and Observer*, with great interest, and especially that upon diphtheria.

It is the sum of individual observations, carefully made and compared, that gives us any safe basis for progress in our profession.

No matter how humble or exalted the member who may be devoted to medical science, if he learns one new fact, and gives it to the world, every true-hearted physician receives it gratefully.

Our noble science is progressive. There is no place in our profession where we can stop and say that our knowledge of this disease or that, either in cause, pathology or treatment, is finished; that we know all there is to be learned about any given disease.

The great medical theories that have attracted the attention, and formed the faith of so many medical men in the past, have culminated, one after another, and the popular furor that emblazoned them is extinguished, and not a devotee is left to reverence their antiquity or former notoriety.

It is well that we are settling down into a practical age, where we are to inquire for facts; no theory, no eminent authors, no assertions of this system or that, will answer in this age, unless founded upon incontrovertible facts.

But to our subject. Our friends in the Cincinnati Academy of Medicine have proved all I have said beyond a doubt. No one who reads carefully their discussion upon diphtheria, able, interesting and valuable as it is, can doubt one thing, that the medical profession have not yet settled the cause, pathology, diagnosis, prognosis or treatment of diphtheria.

The learned and able disputants have given us many interesting facts and opinions, not only of their own, but of many eminent authors; yet they leave all the main questions and points discussed still unsettled, and some that they have settled, are not so clear to my mind as I would like to have them.

It would be a great gratification to know the relation between diphtheria and scarlatina. Are they brothers or cousins?

Dr. Murphy tells us "he has known diphtheria to come on directly after scarlatina, but does not believe that the two diseases could exist together."

Now if this opinion from a learned man, does not finish the whole question, I would like to give a few facts upon the point.

In 1860 diphtheria began to prevail in this vicinity as an epidemic. It soon spread throughout the entire town and country. It prevailed in its epidemic form for some eight months, since which time it has apparrently become one of the common diseases of the country. Among the great variety of cases was a family of five children, living three miles north of town, all sick at the same time. Two had ordinary diphtheria, one with the entire nasal passages, as well as tonsils, covered with the diphtheric membranes as in the throat, as much so as I

ever saw, with full and perfect scarlatina. One of these cases died and one recovered.

A German family, in town, had three children sick at the same time; two of the cases had a perfect diphtheric deposit on the tonsils, with violent scarlatina at the same time.

I was called recently to see a little daughter of Mr. Curls, aged eight years; found her with diphtheric membranes fully devoloped. The second day a scarlet eruption came out over her entire body. Dr. Bowers visited the case with me, and said there was no doubt about the case. The double disease yielded readily to quinine, iron and chlorate of potash. On the tenth day she had an attack of general anasarca, with an excess of albumen in the urine, which yielded readily to diuretics and tonics. I noticed a number of cases where children of the same family were sick at the same time, some with scarlatina and some with diphtheria.

These facts, with many others, have convinced me that diphtheria and scarlatina do occasionally exist at the same time in the same individual.

It was a matter of great surprise to see the wide difference in the treatment of diphtheria by the learned Academy, and especially to see the wonderful extremes in their mode of practice. The most venerable Dr. Carroll tells us "that all the varieties of throat-diseases zymotic in character, were caused by some blood-poison; that when mild they will run a fixed course, endure a certain time, whatever the treatment may be. That we should not deplete unless there is exudation; but upon its appearance we should bleed, leech, vomit, purge, and apply cold externally."

We are to understand by this, that in certain forms of zymotic disease we are to do nothing; that must be a great relief to the labors of the profession. In other and more violent forms, where there is exudation, we are to attack our patient with the most heroic treatment ever known in the palmiest days of the great antiphlogistic theory of treatment.

I love antiquity, and have often wished I could visit the tomb of Hippocrates; but I would not like to bring from the tomb of any antiquated medical father, either the old notions of doing nothing for our patients, or doing too much.

It seems to me a very singular idea that we should leave one-half of our patients to take the chances of getting well or dying without anything, and the other half a still greater chance to die by the rash-

ness of our practice. Dr. Murphy tells us "that when called to cases of membranous exudations presenting intense toxic effects, he at once gives remedies that will liberate quantities of oxygen in the system, such as quinine, tr. chlor. iron, chlorate of potassa, stimulants and food."

Here, in my humble judgment, is as much valuable advice in a few words, upon the treatment of zymotic diseases as ever came from any man.

Yet, what extremes these two men represent; the one rehearsing the exploded notions of more than a quarter of a century; the other, on the advance guard of the great modern improvement.

Mr. Editor, I have written this short article, not to criticise the proceedings of the Academy, but to raise a few questions that I would like to have answered:

First—What is the relation between diphtheria, scarlatina, erysipelas and typhoid fever?

Second—Are they not all lymphatic diseases? Or, is not their pathology located in the lymphatic system?

Third—Do they not originate first in lymph-poison, instead of blood-poison?

WAYNE GRISWOLD, M. D.

CIRCLEVILLE, OHIO.

"DEATH FROM CHLOROFORM."

MR. EDITOR: I read with the greatest interest the clinical lecture, in your last number, upon a fatal case of chloroform-inhalation, by Dr. Billroth, the eminent professor of Surgery in the University of Vienna. The high position of this gentleman, and his well-known ability, give unusual weight to any doctrines he may advocate; yet, in science, no single authority can be considered so high as to allow statements to be received without question, or to permit error to pass unchallenged. It is not my purpose to examine at any length the views presented in that lecture, but I can not abstain from calling attention to two points, in which, I think, the eminent professor is not sustained by facts.

The first is the attempted explanation of death under chloroform, by claiming idiosyncrasy for the patient. Now the record of fatal cases shows several instances in which the patient had inhaled the anæsthetic with safety within a few days, the day before, and, I believe, in one instance, on the very same day the death took place.

Idiosyncrasy is a peculiarity of constitution, and does not change thus rapidly. If it did, with how much reliance could we administer any medicines, since the accepted doctrine of idiosyncrasies as to opium, mercury and other articles, is well sustained? How could we ever be sure that the patient who took one of these kindly last week, would not be poisoned by an ordinary dose to-day? It seems strange that so eminent a man should have overlooked the facts above alluded to, and their bearing upon the question of idiosyncrasy as an explanation of death from chloroform.

The second error is in the following sentence: "The singular idea that a mixture of chloroform and ether is less dangerous than either of these substances used separately, has been abandoned." This may be true of Germany—it certainly is not true of England and other parts of the world. Moreover, there is a vast amount of evidence to show that this idea is sound; almost universally, death under chloroform is sudden—the patient has been overwhelmed, struck down in a moment by a powerful agent. Is it not reasonable to believe, then, that the more this agent is diluted, whether by atmospheric air, by ether, or by the vapor of alcohol, the less probability there will be of death in this manner? Experience has sustained theory in this, or rather the theory has grown out of observation of the facts, and I believe that the use of a mixture of anæsthetic vapors is increasing instead of diminishing. Yours truly, J. C. REEVE.

DAYTON, OHIO.

BIBLIOGRAPHY.

CONSTIPATION OF THE BOWELS; THE VARIOUS CAUSES, AND THE DIFFERENT MEANS OF CURE.

BY S. B. BIRCH, M. D.,

Member of the Royal College of Physicians, London; Corresponding Member Salopian Medico-Ethical Society, etc., etc. From the third London edition. Philadelphia: Lindsay & Blakiston, 1868. Pp. 181.

Constipation of the bowels is a very troublesome condition of no insignificant proportion of the human family, found among people of all ages and stations. We are of the opinion, too, that the difficulty

is frequently very imperfectly understood, and quite erroneously treated.

Dr. Birch sets out with a declaration of similar opinions, and then proceeds to consider the whole subject in a philosophical and practical sort of way. He regards improper regimen and badly regulated habits as the prime cause in a vast majority of constipated bowels, and he thinks the use of purgative medicines to overcome this irregularity, without an attempt to correct the cause, is not infrequently the means of establishing permanent ill-health.

The book has sound and judicious theories, and well-considered practical recommendations. All medical men may find something in it pleasant and useful. Its author, however, is something of a pedant, and given to verbosity; the essential material of the little volume might have been presented in less than half its pages. J. F. H.

LECTURES ON THE STUDY OF FEVER.

BY ALFRED HUDSON, M. D., M. R. I. A.,

Physician to the Meath Hospital. Philadelphia: Henry C. Lea, 1869. Pp. 316. For sale by C. P. Wilder, Indianapolis: Robert Clarke & Co., Cincinnati.

These fifteen admirable lectures, diadactic in character, are to be considered as complimentary to the lecturer's clinical course in the hospital.

Clinical lectures proper, based upon the observation of the various patients as they are met with, have a kind of desultory, individual, or disconnected character, and Dr. Hudson very properly came to the conclusion that in so important a form of disease as fever, the students would the more completely appreciate that importance, and the more fully comprehend the whole subject in its true bearings, if, in addition to these bedside teachings, they should have added a scientific view of fever, in a connected series of lectures covering the entire ground, the practical points being illustrated and enforced by frequent reference to individual cases examined in the wards of the hospital. This idea Dr. H. has carried out in a very comprehensive, entertaining and instructive manner; beginning with the nature of fever, and running through the cause, symptoms, complications, termination, prophylaxis, and treatment; and all this in a very full and satisfactory manner, without being tedious or prolix.

The immediate practical observations are confined to typhus, typhoid and relapsing synocha; but the philosophical teachings compass the whole affair of febrile disturbances. The readers of the *Medical News and Library* will recognize this volume as that which has just been completed in the Library department of that journal.

Nothing in this work, as presented to us, directly indicates whether it is a reprint of a foreign book, or an original American one. The preface is without date, and has no mark to signify where it was written. In the title page the author is styled a "Physician to the Meath Hospital;" but where is the Meath Hospital? in Philadelphia, Copenhagen or Dublin? If any one finds out that it is located in the last named place, he will derive his information from other sources than the pages of the book under notice. The lecturer, beside being an M. D., is styled a M. R. I. A., whatever that means. One may guess at the interpretation of these mystical letters, but certainly no common American student will be able to tell where the author is, or what he is, from this affix to his name.

We think the publisher does himself a moral wrong, and injustice to the author of these excellent lectures, to say nothing of his lack of candor and fullness to his American readers, by the parsimony of his information in the opening pages of the book. J. F. H.

A THEORETICAL AND PRACTICAL TREATISE ON MIDWIFERY, INCLUDING THE DISEASES OF PREGNANCY AND PARTURITION.

BY P. CAZEAUX,

Member of the Imperial Academy of Medicine, &c., &c. Revised and Annotated by S. Tarnier, Adjunct Professor in the Faculty of Medicine of Paris, &c., &c. Fifth American from the Seventh French Edition. By Wm. R. Bullock, M. D. Published by Lindsy & Blakiston, Philadelphia. For sale by C. P. Wilder, Indianapolis; Robert Clarke & Co., Cincinnati.

About twenty years since, when asking our preceptor, Dr. John Neill, what work to get on midwifery, the reply given was "Cazeaux." This was the first work upon this subject we read, and in the years of active practice, it is that to which we oftenest refer. Both at home and abroad, as the numerous editions testify, "Cazeaux" stands unexcelled by any, unequaled by any. Prof. Tarnier, who, in consequence of the lamented death of the author of the book, edits this edition, concludes his preface thus:

"It would be impossible to point out all the additions which are scattered through the work, but they are very many. Everywhere have I accorded to the views of Prof. Depaul and Pajot, as also to the views of all cotemporaneous authors, the prominence which they deserve. I hope, therefore, that this book, which is, so to speak, a new one, will be found to represent all the most important knowledge which we possess pertaining to the obstetric art." This hope, let us add, in conclusion, will be completely realized by any one who carefully consults these pages. No one engaged in obstetrical practice, should deny himself the right and privilege of possessing this book. T. P.

THE MEDICAL FORMULARY; BEING A COLLECTION OF PRESCRIPTIONS, DERIVED FROM THE WRITINGS AND PRACTICE OF MANY OF THE MOST EMINENT PHYSICIANS IN AMERICA AND EUROPE, TOGETHER WITH THE USUAL DIETETIC PREPARATIONS AND ANTIDOTES FOR POISONS. TO WHICH IS ADDED AN APENDIX ON THE ENDERMIC USE OF MEDICINES, AND ON THE USE OF ETHER AND CHLOROFORM. THE WHOLE ACCOMPANIED WITH A FEW BRIEF PHARMACEUTICAL AND MEDICAL OBSERVATIONS.

BY BENJAMIN ELLIS, M. D.,

Late Professor, &c. Twelfth edition, carefully revised and much improved, by Albert H. Smith, M. D., F. C. P., Phil. Lecturer on Obstetrics, &c. Philadelphia. H. C. Lea, 1868. Pp. 374.

This huge title recites nearly all that need be said of "Ellis' Formulary," now attained to its twelfth edition. Dr. Smith has omitted some formulas that had become superanuated, and added some new ones. Many practitioners, in years gone by, have found great comfort in this book, and many more may do so in the present edition.

Hypodermic injection, and inhalation of atomized liquids are suitably presented among the new appliances in therapeutics, but we find no mention of Richardson's method of producing local anæsthesia, which has great value in many minor surgical operations, and was worthy of being called to the attention of those physicians who will consult the "Formulary." J. F. H.

ATLAS OF VENEREAL DISEASES.

BY A. CULLERIER.

Translated from the French, with Notes and Additions, by Freeman J. Bumstead, M. D., Professor of Venereal Diseases in the College of Physicians and Surgeons, New York, &c. Published by Henry C. Lea, Philadelphia. For sale by C. P. Wilder, Indianapolis; Robert Clarke & Co., Cincinnati. Part v.

We have already noticed the previous numbers of this magnificent work as they were issued; the present fasciculus completes the volume. It is hardly necessary for us to reiterate what we have previously said in commendation of this work. The plates, so admirably executed, are themselves almost worth the entire price of the volume; but besides, we have the fruit of the rich experience and learning in this department of disease, of one of the ablest and most celebrated of French surgeons, rendered still more valuable by the excellent notes and additions of the American editor who, probably, more than any one else in the United States, is qualified to speak *ex cathedra* in all that pertains to venereal diseases. T. P.

THESE DE PHARMACIE, PRESENTEE ET SOUTENNE A L'ECOLE SUPERIEURE DE PHARMACIE.

PAR ARMAUD FUMOUZE,

Docteur en Medecine—Pharmacien de premiere classe, Member de la Societe Entomologique de France, et de la Societe Chmique de Paris. DE LA CANTHARIDE OFFICINALE: Paris, chez Germer Bailliere, Libraire-Editeur, 1867. From E. Fougera, New York.

OFFICINAL CANTHARIS; A THESIS PRESENTED TO THE SUPERIOR SCHOOL, PARIS.

BY AMAND FUMONZE, ETC.

This thesis of fifty-three quarto pages is divided into four chapters. The first is devoted to the natural history of the officinal cantharis. The second to the chemical history of the same. The third to the causes which alter or diminish the peculiar properties of cantharides; and the fourth, to the various insects to be met with in cantharides.

These chapters furnish full and satisfactory information in relation to the subjects of which they treat. Many experiments are reported in detail. These will render this brochure attractive to the pharmaceutist, for whom it will have more interest than for the physician. Two handsome plates, containing many figures, are attached.

J. R. W.

UTERINE CATARRH, FREQUENTLY THE CAUSE OF STERILITY—NEW TREATMENT.

BY H. E. GANTILLON, M. D.
From the Author.

Here we have a monograph of nearly ninety pages, printed in English at Paris. Its author once resided in this country, but is now settled in Paris, and is preparing a work on *diseases of women*, this *brochure* constituting a part of the proposed volume.

We suspect that were it devoted to a method of *causing* instead of *curing* sterility, it would have a great "run" in some circles of American society; such knowledge would be eagerly sought for, by not a few of the female sex, who cheerfully sacrifice the pleasures and the duties of maternity upon the altar of insane and unholy fashion, or else shrink from the perils and the responsibilities of a condition which is the law of married life, for woman's lot is "to bear, to rear, to love, to lose," the first and second quite as much as the third, and still more than the fourth, of this quartette of duties, as sung by one of the best poetesses of the day.

But to the book. The following are the topics discussed: Anatomical and Physiological Reflections on the Uterine Cavities, Causes of Uterine Catarrh, Symptoms of Uterine Catarrh, Diagnosis of Uterine Catarrh, Prognosis of Uterine Catarrh, Treatment of Uterine Catarrh, then, the Method of Performing Intra-Uterine Injections, and finally, Cases. For the purpose of injecting the uterine cavity, a solution of nitrate of silver is used. The author has invented an excellent syringe, holding but a drachm, a tube attached to it, having a diameter less than that of the ordinary uterine sound, round and perforated at the extremity, "with holes directed backwards towards the operator, on the same principle as the urethral syringe of Dr. Langlebert."

The author speaks quite positively of the efficiency of this method of treatment, and also of its innocuousness. While we write we recall a case reported a few years since by one of the New York physicians, Dr. Nœggerath, we believe, where the injection of a solution of nitrate of silver into the uterine cavity was followed by a fatal peritonitis; nor are we prepared to abandon the creed firmly established in our minds after a somewhat diligent study of "Bernutz," of the ready passage, in some circumstances, of fluid by the oviducts from the uterine into the peritoneal cavity. Nevertheless, it may be possible that

Dr. Gantillon's instrument will secure the benefits of intra-uterine injections without their great peril; indeed, we think it decidedly the best that has yet been invented. We will say still farther, we fully believe, and our practice corresponds with the belief, that a persistent uterine catarrh as imperatively demands local treatment as a conjunctival catarrh, and that in each case nitrate of silver is the best agent.

But, on the other hand, we can easily understand that rash and reckless resort to this agent, whether in substance or in solution, may kindle the flame of a slumbering endo-metritis which shall spread to the substance of the womb, or else by continuity of structure, travel an oviduct and very soon develope a local or a general peritonitis, rapidly hastening to a fatal issue. Let physicians, while appreciating the advantages, be warned against the perils of certain methods of local uterine therapeutics.

We heartily thank Dr. Gantillon for his little book, and we believe that it adds materially to a general professional knowledge of a very frequent form of uterine disease and of its successful treatment.

T. P.

EDITORIAL AND MEDICAL NEWS.

THREE BILLS, in which the medical profession are especially interested, are now pending in the Indiana Legislature. The first is entitled "*An Act to protect the citizens of Indiana from Empiricism, and elevate the standing of the Medical Profession.*" This act has passed its second reading, and probably will become a law, so far as legislative action is concerned, (though we hope not, unless some material alterations are made in it,) before this number of the *Journal* reaches its readers. It makes it "unlawful for any person who has not attended two full courses of instruction and graduated at some school of medicine, in the United States or some foreign country, or can not produce a certificate from a State or county medical society, and is not a person of good moral character, to practice medicine in any of its departments, for reward or compensation, for any sick person in the State of Indiana; provided, that in all cases where any person has been continuously engaged in the practice of medicine for a period of

ten years or more, he shall be considered to have complied with this act, and that when persons have been in continuous practice of medicine for five years or more, they shall be allowed two years in which to comply with such provision." The second section of this *act* recounts the penalties for its violation—not less than fifty dollars, nor more than one hundred dollars for the first transgression, and for the second, thirty days in jail besides the fine, and in no case can any fee for professional services, rendered by the offender, be collected, and concludes by stating that dentists are exempt from the action of this law.

It is hardly necessary to tell our readers that the law is badly worded; but this is a comparatively trivial objection. "Two full courses of instruction and graduated at some school of medicine," &c. Now what period must these "two full courses" occupy? Can they be condensed into eight or nine months, or must they occupy portions of at least two years?

Some reputable medical schools in this country admit gentlemen to graduation who have been in practice five years, and attended one course of lectures; others confer honorary degrees without asking whether the recipient has ever attended a single full course of lectures. Now will the law go behind the diplomas these gentlemen may have, and insist upon their attending "lectures" a while longer? "Graduated at some school of medicine." No matter whether by grace or merit. It is shamefully true that men have diplomas without even a good English education. No matter what school—simply "some school"—it may be a school whose diplomas, signed and sealed, are peddled abroad in foreign countries, as was the case with those of an eastern Eclectic school, until the foul wrong was exposed through the influence of Dr. Corrigan.

But again: State and county medical societies may license. But what medical societies? Eclectic, Homœopathic, Hydropathic, any sort you please, just as well as those of the regular profession. But even if this power were specifically confined to the societies representing regular medicine—a measure that we should look upon as impolitic, to say the least—great abuses might result from giving it to so many different sources. Every county in the State may have a county society—it may have a dozen, all licensing doctors. But suppose no county society exists, as is the case in several counties in this State, what is the appplicant for license to do? Or, suppose such society existing, it meets at distant intervals, rarely has a quorum, does not represent some of the best ele-

ments of the profession in its locality, is under the control of a clique of selfish men, who can not brook any rivals for public patronage, or who would crush every one by foul means if not by fair, that was not of their "set," worshipping their golden calves, kissing their crocodiles, or becoming petrified like their fossils! We believe that the delegation of this power of licensing doctors should not be made to the society or the different societies of a county, for the reason that injustice might sometimes be done from prejudice, unscrupulous selfishness, or other cause, now and then. When there should be a hundred or more examining bodies in the State, what uniformity of examinations might be expected. One county society might license a doctor when he had been rejected by a dozen others. We believe all pertaining to State and county societies ought to be eliminated from the bill; and the power of licensing confined to a board of three or five physicians, appointed by the Governor, (confirmed, if thought best, by the Senate), which shall hold semi-annual sessions at the Capital: each member of the board receiving from every applicant for examination, a fee of three or five dollars.

One word more. We hope our friends are not expecting too much from legislation. The passage of this or a dozen similar bills, but more stringent—however much good to the people and to the profession they may accomplish—is not going to bring the medical millenium. Our chief work to exalt Medicine to that sublime position which she ought to occupy, must be done in and with ourselves—in our own ever-growing attainments, in our own ever-enlarging philanthropy, in our own ever-vivid conscientiousness: every drop being pure and sparkling, shall not the entire fountain be clear as crystal? Every grain of gold being thoroughly purged from the dross, shall not the burnished shield flash perpetual brightness on the pathway of man?

The other two bills to which we refer, are one in reference to the establishment of a medical department of the State University, and the other for the registration of medical practitioners in each county auditor's office every year, a fee being paid by every one thus registering, (he at the same time specifying the school to which he belongs), these fees to be distributed to the different county medical societies. This last bill was prepared by our friend Dr. Hibberd, and we hope he will give in the next number of the *Journal* some details as to it.

As to the bill for the establishment of a medical department, to be located at Indianapolis, of the State University, we have merely space to say, that the trustees of that institution propose, if the legis-

lature should give the University the "agricultural college grant," to spend a part of the funds in that way, their design being to build up a medical school upon a similar plan to that belonging to Michigan University. In a future number we shall have something more to say, should this bill pass, upon the subject of a medical school in Indiana—only now suggesting that neither will such an institution make a medical millenium.

In the Philadelphia *Medical and Surgical Reporter*, January 2d, we find the following in reference to *Priority in Ligature of the Femoral Artery*. We only wish to premise the extract by saying that the credit of having pointed out the priority of American surgery in this operation, for such therapeutic purpose, is due Prof. Blackman.

"In a communication to the *British Medical Journal*, in June last, Mr. C. F. Maunder, F. R. C. S., thus gracefully yields a palm to American surgery. All honor to Mr. Maunder!

"Twelve months ago I proposed the application of a ligature to the superficial femoral artery, to check acute inflammation of the limb following wound of the knee-joint. The operation was performed with immediate and continuous benefit, and the patient recovered. I need scarcely say that at that time I believed the suggestion to be original, and have only now been undeceived by the perusal of a short paper upon the subject, in the *American Journal of Medical Sciences*, of April, 1868. It there appears that the femoral artery was ligatured, *first*—for wound of the knee-joint, by H. U. Onderdonk, M. D., in the year 1813, and occasionally since that date also in America. It is a curious fact that no surgeon has ever informed me that my suggestion was not original; and it is still more strange that the author of the *Annus Medicus*, 1867, published in the *Lancet*, should have spoken of the operation proposed by me 'as bold and *novel*, (italics are mine,) and withal successful, surgical proceedings of the year, we may mention the ligature of the femoral artery in a case of acute traumatic inflammation of the knee-joint, on the principle of diminishing the arterial supply of an inflamed part—a principle suggested by Mr. Maunder, and now under much discussion.' Still, with the evidence before me, it is clear that I can not claim priority in the suggestion; and I hasten, by thus addressing you, to give credit to whom credit is due."

Death of Dr. F. Schuermann.—At a meeting of the medical profession, held at the Dental College, Monday evening, January 11th, 1869, for the purpose of testifying their respect for the memory of the late Dr. Francis Schuermann, Dr. Dawson was called to the chair, and the following resolutions were unanimously adopted:

"Whereas, God, in his allwise providence, removed, after a lingering illness, our friend and colleague, Dr. Francis Schuermann, one of our oldest

members, who died on the 1st of January, after a long life of professional usefulness, in this city;

"*Resolved*, That we have received the intelligence of the death of Dr. F Schuermann, with the deepest sorrow.

"*Resolved*, That we deplore the loss which our profession has met with through his decease.

"*Resolved*, That these proceedings be published in the daily papers and medical journals of this city, and that a copy of these resolutions be sent to the family of the deceased."

Dr. A. Rosenfeld, Dr. Wm, Carson, Dr. C. S. Muscroft, Dr. J. P. Walker, Dr. J. S. Unsicker, Committee; F. Brunning, M. D., Secretary.

FOR SALE.—An order for an artificial limb. Will some one of our surgical friends take notice?

NEW SUBSCRIBERS can be furnished with complete sets of the *Journal* from its commencement, January, 1866, to the present, the February number for 1866 excepted. By the way, we still offer twenty-five cents for each copy for that month.

WE HOPE our friends will not weary in their efforts to add to our subscription list, nor in our solicitations for such efforts. Even if each one of half our subscribers added a new one—a thing which any of them could easily do—we would be content.

PLEASE REMEMBER that subscriptions are expected *in advance*, when it is practicable for parties to remit. We hate to "dun," but we hate still worse to be in debt. By the way, we send receipts in the *Journal*, not by letter.

A FRIEND at Muncie, writes us that the post-master there charges twenty-four cents postage for the *Western Journal of Medicine*. This is wrong; the charge should be but twelve cents, as we are informed by the post-office department here, and we hope the error will be promptly corrected.

WE WISH to suggest to those of our friends who have not their lives insured—and we believe physicians, above all other men, ought to have such insurance—that the MUTUAL LIFE INSURANCE COMPANY, OF NEW YORK, the advertisement of which we publish, is one of the very best companies in the United States, and especially characterized by its liberal and honorable course towards medical gentlemen who may be in its employment. We speak that which we know in this regard.

THE WESTERN JOURNAL OF MEDICINE,

(*Formerly*, "CINCINNATI JOURNAL OF MEDICINE.")

Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

VOL. IV. INDIANAPOLIS, MARCH, 1869. No. III.

GUN-SHOT WOUND OF THE SPINE—WOUND INVOLVING THE ATLAS AND AXIS.

BY S. C. THOMAS, M. D., MILROY, IND.

(Read before the Rush County Medical Society, and published by request of the Society.)

July 12, 1868, 4 o'clock P. M.—I was summoned in haste to see Mrs. Ann B——, who had been accidentally shot by her husband, with a very small vest-pocket pistol, with which was used conical ball-cartridges.

After examination, I found the ball had entered beneath the inferior maxillary bone, two inches to the right of the symphysis mentis, ranging upward and backward, entering the upper and right side of the fauces, immediately behind the "velum pendulum palati."

Hemorrhage was quite profuse from the mouth and right nostril for a very few minutes, after which it almost entirely ceased, and we had no further difficulty from that source until some thirty-six hours before death.

When I first saw patient her mental condition was good. Nervous system but little disturbed. No acceleration of the pulse. Respiration normal. Articulation of sounds and deglutition attended with much difficulty and pain.

TREATMENT.—Cold water dressings to chin and neck, and anodynes sufficient to control pain.

July 13.—Seventeen hours after accident. I found patient feeling very uncomfortable, on account of augmented inflammation, and swelling of the chin and the right side of the fauces. Complains of pain in back portion of head and neck, and also that she is incapable of otating the head. Respiration and *circulation* but slightly changed. Deglutition less troublesome. Swallows fluids very well. Articulation of sounds much the same.

TREATMENT—Continued, with the addition of the sulphate of magnesia to move the bowels.

July 14.—Patient complains of increased pain in posterior portion of the head and neck, and also of extreme soreness at the junction of the spine and cranium. Slight photophobia. Inflammation and swelling increased, and suppuration set up in the right side of the fauces. Muscles of the right side of the neck very sensitive to the touch. Bowels not moved. Other symptoms much as they were before.

TREATMENT.—Ordered sulphate magnesia to be repeated every three hours, until free catharsis shall be obtained.

July 15.—Says she feels better, and that the pain in the posterior portion of the head and neck has subsided. Stiffness and soreness of the neck still continue. Bowels freely moved.

July 15, midnight.—Patient grew suddenly worse. Pain in posterior portion of the head and neck greatly augmented. Excruciating pain in front portion of the head. Much intolerance of light. Had a very severe and protracted rigor,—lasted about three hours; after which complete reaction came up. The wound in the fauces ceased to uppurate for six hours, after which it threw off more than at any time previous.

July 16, 9 A. M.—Pulse feeble and quick. Respiration labored and rapid. Deglutition again attended with pain. Severe pain in back portion of head and neck, with increased stiffness of the latter. Increased soreness of the muscles of the right half of the cervical region. Profuse perspiration. A painful condition of the muscles throughout the whole system. Congestion of the conjunctivæ; but less intolerance of light than through the night. Increased swelling of the right and posterior fauces. Persistent nausea. Within twenty-four hours, four large and offensive stools. Exhibits unusual anxiety.

TREATMENT.—Wine, quinine, chlorate potash and sulph. morphine.

July 16, 6 o'clock P. M.—Met Dr. M. Sexton, who was called to visit patient. We found patient better than in the morning. Has had four rigors since midnight; the last one only lasting some twenty minutes. Circulation one hundred and twenty; respiration twenty-four. Heavy, muddy coat upon the tongue.

Swallows much better. Has taken solid food without anything to moisten it. Appetite better than at time of morning visit.

TREATMENT—Continued.

July 17, 9 A. M.—Respiration eighteen, and circulation one hundred per minute. Pain in the extremities has subsided. Pain and soreness at the junction of the spine and the cranium unchanged. Less congestion of the conjunctivæ, and, also, less photophobia than for three days. Secretion of pus large and very offensive; it often excites vomiting as it passes through the mouth. In other respects patient much better.

TREATMENT—Continued.

July 18, 9 A. M.—Circulation one hundred; respiration increased in frequency, and attended with pain in upper portion of the chest. Swallows well any kind of food. Less inflammation of the fauces; notwithstanding patient complains of pain in that region all of the time.

Pain in the back portion of head and neck increased within twenty-four hours. Stiffness of the neck and shoulders is giving much distress. Does not breathe through the nostrils, but alone through the mouth. Breathing loudly stertorous during sleep. During sleep the expired air leaves the mouth as if blown out, as in smoking. A tetanic condition of all the muscles. A slight noise disturbs the patient much, although she is rational and conscious all of the time.

Extremities covered with a cold, clammy sweat. Increased photophobia, and congestion of the conjunctivæ. Sleeps with eyes nearly open. Takes but little food, and there is an increase of thirst.

TREATMENT.—Ordered the bowels moved, and the other treatment continued as before.

July 19, 10 A. M.—Patient is feeble; but in every other respect she is much better.

TREATMENT.—Increase the dose of tonics and stimulants.

July 20, 9 A. M.—Pain in back portion of head and neck very great through the night, but slightly better this morning. Complains of dimness of vision. Muscæ volitantes, and roaring in the ears. Photophobia increased. More swelling of the right side of the fauces and uvula. Large secretion of pus by internal wound. Can swallow

fluids well, but solids not at all. Increased thirst. Bowels very free in their action. A severe and protracted rigor during the night.

TREATMENT—Continued, with the addition of an astringent for bowels.

July 21, 9 o'clock A. M.—Much improved in almost every respect. If it were not for stiffness of the neck, we would conclude that our patient was fast approaching cure; for at every other point there has been a marked change for the better.

July 23, 10 A. M.—Rested badly during the night, notwithstanding she was doing quite well previous to that time. Had a severe rigor at two o'clock A. M.; and after reaction was set up, she had very high fever, which still continues. Bowels very active, and the stools large and offensive. No appetite for anything. Tongue covered with a heavy brown coating. Circulation feeble and frequent. External wound entirely healed, and swelling and inflammation of the fauces greatly reduced.

TREATMENT.—Gave full doses of quinia, chlo. potash, per. sulph. iron, and wine. Anodynes, to be used as occasion may require.

July 24, 11 A. M.—Case unchanged since yesterday, except the diarrhœa, which is now somewhat controlled.

TREATMENT—Continued.

July 25, 10 A. M.—Patient sleeps with eyes wide open, and the eyeballs continually in motion. Froth and mucus forced out of the mouth at every expiration during the most profound sleep. Other symptoms unchanged.

TREATMENT—The same.

July 26, 11 A. M.—Patient much better. Circulation eighty-five, and full. Respiration sixteen, and easy. Skin soft, moist and warm. Suffers no pain, except when she attempts to move the head. Swallows food without any trouble. Very little redness or swelling about the fauces. Suppuration profuse and offensive, and of a dark yellow color. Appetite improved. No thirst. Eyes less open, and no motion of the eyeballs during sleep. No frothing, nor any other disturbance of the mouth during sleep.

TREATMENT.—Supporting.

July 27 and 28.—Improvement continues in every respect except the stiffness of the neck. Able to rise up and remain for a considerable time without fatigue.

July 29, 11 A. M.—Patient has been resting quietly since last seen. Circulation and respiration normal. Discharge of pus from fauces

still large and offensive. Pain has entirely subsided, and but slight soreness remains in the cervical region. Bowels rather free. Appetite good.

TREATMENT.—Stimulants, tonics and astringents.

July 30.—Patient still improving.

July 31.—Walked across the floor, and took her meals with family at the table, and does not suffer any inconvenience from any cause, except stiffness of the neck.

From this time until August eighth, patient steadily improved in strength and ability to walk. Could not rotate head, and when she attempted it, increased soreness of the cervical muscles was the consequence. After she was able to walk about, she would occasionally have a rigor, (never lasting over a few minutes), whenever excited or fatigued from any cause.

She performed manual labor of the lighter kinds for a few days, and did not seem to suffer any inconvenience from it. I am told that she spun or twisted yarn at the big wheel for a part of one day, and that it resulted in nothing more than slight fatigue.

August 8, 8 o'clock A. M.—Patient feeling as well as she had for days, walking over the yard, and, without any apparent cause, fell, but quickly got up again without any assistance. She stated that she knew no reason why she fell, except the sudden giving way of the muscles.

At twelve o'clock M., she was seized with a severe lancinating pain beneath the right mammary gland, which continued gradually increasing until four o'clock P. M., when she coughed, and at the same time felt something give way at the seat of pain. Complained that the chest felt full and hot, and that the breathing was difficult; after which came profuse hemorrhage from the mouth. Judging from the general appearance, and the amount that could be collected, I think the patient lost one quart of blood.

When I first saw patient, she was pale and apprehensive; circulation one hundred and forty and feeble, respiration twenty-eight and labored. Examination of the chest revealed the fact that the bronchial tubes were filled with a fluid. Bronchial rales could be heard all over the chest. Pain in back portion of head and neck excruciating. Increased thirst. Appetite gone. During the day she had three paroxysms of hemorrhage, but the amount of blood lost was small.

TREATMENT.—Stimulants, tonics and anodynes, to be given freely.

August 9, 9 A. M.—Patient more feeble. Portions of the lungs not expanded this morning. Pain in head and neck much the same as yesterday. Has occasional rigors, but they are not severe nor long.

TREATMENT—Continued.

August 10.—One paroxysm of hemorrhage during the night. Rapidly failed in strength, until death closed the scene, at eight o'clock A. M.

Post mortem examination, held at two o'clock P. M., six hours after death. Drs. F. M. and P. M. Pollitt gave kindly and efficient assistance during the examination.

Symptoms during life led to the examination of the lungs first. Lower and a portion of the upper lobes of the lung were largely congested. By cutting into the lung structure, we found isolated patches of miliary tubercles and the air-cells filled with extravasated blood, which flowed freely as soon as the incision was made. The bronchial tubes were healthy, and the right were filled with blood. Being satisfied with our examination of the viscera of the chest, we next turned our attention to the wound. The wound, from the entrance of the ball to the point where it passed into the fauces, seemed to be thoroughly healed, and almost all trace of it obliterated.

The ball passed through the fauces, impinging heavily upon the anterior arch of the axis, in close proximity to its junction with the atlas, producing a radiated or comminuted fracture. The soft parts at and in the immediate vicinity of the injury were in a suppurative condition, and had a dark and gangrenous appearance, emitting a very disagreeable and offensive odor.

After careful examination of the wound, we discovered small pieces of bone, which were easily removed with the fingers. Notwithstanding we made strict and minute search, we were unable to find the ball. The anterior articulating surfaces, as well as the ligaments connecting the anterior portions of the axis and atlas, were entirely destroyed, and the odontoid process detached so that it could be easily removed.

The theca vertebralis was in a softened and almost disorganized condition, so much so, indeed, that its continuity of structure was easily destroyed by our manipulations, in connection with our examination of the parts. The medullary matter for an inch each way, in the spinal canal, from the opening in the spinal column, was largely mingled with dark, grumous blood. The connection between the axis and the atlas was so fragile that the weight of the head, when thrown backward, destroyed it.

We were unable to say that the hemorrhage immediately preceding death came from the wound, because there were no important blood-vessels in the line of injury, and, also, in consideration of the fact that there was strong evidence, before and after death, that it might have come from the lungs.

EPILEPSY—A REPORT OF FOUR CASES, WITH TREATMENT, FROM MY NOTE-BOOK; ALSO, SOME REMARKS AND OPINIONS UPON THE PROGNOSIS, AND STUDY OF THIS SAD DISEASE.

BY WAYNE GRISWOLD, M. D., CIRCLEVILLE, OHIO.

CASE I.—J. D——, boy five years old. First called to the case, February 4th, 1867. Well developed; nervo-bilious temperament; dark hair and eyes, but dull and downcast in look; like most epileptics, inclined to be silent, morose, petulant, and excitable; occasionally complains of pain in back part of head; respiration and circulation natural; bowels regular; appetite good; inclines to run and play as usual.

Had enjoyed good health up to last July, when, after playing in the hot sun for some time, he went into the cellar kitchen and laid down upon the damp brick floor, fell into a sleep, took a congestive chill, followed by fever, producing a violent epileptic convulsion. From that time up to February 4th, the boy had a return of the paroxysm every four to six weeks, usually in the night.

The parents were deeply anxious about the chlid, and very solicitous to know if he could be cured. I gave them to understand that I should have great hope, if they would follow a prescription for ten to fifteen months. I make it an invariable rule to make no prescription for a chronic case of epilepsy requiring medication, unless they will follow the directions from ten months to two years. Trousseau never uttered a greater truth than when he said, "chronic diseases require chronic treatment," and it is particularly so in epilepsy.

I could not discover any organic lesion in the case; no hereditary taint; no trouble with teeth, worms, kidneys, bladder, sexual organs or bowels. My theory of the case was, that some congestion or irritation of the medulla oblongata had remained from the severe attack

in July, and that occasional excitement from deep sleep, produced sudden contraction of the vaso-motor nerves of the encephalon and its meninges, followed by anemia of the brain, and the epileptic paroxysm.

PRESCRIPTION.—Good food, free exercise in the open air, with an ocasional warm bath.

℞ Potassii Brom., ʒiii.
Aquæ ℥iv. M., ʒi, ter. die.

Also, rub the back of neck and spine with strong stimulating liniment.

At the end of three weeks, I gave the boy a half grain of valerianate of zinc, three times per day, with the potassium.

The boy had but one paroxysm after the treatment was fairly commenced. This course was followed for nine months, without change, and then gradually slacked off. The boy has been perfectly well ever since.

CASE II.—E. B——, girl, aged five years; nervo-sanguine temperament; light hair and complexion; blue eyes; dull and downcast; mind weak; restless, excitable, petulant and easily irritated. About two years before, this child had a severe sickness. From that time she had epileptic fits, about one a week on an average, usually at night, followed by an involuntary discharge of urine. She had been under treatment by a quack all this time, and was constantly growing worse. I could not discover any local lesion in this case; yet she was weak in body and mind and inclined to be anemic.

Prescribed a generous diet; free exercise in the open air; occasionally warm bathing; keep her as cheerful as possible; let her have a little whisky when there is much weakness or nervous excitement. Gave her five grain doses of bromide potassium at meal time, also half grain val. zinc three times a day.

This treatment was followed for seven months, without change, and then gradually lessened. She had but three paroxysms after the treatment commenced, and has been free to date.

CASE III.—Called December 13th, 1867. A. C——, girl, aged three years and six months; had hooping cough badly when one year old; soon after had spasms from worms and teething; when about two years old she took epileptic fits, generally in the night, occasionally in the day time; had from one to four every twenty-four hours. At present the child has from two to six every twenty-four hours; she is very weak and irritable; staggers when she walks; often falls down;

seems to have but partial control of muscles of the extremities; head inclined to lean forward; downcast look; eyes indicate great vacuity; mind weak; appetite tolerable; respiration and circulation natural but weak; restless, uneasy and excitable; nervous temperament; seemed well nigh destroyed both in body and mind, from the frequent repetition of the paroxysms for the last year.

While looking at the child, and reflecting upon the cause and pathology of the case, I saw her pass her hand under her clothes up to her privates. I called the attention of the mother to the fact, and inquired whether she had seen her do that before. Said she had frequently; but did not know that there was any harm in it. Upon examination, I found this child had fingered and pulled at the vulva, until the vagina, for some distance up, was enlarged enough to enter the end of a full grown thumb.

I never investigate a case of epilepsy, that my suspicions are not turned to the generative organs for a most careful examination, no matter how young or old, unless a positive cause is known. It is astonishing how young children of both sexes are led to self-abuse; and, of all the causes of epilepsy, as far as my observation goes, this is the greatest and worst.

I prescribed for this case with little hope, simply because the mother, while she felt a deep interest for her child, was wholly deficient in the capacity and patient perseverance to manage and nurse the case.

PRESCRIPTION.—Keep her hands from the privates, never let her touch them, if they have to be tied for a year; free nourishing diet; warm bath and exercise in open air.

℞ Belladon. Fld. Ext., gtts. xl.
Potassii Brom., ʒiii.
Aquæ, ʒiv. M. ʒi ter. die.

Also, a one grain pill of iron by hydrogen, at meal time.

Up to January, 1868, the child had about two paroxysms every day; but had improved somewhat in strength. During January, she had only two each week. The mother had kept the child from self-abuse. In February, averaged three fits a week. March 1st, left out the belladonna, continued the bromide, also stopped the iron pills, and gave half grain val. zinc three times a day; child improved both mentally and bodily. This course of medicine was continued, noting the

case carefully up to November, 1868, child having from four to six paroxysms each month. From that date, the parents concluded to stop medicine, as they had so far to come, and the weather became cold. January 1st, 1869, two months after, the child was still improving, and not more than one fit in a week. If this child was so situated that she could have constant care and medical attention for a year more, I should have little doubt of a permanent cure.

CASE IV.—Mrs. B——. Called to see her November 11th, 1867. Married, aged thirty-two years; has had two children, one living aged seven; light complexion and hair; gray eyes; spare, sharp features; nervous temperament; excitable, restless, very loquacious; respiration and circulation natural; general health tolerably good; works most of the time; had epilepsy in childhood, and occasionally up to womanhood. The day after the birth of her first child, she had nine severe convulsions, whether eclampsia or epileptic, I could not learn. Since, has had attacks every four or five months, coming on generally in the night while asleep, and occasionally, two or three paroxysms in a single month, generally severe, leaving the patient weak, sore, sometimes bruised, also pain in head, and giddiness.

Prescribed quietude and good nourishment.

℞ Hall's Sol. Strychnia, f ʒ ii.
Potassii Brom., ʒiv.
Aquæ, ℥iv.

Tea-spoonful middle forenoon, middle afternoon, and bed time. Also, gave three grain pill of iron by hydrogen at meal time. This course was pursued carefully up to April, 1868. She had one fit March 3d. On the 1st of May, the pill and strychnia were omitted, she having become pregnant. The potassium was continued in increased doses. She enjoyed good health up to November 11th, when she was delivered of a fine large boy—labour natural, and free from any convulsions. On the 22d, being somewhat exhausted with a bad breast, she had an epileptic fit, the second in a year and twelve days. From this time, I added the iron to the treatment. January 1st, 1869, feels quite well, is nursing her child, and continues treatment.

There was a peculiarity in this case worthy of note. She has a shoulder which has been dislocated probably twenty times, by simply raising the arm and carrying it back; and during the struggle of her last attack, she dislocated the shoulder. The original dislocation was probably produced by the same cause.

I report these cases, not for the purpose of discussing the causes or pathology of epilepsy, or to urge any particular mode of treatment; but to present the simple practical facts, hoping to awake a deeper interest in this sad disease, and to excite the profession to a more devoted and careful study of the causes, pathology, prognosis and treatment of epilepsy. I am fully aware that authors are divided upon the prognosis of this disease; that many eminent men consider epilepsy incurable.

Trousseau tells us, "That in past ages this disease was considered a scourge sent from the Almighty, and that nothing but Providential interference could cure it." "The progress of science," continues this author, "has only slightly altered this state of things, and epilepsy is now a days, generally quite as incurable as formerly."

Prof. Tardieu says: "There are few diseases so severe and so terrible as epilepsy, and that it is nearly always incurable."

M. Romberg expresses faith in the curability of many cases.

M. Herpin of Geneva, in his premium essay from the French Institute, reports fifty cases—one-half cured by medicine.

Althaus, Chambers, Locock who was one of the first to call the attention of the profession to the use of bromide of potassium in epilepsy, and Reynolds, all give us a favorable prognosis, with a hope of cure in numerous cases.

Watson, Barlow, Aitken, Tanner and Sieveking, give a doubtful.

Brown-Séquard, Marshall Hall and Schrœder Van Der Kolk, who have thrown so much light upon the pathology of epilepsy, are sanguine of cures, under their peculiar principles of treatment.

I quote opinions only to show that while we are advancing in these latter days, we have gathered only a few pebbles on the medical shore, while the great ocean lies beyond, and the study of epilepsy opens up a field for the medical student in the future, worthy of the highest effort in the cause of humanity and science.

If the world should ever be reconstructed, and placed upon the platform of that Noble Humanity born at Bethlehem, the free-offerings of individuals and States, would supply the means to open epileptic hospitals in every part of the land. Then we might expect results just as favorable and happy as those which follow the treatment of the insane in our lunatic asylums.

HOSPITAL GANGRENE, AS IT APPEARED AT THE CLAY AND CRITTENDEN U. S. A. GENERAL HOSPITALS, AT LOUISVILLE, KENTUCKY.

BY J. Q. A. HUDSON, M. D., CINCINNATI, OHIO.

(*Continued from the February Number.*)

TREATMENT.—The methods of treatment of hospital gangrene, vary with different authors according to the views entertained as to its character as a general or local disease. This is especially true of some of the older writers, particularly Hennen, who relied almost wholly upon general treatment. Most recent writers, however, whatever may be their pathological theory as to its nature, place great importance upon local remedies, and it may be laid down as a rule, that the success in treatment is commensurate with the use of energetic local remedies. Might not this fact tend to confirm the doctrine of its local nature?

At Bilbao, during the Peninsular war, in the summer of 1813, where Hennen had his observation and experience in this disease, and who treated it almost entirely by use of general remedies, the fatality was very great. (*Op. cit.*)

During the same summer, in the same campaign, at Passage, the disease was treated by Blackadder, (also a surgeon in the English army), by the local use of arsenic as a caustic, and with comparatively good success.

Local treatment was considered of the first importance at the Clay and Crittenden Hospitals, and I think this is true of nearly all the military hospitals in the west and south-west where the disease prevailed.

The principal local remedies used were, bromine, sol. permanganate of potassa, and nitric acid. The first two named were the agents mostly used; but our main remedy was *bromine*.

It was first introduced as a remedy in the treatment of hospital gangrene and erysipelas, by M. Goldsmith, Surg. U. S. V. It was used at first by reducing its strength, mixing it with water, by the aid of bromide of potassium. It was afterwards found that in hospital gangrene, the pure bromine was much more effectual, and those who had used it both pure and diluted, preferred the former in most cases, especially for the first application. It was used in the following manner. I shall give the details quite full, as many do not seem fully to understand the manner in which it was applied, notwithstanding the numer-

ous articles in the medical journals relative to its use, since its introduction:

If there is much extent of the gangrene, it is necessary to put the patient under the influence of chloroform. Then, by the aid of the forceps, curved scissors and scalpel, the dead gangrene is wholly removed, taking it *all* away down to the living part. The integument along the margin of the wound should be everted and the dead areolar tissue cut away. Sometimes it will be necessary to slit up the skin at one or more points, to have better access to the dead fascia beneath it. Where there are extensive sinuses formed along the course of the muscles and vessels, it is generally not advisable to cut the skin and deep fascia, and expose the whole of the interior of the limb; but as much of the gangrene as can be reached, should be taken away, and the rest left to the action of the bromine.

It may be advisable in *some* cases, to make quite extensive incision, exposing the parts beneath. It is difficult to give rules for this, and much must be left to the judgment of the surgeon in each particular case.

After the removal of the gangrene, the bleeding should be stopped by the application of cold water and the pressure of the sponge. In order that the bromine may act more effectually, the bleeding must be stopped and the surface made as dry as can be. A free use of cold water, alternately with the pressure of the sponge, will soon check the hemorrhage. When this is done, an assistant should hold the sponge firmly pressed upon the part until the very moment that the surgeon applies the bromine.

This is applied by means of a small bit of sponge fastened on the end of a probang, and the application should be made rapidly and thoroughly to the whole surface. The wound is then to be instantly filled with lint and the whole covered with oiled silk. Bandages or other means are then used to retain the dressing.

The irritating effect of bromine vapor upon the mucous membrane of the air passages should be obviated as much as possible, by preventing its diffusion around the patient and attendants. This is best done by having the bromine in a large-mouthed glass vessel, which one of the assistants should keep closely covered with a bit of glass, except when the surgeon is charging his sponge. The prompt application of the oiled silk confines the vapor to the wounded part.

The surgeon should guard against filling the sponge upon the pro-

bang with an excess of bromine, so that it will not dribble or drop in passing it from the vessel to the wound.

The sponge should be firmly tied upon the probang with thread or twine, *thoroughly waxed*, otherwise the bromine will destroy the thread and the sponge come off.

When sinuses exist which have not been opened, the bromine may be applied by pushing the sponge charged with it into them, or a solution of bromine may be injected into them. Before doing this, it will be necessary, by careful examination, to ascertain the size and direction of the sinuses, and there should be a full supply of probangs, large and small, with sponges attached according to size, so that the surgeon may select, to suit the dimensions and direction of the sinuses. A solution of bromine, made by dissolving one hundred and sixty grains of bromide of potassium in three ounces of water, and adding one ounce of bromine, may be used in the sinuses in place of the pure bromine. If, however, the sinuses are of easy access, so that the probang can be introduced and withdrawn easily, the pure bromine is preferable.

Where the cellular tissue between the large joints of a limb is destroyed, it will be necessary to make a counter opening and pass a dilute solution of bromine by means of a syringe through the sinuses of the limb, washing out the dead matter, and producing a change in the action of the part.

It is neither practicable nor judicious to produce the caustic action throughout the whole interior of the limb, when the inter-muscular fasciæ is destroyed; but a high degree of stimulation may be produced by injecting a solution of suitable strength, and the decomposition of the slough be checked.

We had several cases of this kind, only two of which survived. One, a sergeant, of strong constitution, from Posey county, Indiana, had a gun-shot wound at the upper part of right leg, about three inches below the upper extremity of the fibula. The ball fractured the fibula, and passed out on the inner and back part of the fleshy part of the leg.

The gangrene destroyed all the areolar tissue below the wound down to the ankle joint. There was great swelling of the leg. An opening was made at the inner border of the tendo Achilles, near the ankle, and injections were passed from the upper to the lower opening. The parts were washed out twice every twenty-four hours, first with tepid water and lastly with a weak solution of bromine—about one-

half an ounce of the above solution to two quarts of water. The dead areolar tissue and accumulated matters were freely discharged, and the swelling, in time, subsided, when the leg was kept firmly bandaged, the openings kept patent, the *injections continued, the gangrene firmly eradicated, and the patient removed from our ward.

During all his stay in the gangrene ward, he had very little general trouble. During the time of the full action of the disease in the leg, when the swelling was at its greatest and before the counter-opening was made, he had some fever, poor appetite, &c., but soon after the counter opening was made and the discharges became free, the swelling subsided, and with it vanished the general trouble.

It would be interesting to know in what state the muscles of the limb were after complete recovery in this case. This I am unable to give, as the sergeant went home on a furlough, and I lost sight of him.

In a case like this, it would be unwise to lay open the whole limb and apply to the whole gangrene surface the pure bromine. If the patient has sufficient power of resistance to the disease, he may live through it with the little aid the surgeon can give him as above directed. Few constitutions have this power.

As before stated, when the sinus is not of any very great extent, and easy of access, it is better to apply the pure bromine to it.

In its local action, bromine is one of the most powerful escharotics known. It instantly destroys the surface of the part to which it is applied, producing a thin superficial eschar of a yellowish-brown color. If there be little or no bleeding at the time of its application, it will be of a yellowish-white color. It coagulates the albumen of the tissues. In the rapidity and completeness of its action, it is probably not surpassed even by the actual cautery. The burning pain it causes, soon passes away. The most important feature of its action is, that the eschar it produces is *thin* and superficial, and soon separates from the living parts. In this respect, it differs from many other escharotics, such as potassa fusa and nitric acid, (unless the acid is perfectly pure and of the proper strength), the eschar produced by these agents is generally thicker and more slow of separation.

The treatment subsequent to the application of the bromine, is simple. The eschar generally separates in from one to three days, the time rarely extending beyond forty-eight hours, and in most cases leaves a clean healthy surface, free from the disease. There may be, however, in a few cases, one or more points left with the disease upon

*During the latter part of the treatment in this case, a weak solution of permanganate of potass was used in place of bromine solution.

them, and requiring another application of the bromine or its solution. When these patches are found after the separation of the eschar, they are mostly thin and superficial, and it may not be necessary to cut away the diseased surface before using the bromine.

If the gangrene patches are small and the other parts of the wound begin to put on healthy action, the application of the bromine solution may be sufficient to check the morbid action and promote a separation of the slough.

Should there remain a large patch of gangrene, it may be proper to apply the pure bromine, and if it be of much thickness, it should be cut away and the bromine then applied, being cautious to limit its use to the location of the disease, and not to produce an eschar on the healthy surface.*

A frequent characteristic of gangrene wounds is a torpid, sluggish vital action. In these cases, the eschar separates very slowly, and the wound is slow to take on healthy action. Then it is necessary to use some stimulating application to rouse the languid vitality and aid in separating the eschar. The solution of permanganate of potassa, was found just the desired article to meet this indication.

In every case during the existence of gangrene in the wound, a solution of greater or less strength was daily used just previous to reapplying the dressing to the wound.

If the wound was doing well and the eschar separating finely, the solution was weak, say a table-spoonful to a quart of water, or sufficiently strong to produce a mild stimulation.

When there seemed to be much local inactivity, the strength of the solution was increased so as to cause considerable pain and irritation.

The effect of the solution in destroying the fetor and disinfecting the slough, is an item of no small value in its use.

It is not essential in every case of gangrene, that the diseased part be cut away. If the wound be of limited extent and there exists little or no constitutional trouble—if the slough be thin—the application of the bromine may suffice to destroy the disease and insure a separation of the slough. If, however, the wound be large or the system be much affected, the gangrene should be carefully cut away and the bromine applied to the living parts.

As regards the use of nitric acid, our experience is too limited to speak from actual observation. The bromine and solution of per-

*Dr. Goldsmith cautions against the too frequent application of bromine. After the separation of the slough, if small patches of gangrene remain, the application of solution of permanganate of potassa, of the full strength, as furnished by the Med. Dep. of the Army, is often sufficient to destroy the remains of the disease.

manganate of potash seemed to act so much more successfully than the nitric acid had previously been known to do, that there was no desire to experiment with the latter. For three days time, however, we were out of bromine, the supply being temporarily exhausted, and we were obliged to use nitric acid in its place. Its action was not satisfactory. It was used in three cases only. In all, the slough was longer in separating, and in two, the gangrene was not destroyed, and bromine had to be used subsequently. I ascribe these unsatisfactory results, as due, in a great measure, to the inferior quality of the acid used. It was neither pure nor of full strength. From the statements of many experienced writers, some of them of recent date, I should have confidence in the success of the judicious use of nitric acid of proper strength and purity on hospital gangrene; yet comparative results are more favorable to bromine.

Some form of application to the diseased part, capable of destroying a portion of the sound flesh in immediate contact with the gangrene, has long been the practice of all who believe the disease to be a local poison, and even of some of those who consider the malady constitutional.

The *actual cautery* is an old and favorite remedy with the French surgeons. A national prejudice foolishly forbids its use by the English. I should judge this to be an effectual agent, and would have more confidence in it than any other next to bromine. Its use in hospital gangrene has recently been revived by a German physician.

Arsenic was first applied by Blackadder, in 1813, and since then, occasional instances are given in medical journals of its use, and it is generally recommended by those who have tried it. The reports of its use are quite favorable, but the fear of its poisonous action upon the system by absorption, has probably deterred many from using it.

Citric acid, nitrate of silver, chloride of zinc, chloride of antimony, potassa fusa, sulphate of copper, have all been more or less used as caustics in this disease.

But little need be said upon *general treatment*. The ordinary principles of practice were observed. As stated at the commencement of this article, strict attention was given to cleanliness of patients, bedding, clothes, ward, &c., &c. Fresh air was bountifully supplied. An abundance of nourishing, digestible food was furnished. A large number needed only hygienic care. No medicine was given unless some systemic disturbance existed.

When there was much debility, a sustaining course was adopted.

Quinine and opium, whisky, milk punch, ale, wine, &c., &c., were given, according to present condition and previous habits of the patient. We did not (as we have seen done) simply because the patient had hospital gangrene, dose him with quinine or keep him fuddled on milk punch or whisky.

When there was decided debility, we gave alcoholic stimulants in some form, *if they agreed with the patient and were well borne.*

No writer, as yet, has been able to give infallible rules for the administration of alcoholic stimulants in disease. In many cases in which there seem to be strong indications for their use, yet, upon trial, either in large or small quantities, they are found to entirely disagree with the patient and do harm instead of good.

I have for a long time been accustomed in those cases in which I deemed stimulants advisable, to administer them cautiously at first, and be governed in their subsequent use by their effects in each particular case.

I have been the unwilling and silent observer of the injurious administration of whisky, or punch, or wine, or ale, simply because the patient was said to have typhoid fever, or typho-marial fever, or hospital gangrene.

Any medical philosopher who will establish reliable rules for the use of alcoholic stimulants in disease, *without previous experiment in each case*, will deservedly receive the encomiums of the profession.

INFLAMMATION OF THE VOCAL CHORDS—PATHOLOGICAL ALTERATIONS.

Translated from the German of Prof. Ludwig Turck, of Vienna,

BY THOS. C. HENRY, M. D., CINCINNATI, OHIO.

Contraction of the vocal chords can be caused through disease of the brain and spinal column. Till of late, but few very peculiar cases of this nature have been reported. Gibb avers that in some recent cases of hemiplegia passed by, inflammation of the vocal chords of the side of the portion affected has been observed to take place. Also, through the so-called progressive muscular atrophy, can inflammation of the vocal chords occur, of which I have myself had a case. There is known to be a disease of the motor nerves of the larynx founded

upon inflammation of the vocal chords. It is currently known that Bischof has called attention to it—stating that by the division of the root of the nervus accessorius in the interior of the brain, the voice becomes entirely lost. He observed that this was owing to the division of the recurrent nerve of the vagus, from the left, as we know numerous filaments of the nervus accessorius run off. It is maintained that from the recurrent nervus vagus to the muscles of the larynx, still other fibres concerned in motion are included, and, also, of the cricothyroydei—the extension of the vocal chords, separately and alone, from the nervus laryngeus superior can be seen. One case of mine, with fatty degeneration of the muscles of the larynx, apparently not long ago, having been under my charge, proved to me that this last statement is not altogether correct. By means of physiological experiments, instituted with relation to this subject, for the most part dating prior to the discovery of laryngoscopy, recording observations—in case of diseases affecting nervous (or dependent upon nervous irritation), with consecutive hoarseness or laxness of vocal chords. I will relate a case in point—relating to my experience in a case of compression of both nervi accessorii in the foramen lacerum. This case appertains to a man of thirty-one years of age, who, for two years past, suffered with pain in both sides of the larynx, and double vision, and since then severe and permanent paralysis of the tongue, and spasms—evident at the period of his admittance into hospital—one year before his death. Difficulty of speech was another symptom, and atrophy of the entire tongue, hoarseness without catarrh, which latter increased up to the period of his death—surely denoting disease (as an appearance of cancerous infiltration on section proved,) some part of the breast and a portion of the skin of both temples—so both condyles of the occiput; the latter with a considerable swelling in addition. Both the hypoglossal nerves in the transit through the bony foramen, were in a condition of degeneration on account of disease. Through the cancerous infiltration there was connection between the condyles of the occiput and the two corpora pyramidalia apparent. Through that passed the foramen lacerum on both sides together, and both nervi accessorii were under the free side of the upper segments of the fascicles, in a state of compression by this foramen. So that at this point there was very evident degeneration recognized, by which means the modified hoarseness resulted in the laryngeal affection. (Those muscles were not examined.) The extremity of the corpora pyrami-

dalia were swollen very uneqnally on account of deprivation of nutrition—nervus trigeminus degenerated.*

Still again, some cases of injury of the substance of the vagus nerve in the neck, caused by swellings of the glands, cancer, aneurism of the carotid, or scrofula, are spoken of by Friedreich as taking place. Beside, in this connection, belongs apparent injury of the recurrens nerves. Both nervi recurrentes come off usually from the main portion of the vagus, the right short division turns around the arteria subclava dextra, and from its place of origin around backwards to the left deep concave portion of the arch of the aorta, from thence both pass between furrow caused, or the inter-space formed by the trachea and the œsophagus, then upwards to the larynx. The nervi recurrentes can from this point lose their faculty of conduction by aneurism of the arch of the aorta—perhaps, also, of the right arteria subclava, and from chronic inflammation, as is admitted by laceration or disorganization, and, as I have observed, through compression without disorganization, (see Consecutive Stenosis of the trachea), through an apparent compression of the swollen glands, as verified (Gerhart) through the sinking of the nerves in cancer-swellings or indurations, especially the glands of the neck in tuberculous degeneration of lymphatics. I have determined by observation, in cases of tumors of the glands, on three several occasions in which were tumors of the neck extending under the clavicle, with evidence of lymphatic degeneration, tuberculous in its nature, with unmistakable tubercles degenerated, indicating a tumor with inflammation of the vocal chord on the same side.

In the fourth case, being the last in the designated locality found in the left cavity of the chest, viz: the upper lobes of the lung, taken hold of by the cancerous swelling. Lastly, it is allowed that the conductibility of the laryngeal motor nerves, viz: the accessorii, from their exit from their foramen in the skull, also, in some cases substantially, or by itself by transplanted meningeal inflammation, plainly, so as that by the nerves of the skull, and by the spinal marrow, other nerve-roots were found. By peirpheral degeneration of the nervus recurrens it is often atrophied. Huguier had, in 1834, a case in which was aneurism of the aorta and atrophy of the left nervus recurrens had been caused.

Brenton saw, in 1852, the two left nervi recurrentes for one and one-

* Turck, communications concerning diseases of the nerves of the brain.

half inches in extent, affected with an aneurism of the arch of the aorta. Their tissue exhibited a striking alteration and fatty degeneration, according to his statement. I have noticed the same in my cases of late. In front of the entrance to this fluctuating swelling, already alluded to, its point of exit, the appearance viewed by the microscope was normal, that is to say, between the swelling and the larynx, was an atrophied condition apparently, with diminution in size or fatty degeneration of the nerve tissue.

There are still other cases which might be alluded to, in which undoubted disease of the central nervous system, or of the motor nerves of the larynx are at the base of the disturbance. To speak of them would not throw any further light on the matter, as far as the nature of the inducing cause is concerned. In this connection, also, belong cases of undoubted tabies, cases of progressive muscular atrophy. As one such has been noticed by Gerhardt and myself; other cases in which, together with paralysis of the vocal chords, the same condition attending other nerves controlling motion, that of diphtheria is obscure. Independent paralysis of the vocal chords with paralysis of the soft palate, of which I, in the first place, and subsequently Gerhardt has alluded to form other cases. Although the muscles of the soft palate, also those of the vocal chords, likewise those of the accessorious were innervated; much in that condition at all events, judging by other causes, previously happening—still, in one of my plainly diagnosed cases, when severe paralysis of the palate was present with unsymmetrical movements, and degradation of the tissues of the recurrent nervus vagus—there being, as will be supposed, hemiplegia at the time (of the chords.) In this case, it was ascertained that after decease—the parts being examined—a small twig of the recurrent was given off through the muscles of the palate. A similar case, happening subsequently, it was noticed that with paralysis of the vocal chords, there was paralytic dysphagia, on account of imperfect closure of the glottis, limited, dependent action not to be mistaken. In the plain usual kind of cases—is such consecutive atrophy in the fibres of the constrictor pharyngeus inferior apparent that it causes soon wasting of the substance of the recurrens nervus vagus, and dysphagia, consequently.

The atrophy of the paralyzed muscles of the vocal chords, must be by the compression of a vagus nerve or a recurrens, inducing a so-called snorting or barking sound, which has been compared to the whinnying of a horse, or the whining of a dog. Brenton alludes to it as

occurring with some of his cases lately. It is a compression of the air-vesicles of the lungs, so affecting the respiration. I, myself, have, in a late case, likewise a case of decline of peripheral ailment of the recurrens nerve, found a similar condition, by laryngo-scopical examination—noticed left-sided paralysis of the vocal chords existing. At this time I found the muscular crico antenoidees posterior and lateralis, also filaments of the thyro-arytenoideus externus of the two sides pale yellowish red, and in a decided state of atrophy. By microscopical investigation, a streaked appearance of the transverse diameter of the throat generally seemed to constitute the ailment, or was only here and there indicated to be partly obliterated. In addition, there was a slight degree of atrophy occurring in the case of both crico-thyroie muscles—very considerable degeneration, with appearances of paleness, yet both thyro-arytenoid were not colored yellow (proper muscles of the vocal chords.) The atrophy was caused by the caving out of the unadjusted larynx—and both the vocal chords, from inspecting them above, standing or remaining, symmetrical in a crosswise light to the naked eye, the ulcerated free side being plainly seen. And then, indeed, in that ulcerated portion under the musculi arytenoideus transversus and obliqui, was recognized but little atrophy, evidently. The musculi ary-eppiglotiidei were only much weakened on both sides. The left nervus laryngeus superior, microscopically viewed, usually normal. Gerhardt met with a similar case. I have yet, in some other cases, noticed the same condition of things. The condition of musculus cricothyroydeus in the cases just last alluded to, proved the same, viz: atrophied. That which in a more recent period was stated, maintained of the nervus laryngeus superior, is inferred was not true; at all events, it must be nourished by a considerable number of fibres through the recurrens.

I had, also, an opportunity to pass judgment in a case of atrophy of the same laryngeal muscles, with an equal degree of intensity of ailment as in the foregoing cases, in which the corresponding nervus recurrens, as, also, the nervus laryngeus superior healed entirely normally. Besides the vessels were normal, except upon the diseased side, somewhat atrophied.

These former cases of mine, of peripheral disease of the nerve recurrens were exemplified in the case of a man of forty-six years of age. In 1846, with a chancre, accompanied by a severe syphilitic affection on its heels, soon after swelling on the shin-bone. In February, 1860, he was barely improved during the night, and remained

and the succeeding year, affected with severe hoarseness. First, (it may be,) in the spring of 1863, there appeared to a diminution of the hoarseness, co-existent with the looseness of the vocal chords, also decided paralysis, also, in the muscles of the legs, beside double vision to a certain extent, continuing until the year 1863. There was insufficiency of the aortic valves, and of the left arteria subclava—there being scarcely a sign of pulsation. Circulation had been carried on through the collateral branches, the axillary artery, and also the radial seemed to carry on a normal circulation. The left true vocal chord was perceived in a state of action by the seventh July, 1863, and since repeated examination in the median line, and on the side approaching the median line, together with the corresponding arytenoid cartilages, only partial motion could be induced.

The fourteenth September, 1864, death ensued. The nature of the palsy of the vocal chords was apparent, more particularly, in the upper portion of the nervus accessorius or its place of origin, or enough so, without investigation in the central nervous system.

In regard to this case of disease, constant formication, and imperfect anæsthesia, and in the entire body, or both sides, was indicated. Unfortunately the examination of the brain and spinal chord was postponed to such an extent that no thorough examination could be made.

In the first of the cases quoted, it seems, as it is mentioned, that the atrophy of the musculus crycoideus internus, by inspection from above of the free sides was plainly seen.

One can, laryngoscopic examination of the palsy of the vocal chords, atrophy of the chords in some cases, and so on, detect an excavation on the inner sides of the throat, somewhat curved in shape, appearing like the curve of a sickle. This excavation, which we see at times in the cadaver, upon section, being of no great extent, is no proof of atrophy. In this present day, such a case of irregular ulceration, with impaired mobility of the vocal chords, in the case of a person affected with syphilitic atrophy of the vocal chords, would not be taken notice of.

The atrophy of the muscles of the vocal chords, or rather with the muscles connected with them, can not yet be inferred in all cases by pathological anatomical researches. In cases, also, not old, of the periphery, in regard to the progress of the disease of the left recurrent nerve, even when sought for in the cadaver. The first laryngoscopic examination gave us the true form of the appearance of paralysis of the vocal chords, and never before the time of the invention of

the laryngoscope. It alone can exhibit both double and single paralysis of the vocal chords, to each form of which we can, now, lend a skilled hand.

NOTE BY TRANSLATOR.—There are well-established points of anatomy and physiology in regard to these laryngeal nerves.

The laryngeus, superior and recurrent, formed of motor elements derived from the vagus accessory and the sympathetic, go to the larynx on each side, from above and beneath.

The recurrent is chiefly a motor nerve, concerned in the mechanism of respiration.

The superior laryngeal supplies the cryco thyroid muscles.

Dilatation of the glottis is caused by the posterior crico arytenoid muscle.

Contraction, by the two transverse and oblique muscles aryetenoidei.

Tension and elongation of vocal chords occur through cryco thyroid muscles, by means of the ennervation of the superior laryngeus.

Tension and shortening through the lateral thyroid—edges of vocal chords—approximated by the innervation of the recurrent laryngeal.

SPASMODIC COUGH.

In this connection, we should allude to spasmodic cough, which occurs not unfrequently and much to the disturbance of innervation, particularly with reference to the larynx. Mandl has directed attention to this, and described the symptoms and appearance. It is of the nature of a quick and irresistible, rapidly succeeding one another, succession of short, violent fits of coughing, like barking in a deep tone, with apparent spasm throughout the whole entire larynx, trachea and bronchi. A case which occurred in my practice, happened to be a youthful woman, neither hysterical nor to be considered of a specially nervous temperament.

The attack comes on mostly very irregularly, often during the day. The intervals of coughing vary in length of time of occurrence, and like a double cough, so rapidly do the spasms succeed one another. This case of mine exhibits the typical condition to which Mandl calls attention. The affection is, according to my observation, a very stubborn one, thwarting the various methods of inhalation, narcotic antitypic, so-called nervines, emetic means, cold water cure and cod liver oil.

The fourth in particular, of my cases observed, occurred three times—young women of nine, eleven and fourteen years. In case of the one nine years of age, proved typically fatal.

Upon one evening, the fourth case happened in a nineteen years old, strong young man, in whose case only a very trifling bronchial catarrh existed.

In the case of a young maid, in whom the intensity of the cough

seemed to have arrived at the poriod of its natural severity, a catarrh of the vocal chords was diagnosed.

The fifth case was something anomalous, a seamstress of eighteen years old, Laura Op. She suffered, perhaps, five years, more or less; but the beginning attack was, for the length of a year, more especially severe. It came on of mornings every day, accompanied with acute pain in the throat—at times, intense stupidity. By violent exertion, overheating and the like, brought on cough, occurring more frequently as time progressed, so that she would have these spasmodic fits of coughing ten to twelve times in the twenty-four hours, one after another, with short intervals of quiet. She was kept on wine, and cared for in a warm room; but in less than a week she was suddenly seized with a general convulsion, and subsequent unconsciousness. During the progress of the case, about the 22d of May, 1862, occurred a similar series of coughing fits. An ordinary respiratory effort, followed by a remarkably hoarse sounding cough, singularly high in tone, ending with a whispering sound. Usually, there followed two or three such fits of coughing, with much apparent effort to cough in the intervals, causing much uneasiness—respiration otherwise normal in the intervals; but much effort very apparent and producing noise. By means of laryngoscopic observation, the throat, the back of the tongue, and the soft palate with the tonsils, present a normal aspect; but menstruation appears more oftener than usual. Examination by the ear showed rattling noises in both sides of the throat during respiration. The cough is a deep, harsh tone, but subsequently, a voice perfectly normal. Cold water cure here advised.

In one case of a ten year old boy, otherwise healthy, affected however, with a slight catarrh, and beside, with a deep, croup like cough, and coughs then as usually in a natural way. So often when he coughs strongly, the cough comes out deep and rough in tone, resembling croup, and is always limited to a sharp or shrill intonation. The larynx and the vocal chords, are proved to be in a normal condition, by inspection with the aid of the laryngoscope.

To conclude this article on spasmodic cough, I will append a few observations from Dr. Tobold:

"Nervous also called spasmodic coughs, have something in common with those that are denominated hysterical. They are characterised by spasms that occur with extraordinary violence. These attacks are separated from each other by long and entirely free intervals. They often appear at certain hours of the day, and are excited by other causes than the various

forms of cough that depend on morbid changes of the mucous membrane of the respiratory branch. In the majority of cases, I have met with nervous coughs in old women; in isolated cases also, in young, otherwise healthy maidens. In some cases, I was inclined to regard a strikingly anemic condition of the mucous membrane of the larynx, as the chief disease. Perhaps the nerve fibres in anemic mucous membranes are more inclined to hyper æsthesia."

Dr. Tobold recommends the use of a sponge applied locally, the same being saturated with tinct. ferri chlorid; also the use of electricity; other tonics also to be employed assiduously at the same time. Our few laryngoscopists in this country, use alum and glycerine locally, with much apparent success, combined with constitutional tonic measures.

FORTY YEARS' PRACTICE, OR REPORTS OF EXTRAORDINARY CASES.

BY NATHANIEL FIELD, M. D.,

Of Jeffersonville, Indiana, President of the Indiana State Medical Society.

Forty years in the medical profession, will familiarize the physician with all the diseases to which flesh is heir in the locality of his practice. He will become experimentally acquainted with their symptoms and treatment; so that when he meets with a case, however dangerous and complicated it may be, he is not compelled to resort to his books to enable him to make out a correct diagnosis, or to treat it successfully. Having often seen and combatted it before, he is fully prepared for it again. He is practically acquainted with the different modes of treating it, and he has firmly settled down upon what he considers the best remedies in the case. It matters but little to him what may be the speculations with regard to the etiology or pathology of the disease, or the *modus operandi* of the medicines which he knows will cure it. Having often administered them in similar cases with success, he is willing to trust them again. This is what we call "practical knowledge or experience," supposed to be of more value than the knowledge of a score of medical novitiates.

But in the course of many years' practice, cases will arise of an abnormal or extraordinary character, for which we have neither authority nor precedent; and which will tax the judgment of the physician to its utmost capacity. The following case is an illustration:

Some years ago, a small boy about five years of age, residing in the

city of Jeffersonville, apparently in perfect health, and while at play with other children of the family, was suddenly attacked with an epileptic fit, from which, however, he soon recovered. I was sent for to see him, but before I arrived, he was as well as though nothing had happened, having resumed his customary amusements. The parents of the boy were much surprised at the occurrence, and were unable to account for it. There was nothing in his appearance to indicate the slightest predisposition to the disease. He was the very picture of good health. As no cause could be discovered for the convulsion, and as there was no fever or any other sign of disease, no prescription was made.

About two weeks afterward he had another strong convulsion, lasting several minutes; but as before, passed off without any constitutional disturbance following it, and he was soon as rational and playful as ever. Being at the time absent from my office, Dr. W. F. Collum was called in, but finding the boy perfectly well, and like myself, not being able to detect any cause for the attack, and conjecturing that he might have worms, prescribed some anthelmintic. No worms, however, were expelled. In a day or two the fits returned, and were repeated at short intervals for about ten days, during which time I am confident he must have had a thousand! After an ineffectual effort to arrest them, Dr. Collum retired in despair. I was again summoned to attend him, and exhausted every resource in my power to relieve him. The family were in great distress and were prodigal in the employment of the best medical advisers. Prof. Powell, Prof. Drake and Dr. Richardson, of Louisville, were called in to assist me in searching out the mysterious cause of the terrible affliction. The patient was examined from the crown of his head to the soles of his feet, in the hope of detecting some local irritation, but none was found. After a few visits, the first two distinguished gentlemen, satisfied that nothing could be done to arrest the convulsions, abandoned the case. Dr. Richardson, however, persevered in assisting me to the end, curious as it seemed to me, to see the result. As he made but one visit a day, the burden of the labor necessarily devolved on me. Day and night, I was annoyed with repeated calls to visit the patient, and "do something for him." It was impossible to sleep at home or at the residence of the distracted family. Every antispasmodic had been tried in vain. All kinds of remedies, internal and external, based upon all manner of theories and hypotheses, respecting the pathology of the disease, had been employed to the fullest extent, and to no purpose. The convulsions were still

going on at intervals of ten minutes, defying the combined wisdom of two medical schools and two old doctors besides.

Driven to desperation, and worn out with fatigue and anxiety, I resolved to sit by the bedside of the patient one whole night, and try, if possible, to ascertain the cause of the trouble. It was in the month of December; and, long as the night was, I requested the family to retire to rest, and leave me alone with the patient, assuring them, if he grew worse, they should be notified of it. They assented to the arrangement, and I accordingly took charge of the patient for the night.

From the first, I had come to the conclusion that the irritation, whatever it was, had its seat somewhere in the periphery of the nervous system, and not in the encephelon or medulla spinalis, as my friend, Dr. Richardson, supposed; and the idea occurred to me that if I would notice what muscles were contracted first when a paroxysm came on, it might possibly give me a clue to the precise point of irritation, and, perhaps, the cause of it. With this impression, and in the hope that I might make a discovery that would relieve the little sufferer and myself, I carefully watched the commencement of the paroxysm. I observed that the muscles of the left side of the face invariably began to twitch on the recurrence of a fit. After the passing off of a convulsion, and while in a state of unconsciousness, I raised the upper lip as high as possible, and passed the index finger of the right hand around the alveoli, and lo, and behold! the corona of the second canine tooth, instead of having caused by its pressure the absorption of the root of the deciduous tooth, had passed behind it and forced it through the alveolus and gum and into the lip. I had often seen the same thing, but as this little boy was not quite old enough to shed his first crop of teeth, nothing of the kind was suspected in his case. Fondly hoping that I had found the latent cause of the frightful malady, I hastily slit the gum vertically and removed the old tooth. After pressing the edges of the incised gum together, and wiping the blood from the lips, I sat down to await the result. In less than an hour the convulsions began to subside, and before day they were entirely gone. As soon as it was light, the parents of the child entered the room, anxiously inquiring how he was. I informed them that between midnight and day the fits entirely disappeared. They could scarcely believe it. But there was the patient as bright, cheerful and rational as though he had never been sick. They were at a loss to account for the wonderful change; and acted as if they thought I had performed a miracle on

their son. I did not relieve their suspense, but kept what had transpired during the night a profound secret from them and the numerous friends visiting the house. I did not tell Dr. Richardson, who visited him in the afternoon, as usual; but left him in the dark as to the sudden change. He manifested much surprise; and made many inquiries, respecting the treatment during the night—whether any new remedy had been tried, and how it came that the fits left so abruptly under the treatment which had hitherto proved a failure. But no explanation was given at the time, and not until the family had removed from Jeffersonville, did I reveal to my colleague the facts in this singular case.

My reason for this reticence was, that I felt that the oversight of the cause of all the suffering to patient and relatives, and all this labor and vexation to the physicians in attendance, was a reproach to the profession.

It was a humiliating reflection, that five old and respectable practitioners of medicine, and two of them professors in medical schools, should allow a child to have fits for ten days, the result of so simple a cause, and not soon detect it! Here we were, day after day, holding consultations and philosophising about the pathology of the disease—one proposing the moxa, another ptyalism, another a blister on the head or the nape of the neck, and another something else equally as useless and injurious, when there was nothing the matter but an insignificant mechanical irritation, which could have been removed in one minute, provided we had been blessed with just common sense enough to see it.

*ON THE IDENTITY OF THE WHITE CORPUSCLES OF THE BLOOD WITH SALIVARY, PUS, AND MUCOUS CORPUSCLES.

BY JOSEPH G. RICHARSON, M. D.,

Formerly Resident Physician at the Pennsylvania Hospital.

The nature of the nucleated corpuscles so abundant in the saliva has long been a subject of some uncertainty, and although they have probably, as favorite test objects for the higher powers, been more frequently examined by microscopists than almost any other constituent of the glandular secretions, observers seem to have been generally contented to accept them simply as useful measures for the capacity of the

*Pennsylvania Hospital Reports, 1869.

higher objectives, and passed on without any attempts to solve the mystery of their origin; Köliker indeed advanced the theory that they were essentially a form of exudation corpuscles, but hitherto his hypothesis does not appear to have been generally accepted by microscopists as a fixed fact.

The following experiments, undertaken to elucidate their constitution, were performed with the large Powell & Leland's instrument, so long a denizen of the "Microscope Room" in the Pennsylvania Hospital, and no doubt endeared by constant association to many generations of "Residents," as well as myself. When it was discarded by the institution, I became the purchaser, and after undergoing some repairs, and having adapted to it a one-twenty-fifth inch objective (made by Mr. Wales, of Fort Lee, N. J.), it has accomplished the work below described.

The salivary corpuscles examined under a power of eleven hundred diameters present the appearance of perfect spheres, varying from the one-fourteen hundredth to the one-twenty-five hundredth of an inch in diameter, each having a very transparent but beautifully defined cell-wall of exceeding tenuity, which incloses from one to four almost equally transparent nuclei of a circular or oval form, whose diameters range from one-three thousandth to one-four thousandth of an inch. These nuclei are situated sometimes centrally but more commonly near one side of the corpuscle, and the cavity between the margin and the cell wall is generally filled with from twenty-five to fifty molecules, not more than one-twenty thousandth of an inch in diameter, whose characteristic is that of constant and rapid motion. Some of these molecules seem to be elongated into an oval or hour-glass form, but the activity of their movements renders it difficult to ascertain this with precision. In my observations these corpuscles have appeared to enlarge and become flattened, from the pressure of the glass cover, as the stratum of liquid beneath became thinner from marginal desiccation, so that usually in the course of an hour or so they burst, and discharge about one-fourth of their contents, when two, three, or more of the molecules swim away, continuing their revolving movements until they pass out of view; the other granules outside and those remaining within the cell become in a very few seconds entirely stationary. If a solution of aniline red, of the strength of one grain to the ounce of distilled water, be allowed to penetrate at the margin of the cover, the nuclei of the salivary corpuscle are readily stained of a bright crimson, and are thus exhibited with beautiful distinctness; the dye appears, however, to exert an immediate influence upon the movement of the molecules, as I have rarely been able to find cells in which they continued to move after the nuclei became at all colored.

In examining some urine, obtained on the eighth of August, 1868, near my late residence, in western New York, from a patient who complained of severe pain in the kidneys and bladder, I was surprised to find that a deposit, which appeared to the naked eye purulent, was chiefly composed of cells, exactly resembling in form, size, definite cell-wall, contained nuclei, and actively revolving molecules, the salivary corpuscles with which I had become so familiar; and should have

imagined that these proceeded from an accidental adulteration with sputum, had I not been fortunate to have ocular demonstration to the contrary when procuring the specimen. I examined these corpuscles repeatedly in the course of the two following days, during which the movements of the molecules continued, which I carefully preserved.

On consulting the text-books to which I had access, I found that neither Beale, Roberts, Bird, nor Naubauer and Vogel, in their works on the Urine, mentioned cells such as those above described, although the editors of the Micrographic Dictionary, in their description of the salivary corpuscles, state that they have been seen by myriads in the renal secretion; nevertheless, numerous specimens examined during the following few months, seldom without special scrutiny for similar bodies, afforded none, until in a deposit occurring from urine brought me by a medical friend about December first, the corpuscles I had so long been in search of were at last recognized, and on this occasion I was able to exhibit them to several microscopists, among others to my friend, Dr. H. C. Wood, Jr., Professor of Botany, in the University of Pennsylvania.

On the fifth of December I procured a sample of urine from a case of cystitis, which had only been passed a few hours, and on placing it under the field of the one-twenty-fifth, I found many of the pus-globules exhibiting the amœbaform movements described by Dr. Beale in his late elaborate work on the "Microscope in Practical Medicine;" no corpuscles containing moving molecules were visible, but observing that some of the pus-cells having a spherical outline were almost opaque and only about one-three thousandth of an inch in diameter, it occurred to me that they were perhaps only contracted by the exosmose of their fluid contents into the surrounding denser medium, and the idea suggested itself to try the effect of diminishing the specific gravity of the urine by the addition of water. Under this treatment I found that the cells which had been exhibiting amœbaform movements, soon assumed a spherical shape, rapidly enlarged until they reached the diameter of about one-seventeen hundredth of an inch, when the contained molecules began to revolve, and ere long took upon themselves the extremely rapid and confused movements which I had twice before seen in cells occurring in urine, and hundreds of times in the salivary corpuscles; the action of aniline solution rendered beautifully distinct, definite nuclei similar to those found in the salivary bodies.

The opportunity of corroborating the interesting and remarkable researches of Dr. Cohnheim, of Berlin, on the identity of the pus and white blood corpuscles thus obviously presenting itself, I proceeded with the following experiments. Drawing a drop of blood from the tip of my finger upon a "growing slide," I covered it with thin glass and placed it upon the stage of the microscope. After finding a white blood corpuscle showing well marked granules, I raised the objective, and arranged a fine filament of thread from the reservoir filled with fresh water to the upper edge of the cover, and a fragment of wet paper to the lower, according to the usual method of securing a constant current beneath the thin glass. On depressing the body of the instru-

ment and bringing the corpuscle again into view, I found it still adhering to the surface of the cover, notwithstanding the torrent of red globules hurrying over the field, and as these became paler and less distinct by reason of the diminished density of the serum, the white cell first gradually expanded and displayed its delicate wall with two rounded nuclei, then, after acquiring the magnitude of about one-seventeen hundredth of an inch, it exhibited the rapid and incessant movement of its contained molecules, and finally, when its diameter reached about one-fourteen hundredth of an inch, it burst suddenly, discharging a portion of the contents, whose outbreak resembled that of a swarm of bees from a hive, and some particles of which actively revolving as they went, swam off the confines of the field. On repeating the observation, and allowing some of the aniline solution to flow in with the water after the first few minutes, the nuclei were strongly stained and rendered beautifully distinct, although the movement of the molecules promptly ceased, in this respect as in all the others, showing a precise identity with the reactions afforded by the pus and the salivary corpuscles, as above described. It should be noted that a certain variable proportion of the white cells of the blood thus treated exhibited no moving molecules, and *apparently* consisted solely of nucleus and cell-wall.

It is worthy of remark that this experiment amply demonstrates the inestimable advantages of high objectives (which some even yet pretend to doubt), for the remarkable movement of the contained molecules seems to have escaped the attention of Prof. Virchow, the great author of "Cellular Pathology," himself (*vide* p. 181, Chance's translation, 1863). Although the observation was first made with the aid of a one-twenty-fifth, yet *afterwards*, knowing exactly what to look for, I had little difficulty in demonstrating to various gentlemen the revolving molcules thus brought into view with powers as low as the one-eighth of an inch.

A portion of fœtid pus from an abscess, and a specimen of mucus from the nasal fossa, under a like treatment, gave similar results, which did not materially vary in numerous trials.

Tracing now the white blood corpuscle from its condition of irregular outline and amœbaform movement, as observed in serum and heavy urine, when the cirumambient fluid approaches the density of 1028, through its round form with slightly more distinct nuclei, in the liquor puris, and in urine of lower specific gravity, we find that immersed in a rarer liquid, approximating to the mean density of the saliva (1005), it has an accurately spherical outline, is more than twice the magnitude, and contains a number of minute actively moving molecules, thus exactly resembling in all sensible characters the true salivary corpuscle; and it therefore seems reasonably certain that the blood, under the appointed nervous influence, congesting the buccal mucous membrane and associated glands, moves slowly enough through their capillaries to allow some of its white globules to penetrate the walls of the vessels, as they are said to do those of the frog's mesentery in Cohnheim's experiment (Virchow, Archiv, Band 40, S. 38, u. s. w.), which under the influence of the rarer saliva, expanding them and set-

ting free to move their contained molecules, constitute the bodies so long known to histologists, as the corpuscle of the salivary fluid.

Dr. Lionel Beale, in his work on the "Microscope in Practical Medicine," remarks in reference to the examination of the saliva: "In the somewhat viscid matter of which the salivary corpuscles is composed, are multitudes of highly refracting particles in incessant motion. The nature of these particles is extremely doubtful. They look very like the germs of bacteria, and it is possible they may be of this nature." If the hypothesis thus guardedly endorsed by the celebrated English microscopist be correct, it seems not improbable that the white corpuscles, either in the capilliaries or lymphatic glands, collect during their amœbaform movements, those germs of bacteria, which my own experiments (*American Journal of the Medical Sciences*, July, 1868), indicate always exist in the blood to a greater or less amount. And further, it appears not impossible, that when thus loaded, their elimination through the saliva, under the mercurial influence, and their evacuation by a discharge of pus from a seton or a tartar emetic ulcer, really constitute that therapeutic value of these remedial measures in certain cases which has long rested unexplained.

WOMBLESS WOMEN.

(The subjoined is an abstract from an article entitled *Surgical Cases, Devon and Exeter Hospital*, found in the last volume of *Saint Bartholomew's Hospital Reports*:)

That an incapacity for menstruation should consist with female health, is a strange fact. In two of the three following cases of wombless women, the defect was congenital.

Case I.—About nine years since, I removed the womb by ligature. In the "Address in Surgery" of 1860, I gave this case very circumstantially. The main facts were, that the patient was twenty-one; that it was her first labor; that she was delivered while standing; that the midwife tugged at the naval string; that the womb was everted; and that she nearly bled to death on the spot. After many months, when she was utterly exhausted by recurring hemorrhage, I tied the womb with Gooch's canulæ.

As I was going into the operating room, the nurse, a worthy old woman and a favorite, said, "Please, sir, if you take out her womb, I suppose she can never have her courses again, and if so, what then?" I replied, "Nurse, if I do not take out her womb, she may die before night. If I can, I will save her life now. That is my present thought. I can not look beyond that."

After all manner of perils, she made a thorough recovery. Of course she has never menstruated since, but when I saw her, three years after, she was in good health and good spirits. I know that she was perfectly well several years after that. Her whole aspect is feminine, her complexion is fair and delicate, as it always has been, but in

no wise chlorotic. She walks with her young man like any other servant girl; she cares nothing for the loss of her womb, which seems to have produced no other effect, moral or physical, than the cessation of her menses. That is the answer to the nurse's question, "if so, what then?"

CASE II.—About four years ago, a very delicate young woman, æt. twenty-five, evidently in declining health, came under my charge at the hospital. She told me she had been left an orphan, (I believe one at least of her parents had died of consumption), that she was delicate, and had not been able to retain her water like stronger girls; but that she had been brought up carefully; was now the mistress of a national school, and had married at twenty-three. She then added that coition had from the first been accompanied by pain, which instead of diminishing, as she expected, had increased, until she could not bear it; and that her urine escaped from her involuntarily. She and her husband, who were reputed to be very worthy young people, and a most attached couple, were greatly distressed, as they well might be. I learnt then, also, that she had never menstruated.

Her pudenda were perfectly natural. About three inches up the vagina there was a sudden narrowing, like a stricture. Its circular edge was soft, and the orifice sufficiently open to admit the finger; but it could have been easily dilated to a greater extent. It exerted a gentle compression.

This was the sphincter, and beyond it was the bladder. There was no trace of a womb.

I told her that sexual intercourse must cease forever. She was much grieved on her husband's account; of whose regard for her she spoke with genuine feeling. I recommended tonics, and she went home.

I heard nothing of her until lately, when she and her husband called on the nurse. They appeared a fond couple still. Her health was restored; and the incontinence of urine not worse than when she was a child.

CASE III.—I was consulted in the case of a lady's maid, æt. 40, who previous to the last six weeks, had enjoyed excellent health. She was a neat little figure, a brunette, must have been pretty, and was young looking for her age. She had a swollen knee, and flying rheumatic pains, for which she could not account, but she was chiefly harassed by an irritable bladder. Micturition was frequent, scarcely to be restrained, and painful both at the time and afterwards. She had used a hip-bath and opiate fomentations, with partial relief. I was to ascertain if a urethral wart or a calculus occasioned her distress.

Her urine had always been apt to escape when she coughed, but she had not been subject to leucorrhœa, and she never menstruated.

The external appearance of the genitals had nothing peculiar. The pubes and the labia were natural; the glans of the clitoris and the nymphæ were fully developed; but I could not find the urethra.

The vagina was such as might be expected in a virgin, except that there was neither transverse rugæ, nor hymen, nor caruncule, nor fossa navicularis. It opened abruptly, just in front of the perineum. It admitted the finger, which, when it had penetrated somewhat less than

three inches, came upon a dimple. This yielded, circularly, on gentle pressure, and the finger entered the bladder. As it was withdrawn, the sphincter closed again. The bladder was not set on obliquely like a womb; but quite at the end of a canal, which was no vagina at all. It was simply a preternatural urethra applied, as in the male, against the rectum. There was not the slightest trace of an os uteri or cervix —neither could any womb or corresponding body be felt from the bowel.

She told me that, some years before, she had been engaged to a young man, who died. Spoke of him, as a woman should, tenderly and regretfully; but did not affect to represent her love for him as Platonic.

Judging from these cases, the menstrual discharge is not necessary to the health of a woman who has no womb. In the intervals between one pregnancy, or lactation, and another, it would appear that the presence of a womb has a special and accumulating influence on the constitution; and that it is thus the organ which, by its own periodical discharge, affords that relief to the whole frame, of which it has itself created the necessity.

It is the womb alone, and not the whole generative apparatus, or, indeed, any part of it. Looking at their personal appearance, their views, manners and habits, and their womanly, albeit their correct and estimable feeling toward the men they loved, I believe the subjects of the cases II and III to be real women—saving their wombs. If it be contended that their ovaries may likewise be wanting, I can only reply that, in case I the generative system was undoubtedly complete, for that woman lost her womb, and nothing else, after bearing a child; and yet she is as healthy, without menstruation, as the two others, who never had a womb.

CLINICAL LECTURE ON TREATMENT OF CARBUNCLE.

BY JAMES PAGET, D. C. L., F. R. S.,
Surgeon to St. Bartholomew's Hospital. (Short-Hand Report, revised by the Author.)

GENTLEMEN: You have recently had the opportunity of seeing four cases of carbuncle treated in my wards after methods which you would probably describe, if asked to do so, by saying that "nothing was done for them." Here are the patients' papers; and there is, to be sure, no medicine set down for them to take, and you know that no surgery was inflicted on them—and yet a good deal was done for them, though the treatment was what does commonly pass by the name of "doing nothing." They were carefully fed, washed, cleaned and bedded; and their carbuncles were very skillfully dressed and washed with proper things, and every care was taken to shut out all untoward influences from them. And if any complication in their cases had arisen, these

would have been immediately met. But no complications occurred; and, therefore, the cases passed through their course without treatment, as it is said—that is, without medicine, and with no surgery, no active surgery, no incisions or anything of that kind. And since all these cases passed through their course very favorably, and all the patients were, or will be, discharged at a comparatively early time after their admission into the hospital, I will take this occasion of giving you some observations on the manner of treating this disease.

Although you may not have seen much of it, you must all have heard of the ordinary manner in which carbuncles were treated formerly, and still are by some; a method which consists mainly in making large incisions through them, and giving very large quantities of food and stimulants, as well as considerable doses of quinine, bark and other tonics. I do not at all mean to say that the things which in these cases I left undone would have done any harm; but what I hold of them is, that they would have been quite useless, and some would have been sources of great discomfort to the patients. And in the way in which I speak of these things you may notice that I exemplify that rule which I always impressed upon you, of asking yourselves, when you seem to have been successful with some medicine, "What would have happened if I had not given it?" The apparent consequence of giving a medicine may be plain enough; but you can not too often repeat to yourselves the question—as a rule, I will not say of practice, but of the study of your own practice—"What would have happened if this or that, which seems to have been successful, had not been done?"

First, with regard to the incisions made in carbuncles. The ordinary plan, still recommended by some, is, as soon as a carbuncle is seen, to make two incisions crucially from border to border. It is said that they must go even beyond the edges of the carbuncle into the adjacent healthy textures. I have not followed that method of practice very often, but I have followed it quite often enough to be sure that it does not produce the effects which are commonly assigned to it. It is commonly said that if you will thus make crucial incisions into a carbuncle, you will prevent it spreading. If you can find a carbuncle two or three days old, and cut that right across in both directions, I think it very likely that you will prevent it spreading. But even therein is a fallacy; for there is no sign by which, on looking at a commencing carbuncle, you can tell whether it will spread or not, whether it will have a diameter of one inch, or of three, six, or ten inches. The question, therefore, that I spoke of comes back, "What would have happened if I had not made these incisions?" And the answer to that question will be rather according to temper than to knowledge. For as I watch men in their conclusions upon such cases as that, I generally find that self-satisfaction says, "I saved the man's life;" self-dissatisfaction, "I did him no good." The truer scientific temper stands midway, and says, "I will wait for further information on the matter—till I have seen more cases, and then decide whether, in the earliest stages of carbuncle, incisions are useful or not." After this time of three or four days I have seen sufficient numbers of carbuncles thus

divided, and have divided enough for myself, to say that it will not prevent spreading. I have seen carbuncles spread in as large a proportion of cases after incisions as in cases that have never been incised at all. I have in my mind a striking case that occurred to me early in practice, when I followed the routine, and, in a friend of my own, divided a carbuncle most freely. I cut it after the most approved fashion, in depth, and length, and width, and then it spread. After two or three days more all the newly formed part was cut as freely as the first, and then it spread again, and again it was cut as freely. Then it spread again, and it was not cut. Then in a natural time, it ceased to spread, and all went on well. These are only general impressions that I give you, because one can not count the cases in which cutting has been practised, and those similar cases in which it has not; nor even then could it be said whether those in which the cutting was practised would have spread if left alone. On a very strong general impression, however, I say that carbuncles will spread after cutting in as large a proportion as they will spread in without cutting.

Then it is said that carbuncles are relieved of their pain if they are thus freely cut. Here, again, however, is only a partial truth. A carbuncle of two or three days standing, which is hard, tense and brawny, is very painful; and cutting it will relieve, in many cases, a considerable portion of the pain. But after this, when the carbuncle begins to soften, and when pustules begin to form upon its surface, and pus in its interior, it ceases to be painful of its own accord, and without incisions. Thus there are two distinct stages of carbuncle in reference to the pain; the early stage, when hard and still spreading, is generally intensely painful, and the latter stage, in which the pain nearly ceases. A carbuncle divided in the first stage, in the first two or three days of its existence, may be relieved of some of its pain; if divided in the latter stage, what little pain may exist is altogether unaffected by the cutting. And even cut as you may, you can not always put aside the extreme pain that a carbuncle sometimes has, even to its latter time. Some two or three years ago, I was called to a member of our profession with a large carbuncle in the middle of his back. His friends had been much alarmed about the state of his mind, for he had been suffering great mental anxiety for some time, and they were in fear lest the excessive pain of the carbuncle should, in its disturbed state, do his mind permanent damage. So they persuaded me to cut it, and I cut it after the old plan, very wide across, and far into the adjacent textures, as freely as could be. It did not in the least relieve him. I never saw a carbuncle through its whole course so painful as that was, and up to the last, until the healing was nearly completed, he suffered more or less pain in it. So that the conclusion in reference to the pain must be this: if they can be divided in the first three or four days, while still hard and brawny, it may relieve some measure of the suffering; at a latter period the incisions have no influence at all.

The third point is stated thus, that by the incision of carbuncles you accelerate their healing, giving facility for the exit of sloughs. But herein is the greatest fallacy of all. When the cutting of carbuncles was more customary in this hospital than it is now, when I did

not cut them and some of my colleagues did, I used to be able to compare the progress of cases cut and of cases uncut, and time after time it was evident that the cases uncut healed more readily than those cut. A man who is now in the hospital I have brought round here that I may illustrate this point to you. This is the man, Timothy C———, aged fifty-five. When he came in, his carbuncle had a length of more than six inches, and a breadth of three and a half; and it formed the ordinary hard, compact, tense and brawny mass that a carbuncle usually does. It had at that time already taken to suppurate, and little pustules were pointing on the surface. If I had followed the practice of incisions, I should have had to make a cut in one direction of about seven inches, and the other of about five, and after that I should have had not only the wounds wide, open and gaping, and having themselves to heal, but a great part of the substance of the carbuncle fairly exposed, and also under the necessity of healing. But you will observe that the whole of the space that now remains to heal is a series of openings in the middle of the carbuncle, through which the sloughs are to be separated, through which, indeed, nearly the whole of the sloughs have already been discharged, and which now merely remain to be healed like the cavities of small abscesses. In that way you narrow greatly the extent of the wounded surface to be healed. Indeed, it by no means always follows that the whole carbuncle, or its whole base, sloughs. Carbuncles, if not divided, not unfrequently only suppurate about their centers, and slough only in their central parts, and the borders merely clear up by the softening and dispersion of the inflammatory products in them. In every case of that kind you save greatly the amount of healing which has to be gone through. Nay, in some cases carbuncles completely abort. One of these cases, of which I have the paper on the table, was that of a woman, aged sixty-four, who came in with a carbuncle nearly as large as this, in a condition which, it might be said, required incision at once; but, with the exception of two or three small points, no suppuration or sloughing ensued. That carbuncle dispersed, aborted, cleared away. This case shows the more ordinary course of events—the sloughing of the central part, the gradual discharge of the sloughs, and the comparatively small spaces which are left in the center of the carbuncle as the sole space in which the process of healing has to be achieved.

On these three points, which are the grounds that have been assigned as reasons for cutting carbuncles, I have now given you the evidence on which I have ceased from the practice. I fully believe that crucial incisions do not prevent extension; that it is only a limited set of cases in which the incisions diminish pain; and that with regard to the time that is occupied in healing with or without incisions, the healing without incisions is very clearly and certainly a great deal the quicker.

The kind of incisions that I have been speaking of is the old plan of crucial incisions. Another method which I have occasionally tried, but of which I can only state the same general results, is that of subcutaneous incision. This has been supposed to have the same general

effect as the other; and I think the same general conclusions may be drawn respecting it: that it is a measure unnecessary in the treatment of carbuncle, and that it retards rather than hastens the healing. When I speak thus of the incision of carbuncles, however, I do not mean to say that there is no condition of carbuncle in which an incision is not useful. Sometimes a carbuncle sloughs in its central part, with one continuous slough of integument holding a quantity of pus. In that case you would cut through the slough, or through any adjacent part of the carbuncle, to let out the pus, as you would open an ordinary abscess. But this is not a measure which is commonly understood by the "incision of a carbuncle."

If you ask why one may not cut a carbuncle though it may do no good, I reply that you should never be actively useless, and that there are some cases in which cutting does considerable harm. Carbuncles, for the most part, occur in persons broken down in health, exhausted by over-work, or by bad food, or in general deteriorated health—as sometime in diabetes or albuminuria; and in all these states it is a good general rule to save the blood they need for healing. The loss of blood from the carbuncle itself would not be considerable; the hard substance of the carbuncle, when cut into, does not bleed, or bleeds but little. But to carry out the incision perfectly, you have to cut into the adjacent healthy texture; and this sometimes bleeds very profusely, so as to lead to all the distress and pain of plugging the wound with this or that substance to arrest the blood.

Another measure in the treatment of carbuncles which is supposed to be necessary, is very high feeding and large quantities of stimulants. I learned the opposite of this in one of those cases which you will do always well to study—those, namely, in which the patient refuses to do what you advise him. It is from such cases that we may often learn what is commonly called the "natural history of disease"—its course undisturbed by treatment. A case occurred to me once of an old gentleman, eighty years of age, who had a carbuncle, as big as it could be, on the back of his neck, for it extended from one ear to the other, and from his occipital spine to the third cervical vertebra. He measured it for his own amusement, and it was fourteen inches over its surface transversely, and nine inches vertically—a carbuncle, then, of the largest size, and one, it might be supposed, attended with considerable risk to life. I urged him very strongly to take a large quantity of what is called "support," for I was at that time under an impression of its necessity. He absolutely refused, however, and nothing would induce him to take it. I was therefore content to stand by and study the natural history of disease in this huge carbuncle; and the natural history of it was a history that one would have wished to witness in every carbuncle of its size, for no case could pass through its course in a better method. He led his ordinary abstemious life, took moderate quantities of food and of stimulant, lived through a carbuncle of the greatest severity, and finally made a complete recovery and lived for several years after.

Another case which impressed me very much was that of a friend of my own in the profession, who had a carbuncle on the back of his

neck, of very considerable size. Sir Benjamin Brodie and Mr. Stanley attended him with me, and under their advice the carbuncle was cut. I watched its course afterwards, and felt sure that the cutting had done neither good nor harm. It went on as carbuncles do when not cut. But the gentleman was subject to intense headaches, of which he knew by experience the only possible remedy was almost entirely to leave off food, and absolutely and entirely to leave off stimulants. One of the headaches occurred during the course of the carbuncle, at a time when we had put him upon very full diet and abundant stimulant. He said then that he must leave off his stimulants and food, and we looked with some alarm on what would be the result on the progress of the carbuncle. I remember Mr. Stanley saying to him, in his distinct manner, "My dear fellow, if you don't take food, you will die." "Very well," he said, "then I will die, but I will not take food and increase my headache." According to his own wish, therefore, we reduced his diet to a very low level. The course of the carbuncle was not affected at all, unless it were for good; and after three or four days of this, which might be called comparative starvation, he described himself in his own emphatic fashion as being "as jolly as a sand-boy."

Since that time I have watched carefully all cases that I have seen, and I am certain that there is no good to be obtained by large feeding or abundant stimulants in ordinary cases of carbuncle. The whole of these cases that have been in the hospital were put on our ordinary meat diet, with a pint of porter daily; and I see that two of them have had four ounces of wine a day, one of these being a person aged sixty-four and the other sixty-three, and both having carbuncles of considerable size. You will find that for patients in private life it will do very well if you tell them that they may have about two-thirds of their ordinary amount of food, and about the same proportion of their ordinary quantity of stimulants. But indeed there is scarcely any reason to change in any material degree the ordinary mode of life of a patient with carbuncle. So far as he can with comfort take that to which he is accustomed, so far he may. If his diet has been habitually low, so it may remain; if habitually high, so, within certain limits and somewhat reduced, it may still remain.

Now you may ask what I should set down as the things to be done for a carbuncle. These boards, nearly bare as they are, may tell you. In local treatment one of the best things you can do, if the carbuncle is small, is to cover it with emplastrum plumbi spread upon leather, with a hole in the middle through which the pus can exude and the slough can come away. That, occasionally changed, is all the covering that a small carbuncle will need. It is difficult thus to cover the whole surface of a large carbuncle, and to keep it clean; therefore, I think the best application for that is the common resin cerate. This should be spread large enough to cover the whole carbuncle, and over it should be laid a poultice of half linseed-meal and half bread. And, if you want to exercise your skill, learn to make that poultice well, and to put it on well, and to keep it in its place well. That mode of dressing the carbuncle, so far as the materials are concerned, will last through its whole course; but whilst the carbuncle is making progress

and discharging its slough, you will find plenty of room for the exercise of considerable skill in dressing it, and filling up the cavities with soft substance spread with this ointment. Besides this, the carbuncles are to be carefully washed, especially with some deodorising substance, as Condy's fluid, or weak carbolic acid, and the cavities may be syringed out with it. The importance of cleanliness is very great. You noticed in the man whom I showed you just now, the spots of acne and boils around the edges of the carbuncle. This points out the necessity of care, which I suppose had not been taken there, to keep the surface of the skin adjacent to the carbuncle perfectly dry, and free from any contact with the discharge, which seems really to have the power of infecting the neighboring skin, and so producing the boils which are apt to arise, sometimes in clusters, around the carbuncle. Of diet I have already spoken to you. Of medicines I say nothing. Quinine, bark, and other medicines of that class, may be given if you please, or in case of evident need, and so may aperients; but there is really no need of them in an ordinary case of carbuncle. But there is one medicine which you may find very valuable, and that is opium, especially in all the earlier painful stages of carbuncle, in which it relieves the sufferings as thoroughly as incisions, or anything I know. After the early stages, even that is unnecessary, except for some patient who may be unable to sleep.

But there is one measure in the treatment of carbuncle which is seldom employed, and yet is of great importance, and that is letting the patient have very free air. The general idea that carbuncles are very dangerous diseases, has commonly led to the patients being entirely confined to bed and kept shut up in their rooms. There is in that an unnecessary care; and this, too, I learned from a patient who refused to comply with injunctions—a gentleman with a large carbuncle on the back of his head, who would not keep his bedroom. He had been accustomed to an active life, and after seventy or eighty years of that custom, he was quite indisposed to remain in his room. So with that carbuncle he daily came down stairs, changing his room and moving about the house as well as the pain and weakness would allow him. No carbuncle could go on better; all the stages were passed through without any risk or trouble, and it healed with unusual speed. After that I had a yet more striking case. A lady came to London "for the season," as she called it; and she had not been here more than a week or ten days before a carbuncle came out on the back of her head, just under her hair. It was a great vexation to her that she had to give up all her amusements; and so, as she did not mind the pain, she would go out. And it was then that, for the first time and the last, I saw any value in a "chignon." She dressed her carbuncle under the chignon, and went to the park, to the theater, and to dances unharmed, and with her carbuncle quite unseen, and no trouble whatever followed. It healed up after the ordinary fashion in about the ordinary time. But, indeed, you may see cases of this description on a much larger scale, if you watch the carbuncles that come to us in the out-patients' room. There we often see them of considerable size, and they do as well among the out-patients as among the in-patients; and

yet these out-patients are freely in the air all day. And many of them continue at their work. So you may set it down as one point to be attended to in the management of carbuncles, that patients should not be confined to their room. They should at least have change of air in their own house; and, unless they are too low, they should not avoid exposure to the fresh open air.

Treating your cases of carbuncle upon this plan, I believe you will find that the great majority will pass through their course well. I can not tell you what the ordinary proportion of deaths from carbuncle is; but I know that carbuncles are commonly looked upon in the profession as dangerous things, and a large carbuncle on the back of the head is considered to be fraught with risk to the patient's life. But that is very far from being the case in my experience. Remembering, as far as I can, or rather guessing at the number of carbuncles I have had to treat, I should say that there is no other disease of the same extent and general severity which is attended with so little risk to life. During twenty years of hospital and private practice, I can not have treated less than two hundred carbuncles: and of these two hundred, four have died, giving a mortality, at a fair guess, of only two per cent.—a mortality which is less than that of most of the minor operations of surgery, and less really than that of any disease of equal severity that you can name. Of those four deaths, one occurred in a patient aged seventy-eight, who died of erysipelas after the carbuncle had nearly healed. Another was a gentleman of about fifty-five years of age, who died of chronic pyæmia. The third was a gentleman aged fifty, who died with acute pyæmia. And the fourth was a patient of about fifty years of age, who died rapidly exhausted. The first three were from causes which may almost be called accidental; for so we call them when occurring after an operation, and it would be unreasonable to suppose that any other method of treatment would have averted the consequences. The other died, possibly, on account of the deficient stimulation; for he was a man who had lived freely, and took during treatment less than he had been accustomed to have. The main point, however, to which I wish to direct your attention, is that the mortality may be as little as two per cent. I can not doubt that the mortality was considerably larger when carbuncles were severely cut; for the severe cutting meant often severe bleeding, and was attended with all the consequences of large wounds. Thus, though I do not know the exact proportion, I believe that the general reputation of the danger of carbuncle was well founded, and that among the reasons for the diminished mortality of carbuncles may be set down as chief, the more frequent avoidance of the custom of cutting them.

Speaking of the mortality of carbuncle, however, I must remind you that I am not speaking of a disease which sometimes passes under the name of carbuncle—the carbuncular inflammation of the lip which sometimes occurs in young persons; a disease which you may not have seen, and may pass many years without seeing. It was described by a former house-surgeon of this hospital, Mr. Harvey Ludlow, as malignant pustule of the lip. Dr. Budd, of Bristol, has also so described

it. Commencing at one spot, inflammation of the whole lip follows and spreads to the face, and then disease of the lymphatics ensues, with pyæmia as its consequence. It is a disease so unlike carbuncle, that it ought not to be known under the same name. It seems to me not like the accounts given of the malignant pustule abroad, and I have seen no other disease like it in England. It attacks especially young persons from fifteen to twenty-one; and of fifteen cases that I have seen, only one recovered. That disease is not carbuncle, nor is the mortality of that disease to be counted in estimating the mortality from carbuncle. Ordinary carbuncle on the lip and face has none of those special characters, and is not more fatal in those situations than in any other.—*Lancet, January 16th, 1869.*

BIBLIOGRAPHY.

ESSAY ON THE THERAPEUTIC VALUE OF CERTAIN ARTICLES OF MATERIA MEDICA OF RECENT INTRODUCTION.

BY JOHN H. GRISCOM, M. D.

Reprinted from the Transactions of the New York State Medical Society for 1868. Albany: Van Benthuysen & Lous' Steam Printing House, 1868.

This brochure of nineteen pages, presents "the results of an extended and successful experience with the employment of two articles of the materia medica of comparatively recent introduction"—the *sulphite salts* of *soda*, and *glycerine*—the first as an *internal*, and the second as an *external* remedy.

Dr. Griscom states that he has employed the first named article in about three hundred instances, with scarcely a single failure in those cases, to which, according to his theory of its *modus operandi*, it was specially adapted.

Dr. G. believes that this medicine, when used internally, acts not only as an antiseptic, a preventer of decomposition and of fermentation; but also a promoter of digestion in cases in which the gastric juice may be deficient in some of its essential acidulous ingredients. The diseases in which it has proved most useful, are diarrhœa, dysentery, cholera morbus and dyspepsia. The dose is "from five, to twenty, forty, or sixty grains, according to the age of the patient and the

force of the symptoms, administered two, four, or six times a day." We are informed that in all zymotic diseases, this remedy may be employed with assurance of powerful aid to other medical measures. When all the author's sanguine expectations in regard to this medicine are realized, we may say that for most diseases,

——"The sovereign'st thing on earth,"
Is soda sulphite.——

While we regard the sulphite salts of soda as valuable medical agents, our limited experience leads to the conclusion that they have less value than has been assigned them by Dr. Griscom.

The valuable results the author claims to have obtained from the external application of glycerine, were dependent upon the affinity possessed by this agent for aqueous fluids, including the serum of the blood. The following extract presents the views of Dr. G.: "In furuncles, erysipelas, ophthalmia, nasal inflammation, urethritis, and other inflammatory and congestive troubles—in not one of a large number of such cases, have I been disappointed in the alleged tendency of the oil to drain off the serum, even through the perfect integument, and the effect has been almost as uniformly demonstrative of its depletory power as if the blood itself had been removed from the part. In fact, glycerine may be regarded as a good substitute for leeches and blisters, and in some instances, for surgical operations."

J. R. W.

PRONOUNCING MEDICAL LEXICON, CONTAINING THE CORRECT PRONUNCIATION AND DEFINITION OF TERMS USED IN MEDICINE AND THE COLLATERAL SCIENCES, WITH ADDENDA, CONTAINING ABBREVIATIONS USED IN PRESCRIPTIONS, AND LIST OF POISONS AND THEIR ANTIDOTES.

BY C. H. CLEAVELAND, M. D.

Eleventh Edition. Philadelphia: Lindsay & Blakiston, 1869. Price, $1.25.

Daily observation renders the fact evident that a work of this kind is needed. Students, in their pronunciation of medical terms, usually follow the usages of their preceptor and the professors of the colleges they attend. These persons are, unfortunately, not always entirely

reliable, and as a consequence, the habit of mispronouncing certain words is acquired, a habit that will certainly, sooner or later, cause its possessor great annoyance. The use of a carefully prepared pronouncing lexicon, will do much to prevent such a result. The one under consideration may be generally depended on for correct pronunciation; yet it is not always infallible. The phonotypic alphabet is used to represent pronunciation. This alphabet, containing, as it does, a distinct character for each of the forty-three elementary sounds, allows the precise pronunciation of a word to be represented without difficulty. This alphabet is given and a knowledge of it can be acquired in a short time. J. R. W.

THE PHYSICIAN'S DOSE AND SYMPTOM BOOK, CONTAINING THE DOSES AND USES OF ALL THE PRINCIPAL ARTICLES OF THE MATERIA MEDICA AND OFFICINAL PREPARATIONS, &c.

BY JOSEPH H. WYTHES, A. M., M. D.

Eighth Edition. Philadelphia: Lindsay & Blakiston, 1868. Price, $1.00.

The favor with which this little manual has been received, as shown by the demand for an eighth edition, sufficiently proves its value. It was compiled for the use of students; but it also seems as a *vade mecum* for the general practitioner, and serves the trouble of reference to larger and more elaborate works. J. R. W.

ON CHRONIC BRONCHITIS, ESPECIALLY AS CONNECTED WITH GOUT, EMPHYSEMA, AND DISEASES OF THE HEART.

BY E. HENDLAM GREENHOW, M. D.

Philadelphia, Pennsylvania: Lindsay & Blakiston, 1869. Price, $2.50.

The author of this exceedingly instructive little volume comes not unheralded among us. His very valuable observations on *Diphtheria*, published in *The Lancet*, not long since, are still fresh in our memory. Evincing, as those articles did, so much careful thought, Dr. Greenhow has impressed us with the idea that he is a writer, from whom, to

use a common expression, "we expect great things." To say that in his present undertaking, all of our anticipations are fully realized, would be but paying him a compliment to which he is justly entitled.

The subject of his book, *Chronic Bronchitis*, will appear to many, rather trite and prosy. So it is, as ordinarily treated of in the various text books; but Dr. G. throws around his theme so much of freshness, so much of novelty and originality, that he seems, as it were, to be advancing into a territory altogether new and unexplored.

The work, which is eminently clinical, does not, as our author states, profess to be a systematic treatise on bronchitis, but is simply a record of certain opinions and conclusions concerning the pathological nature of that affection, to which he has arrived, after a careful study, and collation of cases. It is thus, happily, devoid of much of the dryness incident to a descriptive detail of symptoms, diagnosis, prognosis and treatment, found in systematic works.

It is divided into eight lectures. The first and second lecture being devoted to the general etiology of bronchitis, and bronchitis arising from cold, and mechanical irritation; the third and fourth to bronchitis in its relation to gout; and the remaining ones to bronchitis in connection with emphysema and diseases of the heart.

It will strike many with surprise that the author devotes so little space to the consideration of exposure to cold as a cause of this affection. Cold, which is so universally regarded as a powerful and ever-acting factor in the production of bronchial inflammations, and other pulmonary lesions, he disposes of without much ceremony, as possessing but a modicum of etiological importance. He bases this view, not upon mere theoretical grounds, but upon what he regards as firm clinical data. In but five out of sixty-six cases, could he trace the bronchial trouble to the action of the cause mentioned. That cold produces bronchitis, is the exception, rather than the rule.

While Dr. Greenhow relates not a few cases resulting from mechanical causes, the great bulk of them are brought forward to demonstrate the very intricate relationship existing between the various forms of bronchial inflammation, and the gouty dyscrasia, and it is just in this connection that our author evinces great cogency of reasoning.

His arguments to establish so close a relationship between two such seemingly different pathological conditions, are not at all specious, but show such analytical tact, and such power of tracing effects back to

causes, that they seem to carry conviction with them, and we feel almost compelled to subscribe ourselves believers.

Since the history of medicine began, catarrhs have been said to arise from exposure to cold, vague as it is in its action. On the inquiry being made by sufferers from bronchitis, as to the cause of their trouble, practitioners are content with the answer that it arises from "taking cold." The same question has been asked, and the same answer been given for generations back. *A cold*, and *a bronchitis*, have, in fact, become synonymous terms.

As has been remarked before, Dr. Greenhow is opposed to this exclusive view as to the causation of these affections; and his cases, with the deductions based thereon, indicate, if they indicate anything at all, that we must look a little further for it. The gouty dyscrasia, is, with him, a powerful factor in these causations. After all, may not other pulmonary inflammations, such as pneumonia and pleurisy, be the results of some profound diathetic or constitutional disorder? If such be the case, we may possibly explain the beneficial action of some of the therapeutic agents often brought to bear against them. The good effects of alkalies in acute bronchitis, and of the iodide of potassium in the chronic form, are proverbial. Instead of referring the action of these remedies to some vague alterative or defibrinizing influence, may we not attribute it to a directly antidotal or eliminative power?

Rheumatism is, also, mentioned as being in some manner connected with attacks of bronchitis, but not so frequently as gout. The latter affection, on account of its much greater frequency in England than this country, may play a very prominent part in its association with bronchitis, but can not be a very fruitful source of the affection here. Rheumatism, which prevails so largely in our country, to the exclusion of gout, may take the place of it, in its bronchitic tendencies.

In this connection, it is well to state that Dr. Greenhow is not altogether alone in his views as to the relationship existing between rheumatism, gout, and certain pulmonary affections; for Pollock, in his admirable monograph on the "Elements of Prognosis in Consumption," states distinctly as his opinion, that the tubercular, rheumatic and gouty diatheses are closely allied. This may, in a manner, explain the remarkable statement of our author, that the tubercular dyscrasia engenders a hereditary tendency to bronchial inflammations, and that these, in their turn, may give rise to a tubercular taint. Gout and rheumatism, are, as it were, sandwiched in between. According to this, one generation may possess an organic weakness of the respira-

tory apparatus, evidenced by a bronchitis, which will transmit to a succeeding generation another organic weakness in the form of phthisis; gout and rheumatism being mere modifications of the same diathesis, but spending their force on different tissues.

The assertion that bronchitis engenders phthisis, and phthisis bronchitis, will not seem orthodox teaching to those authorities who believe in their mutually protective influence.

Practitioners, as a regular thing, are too apt to regard bronchitis in the light of a trivial affection. When patients with some chronic pulmonary disorder apply to them, it is very common to hear the medical adviser say: "You need not be alarmed, you only have a little bronchitis." It is not true that bronchitis is an affection which is to be treated lightly. Following in its train, and dependent on it as a cause, are many morbid conditions which tend slowly, but only too surely, to a fatal termination. We will merely mention emphysema, hypertrophy with valvular disease of the heart, disease of the liver and renal affections. To all of these, as resultants of bronchitis, Dr. Greenhow enforces attention.

The two lectures devoted to cardiac affections, develop the facts that bronchitis may stand in a causative relation to disease of the right side of the heart, and in relation of effect, to disease of the left side. Bronchitis in the one case being a cause of disease, and in the other, an effect.

The author's remarks upon emphysema are practical and instructive. After reviewing the theories of Laennec, Jenner and others, as to the causation and mechanism of emphysema, he clearly states his own. While he thinks it may arise, in some instances, from bronchitis, asthma, and other antecedent diseases, he regards it as oftenest due to an organic weakness of the lung tissue, dependent upon some constitutional or diathetic condition.

There is nothing particularly new in his selection of the special remedies for bronchitis. They grow naturally out of his peculiar views as to the pathological nature of the affection, being mainly tonic, antidotal and eliminative. The *tincture of larch*, which seems to be a favorite remedy with him, is efficacious, we suppose, like all the other terebinthinates, without the objection of its producing nausea and irritation of the stomach and bowels.

If the author but continues his investigations, we may hope that he will effect as much towards the elucidation of bronchitis as have

those of Herard and Corneil, Villemin, Niemeyer, Wilson Fox and others accomplished for its congener, pulmonary phthisis.

We close our notice of this little work, by stating that we have rarely experienced so much pleasure from reading any production as we have from this. To those who are especially interested in the study of this class of affections, and even to the general practitioner, we will say that its perusal will fully repay them. C. R.

THE USE OF THE LARYNGOSCOPE IN DISEASES OF THE THROAT, WITH AN ESSAY ON HOARSENESS, LOSS OF VOICE AND STRIDULOUS BREATHING, IN RELATION TO NERVO-MUSCULAR AFFECTIONS OF THE LARYNX.

BY MORELL MACKENZIE, M. D.,

London., M. R. C. P. Physician to the Hospital for Diseases of the Throat, etc. Second Edition, with additions, and a chapter on the Examination of the Nasal Passages, by J. Solis Cohen, M. D., author of "Inhalation; its Therapeutics and Practice," etc., pp. 289, with two lithographic plates and fifty-one illustrations on wood. Philadelphia: Lindsay & Blakiston, 1869. For sale by C. P. Wilder, Indianapolis; Robert Clarke & Co., Cincinnati. Price, $3.00.

The appearance in England of a second edition of Dr. Mackenzie's "Treatise on the Use of the Laryngoscope," within a comparatively short period after its reprint in this country, has required the American publishers to issue a new edition equally complete. This comes to us in the shape of a handsome volume, printed in large clear type, on fine paper, making its examination a pleasure, instead of a task for overworked eyes.

The favorable reception awarded to the first edition of this book, renders praise of it now a work of supererogation, therefore, we will simply call attention to the new matter contained in this edition. This consists of "Additions on the Use of the Laryngoscope," a report of several interesting cases, and a recent essay on "Hoarseness, Loss of Voice, and Stridulous Breathing, in relation to Nervo-Muscular Affections of the Larynx," by Dr. Mackenzie, and "Some more Explicit Instructions with regard to the Manipulation of Laryngeal Instruments," together with a description of some which are more readily procurable in this country than those described by Dr. Mackenzie, and which experience has proved most serviceable, "Additions on Aphonia," with illustrative cases, and a chapter on "Examination of the Nasal Passages," by the American editor, Dr. J. Solis Cohen, of Philadelphia.

There is now no division of sentiment among the intelligent members of the profession in relation to the valuable aid afforded by the "art of laryngoscopy," in the diagnosis and treatment of diseases of the larynx. To all who now practice, or would acquire this art, we most warmly recommend the work we have just examined.

J. R. W.

JOINED TWINS—THE OBSTETRICAL AND SURGICAL MANAGEMENT, WITH REMARKS.

BY A. B. COOK, A. M., M. D.,

Professor of the Principles and Practice of Surgery, Kentucky School of Medicine. Louisville, Ky., 1868. Pp. 26.

This pamphlet gives the history of the delivery of a case of joined twins, in the practice of E. C. Bright, of Eminence, Kentucky, in 1865, a description of the monstrosity after it was delivered, and the results of a *post-mortem* inspection of the dead bodies.

Some attention is given to the general consideration of human monstrosities, together with the rules which should guide the accoucheur in attendance on their delivery; and the brochure closes with a discussion of the condition of the Siamese Twins, and the propriety of their separation by surgical art, deciding pointedly against such an operation while the twins both have health and comfort. We do not join the author in his reasoning or conclusion about the Siamese Twins; but recommend the pamphlet as a valuable monograph on the subject of human monsters.

J. F. H.

MEDICAL COMMUNICATIONS, WITH THE PROCEEDINGS OF THE SEVENTY-SIXTH ANNUAL CONVENTION OF THE CONNECTICUT MEDICAL SOCIETY, HELD AT NEW HAVEN, MAY 27 AND 28, 1868.

New Haven: Published by the Society. Moses C. White, M. D., Secretary.

These communications, together with the transactions proper, make a handsome volume of two hundred and eight pages. The "annual address" of the president, Dr. C. Woodward, of Middletown, has for its subject, "our Organization, its Relations and Responsibilities." The distinctive characteristics of the founders of the society, the claims

the community has upon it, and its future improvement and advancement, are the topics discussed in this address, which contains more pith and value than similar addresses usually do.

Dr. H. A. Canington, of New Haven, contributes an article on the "Relation of Theory to Practice." A correct estimate of the value of theory to practice is made. The difference between receiving a theory "merely as a provisional statement or explanation, the truth of which remains to be established" by experiment or otherwise, and of taking the theory of this or that one as "the ultimate expression of truth," and thus becoming partisans instead of seekers, is clearly shown.

The author thinks "that one of the most encouraging signs of promise in the medical world is this, that schools and systems, theories and hypotheses, find so few heated, bigoted partisans; and that the profession, as a whole, stands so far above the narrowness of sectarianism."

The third article, on "Army Hygiene," is by Dr. R. Bartholow, of Cincinnati. To this essay was awarded the "Jewett" prize offered for the best essay on the question, "By what Hygienic Means may the Health of Armies be best Preserved?" This is a lengthy and very valuable paper. Dr. B. is familiar with his subject, and has done it and himself justice in this essay. The conclusions arrived at after a careful survey of the whole ground, are expressed in the following summary:

"1. The minimum age of the men composing an army, should be twenty-five. In addition to the ordinary requirements of recruiting regulations, the influence of diathesis and cachexias over the health and physical stamina, should be considered.

"2. In the training of recruits, the conditions of the military service should approach as nearly as possible, to those of civil life. As the mortality of this period is greatly in excess of the other periods of military life, special hygienic precautions should be taken as respects habitations, diet, clothing, exercise, amusements, etc.

"3. As the chief danger to the health of the soldier arises from crowd-poisoning, scorbutus, malaria, a morbific cause compounded of these, and from contagious and epidemic diseases, the sanitary regulations of armies should be especially directed to the avoidance of the evils of permanent camps and barracks; to the providing a varied and ample diet, to instituting the most approved measures of private and public hygiene, and to enforcing police laws against the spread of probable zymotic diseases."

The fourth article is the "Russell prize essay." This is also by Dr. Bartholow, and is on the "Therapeutical Uses and Abuses of Quinia and its Salts." We think that the majority of the profession will not be likely to accept as true all the conclusions arrived at in this essay; yet we believe that the best observers will endorse them.

The fifth paper is on the "Treatment of Paralysis by Hypodermic

Injections of Strychnine, with remarks on Infantile Palsy," by Dr. M. G. Echeverria, Superintendent of the Mahopac House for epileptics and paralytics, at Lake Mahopac, New York. This is a valuable and interesting paper, and gentlemen interested in the subject will do well to consult it.

The sixth paper is by Dr. S. G. Hubbard, of New Haven, and comprises "Observations, Ante-Mortem and Post-Mortem, upon the case of the late President Day." This paper contains a clear and concise description of an highly interesting and instructive case.

The Seventh paper is on the "Relation of Albuminuria to Puerperal Convulsions," by Dr. P. M. Hastings, of Hartford. This paper contains nothing new, and is mainly taken up with a report of cases, and a consideration of the treatment of puerperal enclampsia.

Dr. H. Pierpont, of New Haven, presents a paper describing a case of "Ichthyosis Sanriderma Spynosum," occurring in a girl ten years old. No new facts concerning the pathology of this rare disease are made known.

The last scientific paper in this volume is by Dr. E. F. Coates, and gives an account of an interesting case of "Traumatic Lesion of the Knee-Joint."

The remainder of the volume is taken up with biographical notices, reports of committees, proceedings, etc. J. R. W.

CORRESPONDENCE.

NEW YORK CITY, FEBRUARY 15, 1869.

DEAR JOURNAL: The annual report of the Metropolitan Board of Health, being their third report, has recently been published, and is a most interesting document. Our city has, fortunately, been visited with no epidemic diseases during the past year. The mortality among infants, however, has been exceedingly great, especially of those under one year of age. From one-fourth to one-half of the whole mortality for the year is to be found among children under one year old, and, in some parts of the city, eighty per cent. of the mortality occurs in the infant population. The city and county of New York show a total mortality for the year, of twenty-five thousand, four hundred and fifty-nine, and Brooklyn, nine thousand and fifteen deaths.

According to the Registrar, during the past forty years we have had no summer so hot, damp and unhealthful as was the last.

"A separate special history of deaths in tenement-houses is made up, week by week, in the Bureau of Vital Statistics, and the number and causes of deaths in every such house, constitute important elements in sanitary maps, which are prepared for the use of the Board and its officers, as well as for future reference and analysis. An improvement in the health and comfort of the tenement-house population, and a decrease in the rate of mortality, must continue to be the result of the constant inspection, by the officers of this board, of this class of dwellings, and of the thorough enforcement of the wise provisions of the tenement-house act."

The report, after disposing of the subject of markets, slaughter-houses, streets, returns of coroners, foundlings and nurseries, takes up the subject of public baths, which, in such a city as ours, can only be regarded as a great sanitary necessity. The experiment in other cities has been eminently successful. Public baths were first erected in Boston, in 1860, and in 1867, twelve were in operation, at which, during the summer, eight hundred and seven thousand, two hundred and one baths were given.

During the past year, over seven thousand patients were treated at Bellevue Hospital for various ailments, five thousand, eight hundred of whom were admitted to the wards of the hospital. The out-door poor department shows a large increase in the number of patients treated. Of this class of patients, ten thousand, one hundred and twelve were treated year before last, while twenty-five thousand, five hundred and fifty-seven were treated last year. This well shows the extension of the usefulness of the institution, as well as the growth of poverty. At this out-door relief department, which is intended for those whose diseases do not require the treatment afforded by a hospital, there are twenty consulting and twenty attending physicians and surgeons. "The cases treated and classified as follows: Diseases of the chest, digestive system, nervous system, urinary system, skin, eye and ear, women, children, orthopedic surgery, and general surgery. To each of these classes two physicians or surgeons are assigned. They attend at certain hours each day, and prescribe for those who may present themselves. The medicines are prepared by the apothecary of the institution, and are furnished gratuitously. Such patients as require rest and continuous attention, are transferred to the hospital of the department."

The usefulness of the Morgue is shown by the fact that one hundred and forty-nine bodies were brought there during the year, of whom seventy-eight were recognized by their friends. This year photographs will be taken of all bodies brought to the Morgue, and then, even after burial, they may be recognized by their friends, and taken possession of.

The Commissioners of Public Charities and Correction have purchased Heart's Island of the general government for seventy-five thousand dollars. It is intended to use it as a "potter's field." The buildings erected by the general government on the island, during the war, and which still remain, are said to have cost over one hundred thousand dollars.

The following figures of our great metropolis, recently published, may not be uninteresting to you of the great West:

The total number of persons united in marriage in the city in a year, is seventeen thousand; of births, thirty-one thousand; of deaths, twenty-three thousand, four hundred and forty-three; of dwelling houses, fifty-four thousand, three hundred and thirty-eight; of families, one hundred and fifty-five thousand, seven hundred and seven; there are nearly three families, on an average, to every dwelling; nearly fifteen persons to every dwelling. There are eighteen thousand, five hundred and eighty-two tenant houses, containing four hundred and eighty-six thousand persons; city taxes are twenty-four millions dollars a year; money spent in public amusements amounts to seven millions dollars a year; for the support of the public schools, three millions dollars; for police, two millions, six hundred thousand dollars. Seventeen thousand emigrants land per month at Castle Garden; there are four hundred and thirty churches, chapels and missions, with accommodations for three hundred thousand persons; the number of licensed drinking saloons is five thousand, two hundred and three. By actual count, the number of visits made to two hundred and twenty-three drinking saloons, during twenty-four hours, was found to be twenty-nine thousand, nine hundred and fifty. At this rate, the total visits made to five thousand, two hundred and three saloons amount to two hundred and fifty-three millions, seven hundred and eighty-one thousand, five hundred and twenty-eight a year. The amount of money received at the two hundred and twenty-three saloons named above, in a week, amounted to one hundred and forty-one dollars and fifty-three cents for each. At this rate, the total receipts of five thousand, two hundred and three saloons, for the year, would be thirty-eight

millions, two hundred and ninety-one thousand, seven hundred and ninety dollars and sixty-eight cents. The officers of the United States Revenue Department estimate the total amount of retail liquor sales to be sixty-eight millions dollars. The latest police reports state that there are five hundred and twenty-five houses of prostitution, ninety-nine houses of assignation, thirty-three saloons where waiter-girls attend, and two thousand and seventy public prostitutes.

Total number of arrests by the Metropolitan Police, for the year, eighty thousand, five hundred and thirty-two.

Arrests for crimes of violence, eighty thousand and sixty-two; commitments to the city prison, forty-seven thousand, six hundred and forty-six; lodgings furnished at public stations, one hundred and five thousand, four hundred and ten; lost children taken care of by the police, five thousand, nine hundred and seventy-nine.

Out-door poor relieved, twenty thousand, three hundred and ninety. In the prisons, hospitals, etc., under the care of the Commissioners of Public Charities and Correction, there were ninety thousand, eight hundred and fifteen persons relieved during the year.

A free course of lectures on Ophthalmology, is being given to physicians and medical students, on the first Saturday, and the second, third and fourth Tuesdays of each month, at 8 P. M., by Dr. John P. Garrish, at his Eye and Ear Infirmary, 65 West Thirty-fourth street, corner of Broadway. Daily clinics are also held there at 2 P. M.

Not being entirely satisfied with their present location down Broadway, in connection with the New York Hospital, the trustees of the University Medical College have been endeavoring, for some time back, to secure a proper locality in the upper part of the city for building a new medical college. They have at length succeeded in purchasing a lot opposite Bellevue Hospital, and intend erecting a fine edifice there, which will be ready to be occupied by the coming fall. This will be a fine move for the University, as it will then, on account of its proximity to Bellevue Hospital, be able to present to its students those hospital advantages that have made Bellevue Medical College so popular. The many friends of the good old university, the annals of which have been rendered ever illustrious by such names as Mott, Gross, Pattison, Dickson, Revere, Bartlett, Meredith Clymer, John T. Metcalfe and others, as teachers, and by its long array of distinguished graduates, who are each year adding new lustre to its name, will heartily rejoice at this projected change.

The *Medical Record* says: "We are pleased to learn that a strong

effort is being made to collect funds for the erection of a suitable building for the uses of the medical profession of this city. The initiative has been very properly taken by the Academy of Medicine, which has appointed a committee of ways and means, composed of its most responsible members, who have the power to solicit and collect funds, select a site, and erect the buildings suitable not only for present wants, but also the future exigencies of the profession. The immense utility of such a central organization as this must prove to be, if the design be carried out, will be acknowledged by every one interested, and can not fail to call forth a liberal pecuniary support."

A new "Medico-Forensic Society" has recently been organized in New York, the object being to render medical jurisprudence familiar to physicians and lawyers. Mock courts will be held, and cases regularly tried. Meetings are held on the first and third Wednesday evenings of each month. The following officers have been elected: John Beach, M. D., President; W. B. Putney and Wm. Gibson, Vice Presidents; W. J. Wright, M. D., Recording Secretary; C. C. Terry, M. D., Corresponing Secretary; Charles K. Briddon, Treasurer.

During last fall St. Luke's Hospital held its ninth anniversary. Last year one thousand and twenty-seven patients were treated, one hundred and seventy-two of whom were children. The deaths numbered one hundred and thirty-seven. Of these fifty were of scrofulous consumption, eleven of Bright's disease of the kidneys, and eight of cardiac disease. Other ailments caused the death of only from one to four persons each. Dr. Muhlenberg, the superintendent of the hospital, in a few remarks, said the title of St. Johnland was given to four hundred acres of land, five miles from Northport, L. I., purchased two years ago. It was independent of St. Luke's Hospital. A house had been built upon the spot by benevolent individuals, with a view of ultimately creating a home for aged and infirm men; but at present it would be devoted to children.

St. Luke's Hospital, situated on Fifty-fourth street, between Fifth and Sixth avenues, was incorporated in the year 1850, mainly through the efforts of the Rev. Dr. W. H. Muhlenberg, then pastor of the church of the Holy Communion, and at the present time pastor and superintendent of the hospital. It was not until May 13th, 1858, however, that the institution was ready for the reception of patients.

"The hospital building is placed on the northern part of a plat of two hundred feet wide, and four hundred feet long, leaving six hun-

dred feet for court yard. The principal front is on Fifty-fourth street, facing south, and extending east and west two hundred and eighty feet in length. The general plan of the edifice is an oblong parallelogram, with wings at each end, and a central chapel, flanked with towers. The elevations of the several fronts, even to the members of the cornices, are of square red brick." The wards of the hospital are one hundred and nine feet long, twenty-six feet wide, and fourteen feet high. Each bed has one thousand and ninety-two cubic feet of atmosphere. The great distinctive feature of the institution is the central chapel. This has accommodations for about four hundred persons, is eighty-four feet long, thirty-four feet wide, and forty feet high. Here religious services are regularly held.

There are four attending and consulting physicians, three attending and four consulting surgeons, a resident surgeon and physician and his assistant, an examining physician, and a pathological cabinet. The board, for those who are able to pay, is seven dollars per week for adults, and four dollars for children, for whom a special ward is appropriated. No contagious diseases are admitted. Many patients are maintained on charity beds, to endow one of which, costs three thousand dollars, or three hundred dollars annually. There are fifty-five charity beds in all. Although this hospital is under Episcopal auspices, still patients are admitted without regard to religious creed. This is truly one of our noblest charities.

Yours, very truly,

JAMES B. BURNET, M. D.

LETTER FROM DR. CATLIN.

T. PARVIN, M. D.—DEAR DOCTOR: My letter to you, published in the December number of your *Journal*, was so exclusively a statement of facts that I did not anticipate it could be disputed; I have just seen Dr. McElroy's letter, in your January number, attempting to ridicule and question my statements.

I did not attempt to give general instruction respecting the use of the hypodermic injection, or the doses of morphine to be used in different kinds of cases. I only stated a few cases and their happy results; though I remarked at the close of my letter, "It is perfectly safe when judiciously administered."

I have, as I wrote, used the hypodermic syringe, since 1860, in a great variety of cases, carrying my syringe with me as constantly as I do my lancet, and using it fifty times more frequently.

I do not remember more than one or two cases where the least unpleasant effect followed. My practice is to deal out a dose of morphine in powder, dissolve it in rain or distilled water. I often carry with me grain doses, carefully weighed, using the whole or such part as I find necessary. At other times, as in the case of vomiting in pregnancy, when I stated that *about* half a grain was used, I select the dose without weighing, but an experience of over forty years enables me to do it with great accuracy.

I purchase my morphine of Sisson & Butler, Hartford, Connecticut., some of the best druggists in the country, whose sales extend to the West as well as East. My patients were none of them opium eaters or drunkards.

In my letter of November 19, 1868, I write, page seven hundred and seventy-nine, in your *Journal:* "From that time I have treated every case in the same way, and they have been cured in ten or fifteen minutes." In my manuscript I say every *severe* case. The omission of this word I observed on first reading the printed copy, but did not think it necessary to request you to correct it in the next number. Indeed, I might have emitted the qualifying word in copying the article for the press.

The cases which I stated were all severe cases, where no judicious practitioner would have hesitated in giving, years ago, a grain of morphine, or two or three grains of opium, by the mouth.

Whatever may be said or written, the facts remain the same. My patients are relieved in ten minutes, asleep in twenty, are well the next day; suffer no inconvenience from secondary effects of morphine—(never having witnessed the slightest in cases of *cholera morbus.*)

Dr. McElroy's patient obtained partial relief in three miuntes, "but the lower extremities were still very painful. * * The sick stomach continued." "Before eight o'clock she was asleep," something less than one and a half hours after the injection, though, from the record, she was visited three days after this.

No amount of ridicule will alter the facts. They speak for themselves. With much respect, yours truly,

B. H. CATLIN, M. D.

MERIDEN, FEBRUARY 12, 1869.

EDITORIAL AND MEDICAL NEWS.

A DISTINGUISHED citizen of Indiana died at Indianapolis some two weeks since, a few hours after taking about one-half of a mixture containing eight ounces of brandy, twenty grains of quinine, and one ounce of tincture of gelseminum. The dose directed by the physician who prescribed this mixture was, a table-spoonful every two hours.

As to the condition of the party prescribed for, all our knowledge is derived—as are the statements above—from newspaper accounts of the event. According to one paper, he "had been suffering for several days from nervous prostration." According to another, "he had been ill for some weeks, and latterly had been drinking quite hard. It is stated that for four or five days he had not tasted solid food, subsisting entirely on intoxicating liquors."

We apprehend it is not assuming too much to say that this patient was laboring under *alcoholism*. Letting this be assumed, two or three questions are suggested. Was this patient in a condition to be trusted with any medicine powerful in its effects? Was he fit to be trusted by himself even? And knowing that alcoholism when fatal, generally is so from coma, asphyxia, syncope, or exhaustion, was gelseminum a suitable medicine in such a case? Here are statements of different authorities as to the action of this agent:

"From the accounts given by various authors of the effects of yellow-jasmine, it appears to be a nervous and arterial sedative, without nauseating or purgative properties, but sometimes causing diaphoresis, especially in febrile diseases. In moderate doses it produces agreeable sensations of languor, with muscular relaxation, so that the patient finds some difficulty in moving the eye-lids, and keeping the jaws closed. More largely taken, it occasions dizziness, dimness of vision, dilated pupil, general muscular debility, and universal prostration; reducing the frequency and force of the pulse, and the frequency of respiration, and producing insensibility to pain; but without stupor or delirium. After a short time, these symptoms pass off, leaving no unpleasant effects. It usually begins to act in half an hour, and ceases to act after one or two hours. It is, no doubt, capable of producing death in over doses."—*United States Dispensatory.*

*"Death has followed the employment of what was supposed the tincture of gelseminum, in a few instances, and further investigations are required to determine its probable cause, and whether this agent will produce any fatal

*Dr. John King, the author of the Dispensatory we quote, is not remarkable, as this extract shows, for the accuracy of his composition—his words indulge in a sort of promiscuous intercourse which must be annoying to any one trained up in the virtuous use of language. Observe the second sentence and tell us to what word the relative which refers; so, too, in the third sentence—the which is in trouble as to ownership—so far as grammar can guide us it refers to eyes, "and which gradually pass off in a few hours;" "fatal results in large medicinal doses" is so obviously an absurd expression that it needs no comment.

results in large medicinal doses. * * * Gelseminum is, undoubtedly, an unrivaled febrifuge, and which appears to be dependent upon its relaxing and antispasmodic properties. Whether it is a narcotic is not yet satisfactorily explained. * * * Its effects are clouded vision, double-sightedness, or even complete prostration, and inability to open the eyes, and which gradually pass off in a few hours, leaving the patient refreshed and completely restored. * * * If carried to such an extent that the patient can not open his eyes, the relaxation may be too great for the system to recover from, hence its use should cease as soon as the symptoms above named have been produced.

"The tincture is the form in which it is employed. The dose is from ten to fifty drops in a wine glass half full of water, to be repeated every two hours."—*American Dispensatory.*

"Possessed of narcotic properties to a very considerable degree," * * many employ the tincture of the root in fevers. It acts in a similar manner to digitalis and *V. viride*, with the addition of some narcotic property. It has to be used with caution on these accounts, and because it induces delirium in overdose."—*Resources of the Southern Fields and Forests, by Dr. Francis Peyre Porcher.*

However, without discussing these interrogatories, because there are details in reference to the death—how soon it occurred, what symptoms marked its approach, *et cetera*—and facts which a *post-mortem* examination that ought to have been made in the interests of medicine at least, would have discovered, which are wanting to us, we wish to make this positive and general assertion, that the administration of alcohol to a patient suffering with *alcoholism*, is wrong, both on scientific and moral grounds; and this position is taken without special reference to the case above mentioned. We imagine that hemlock is not often given for paraplegia, strychnia for tetanus, or ergot for excessive uterine contraction; and if alcoholic stimulants have been resorted to frequently in the treatment of the disease in question, it has been from erroneous views of its pathology, and probably the practice has been as successful in furnishing victims for the undertaker as has that which administered opium *larga manu* in the same disorder—each plan is fraught with incalculable mischief. We often think of the anecdote told by Dr. Theophilus Thomson, we believe, of an old lady upwards of eighty, who was suffering with fatal disease, and for the prolongation of whose life the doctor was urging the free administration of alcoholic stimulants, when she uttered the urgent request, "*Doctor, let me go home sober.*" And should we not permit our patients, when they must die, to go home sober—not drugged to utter stupor with opium, nor drunk with alcohol?

As to the pathology of *alcoholism*, some of us who are not very old can remember when we were taught that the disease arose from the withdrawal of an accustomed stimulant; but this teaching, with the

pernicious practice which was its natural sequence, has been exploded by the advance of modern science. Here is what we are taught by some of the best and most recent authorities:

"The essential nature of *delirium tremens* is associated with the loss of cerebral power, evinced especially in the want of control over thoughts, emotions, and muscular action, consequent on the direct influence of the alcoholic poison."—*Aitken, vol.* 1, *p.* 776.

"The pathology of alcoholism naturally divides itself into three portions. The morbid influence which the poison exerts is of three kinds. In the first place, it acts as a local irritant (when highly concentrated) upon the mucous membrane of the stomach, and of the alimentary canal generally; and in the second place, after absorption, it affects the rate of movement and the vitality of the blood, and as a consequence of this impairs the nutrition of every organ in the body. And, thirdly, it is clear that the nervous centres, independently of the ill effects on their nutrition of the blood-changes, have a certain chemical attraction for alcohol, which accordingly is found to accumulate in their tissues. * * The successful treatment of *delirium tremens*, in nine cases out of ten, depends on the regular and continuous supply of suitable nutriment, whereby the functions of the nervous system are supported during the struggle towards recovery."—*Reynolds' System of Medicine, vol.* ii.

"*Delirium tremens* is but the acute form of chronic alcoholism." * *

"Science has determined that the administration of stimulants and alcoholic drinks in this disease, is at once irrational and experimentally dangerous."—*Nouveau Dictionnaire de Medecine et de Chirurgie Pratiques, Tome premier. Alcoolisme.*

"The view of its pathology now prevalent is, that alcohol, a poison dangerous to life in large doses, is also cumulative taken habitually in small quantities. * * Formerly the treatment used to consist of supplying the usual stimulus; but, theoretically, it is clear that this is tantamount to adding coals to fire, and, practically, it has been shown that patients more rapidly recover under the use of nutriment."—*The Principles and Practice of Medicine, Prof. J. Hughes Bennett, M. D.*

We think the authorities adduced are ample to establish the general principle that alchehol is not a suitable agent to administer in alcoholism.

There are certain moral considerations which should enter into the discussion of this question, but which we have not space now to consider. If the poor wretches who have been narcotized with opium, alcoholized or chloroformed, because they had *delirium tremens*, were faithfully enumerated, we believe it could be shown that vastly more were killed than cured by such irrational treatment.

THE COMMENCEMENT exercises of the Medical College of Ohio will be held in the lower lecture room of the college building on Monday, the 1st of March, at eleven A. M., the valedictory to be delivered by Prof. James Graham, M. D., the degrees being conferred and an address delivered on behalf of the Board of Trustees, by Judge Dick-

son. The number of graduates will be between sixty and seventy. Next month the *Journal* will contain the list of questions asked the candidates for graduation—it will be remembered that this Institution has for some years pursued the plan of *written* instead of *oral* examinations—and also, we hope, Prof. Graham's address.

ARRANGEMENTS are being made, and will be completed in time to be announced in our April issue, for conveyance on some first class Mississippi steamer of those desiring to attend the meeting in New Orleans next May, of the American Medical Association. At present we can only announce that the *time* from Cairo to New Orleans will not exceed four days, and the *fare*, going and returning included, will not be more than thirty-five dollars. Our friend, Dr. Hibberd, has the matter in charge, and it could not be in better hands.

THE LATE Dr. Addison, (*A Collection of the Published Writings of the late Thos. Addison, M. D.*, Physician to Guy's Hospital, Sydenham Society's Publications, London, 1868), concluded an article *on the Diseases of Females connected with Uterine Irritation*, thus:

"But, gentlemen, if you really require an apology for detaining you so long, I find ample material for that apology in the lively interest which we must all feel in the comfort and happiness of the other sex, doomed as they are, both by the decrees of Providence and by human institutions, to drink deep of the bitter cup of suffering. Whatever may be *her* lot in this world, we, as men, must at least acknowledge that whilst Infinite power gave us being, Infinite mercy gave us woman."

This extract from a paper—(it was originally prepared as a clinical lecture—a paper that will especially delight the venerable Dr. Hodge, for so much of it is in correspondence with what he has taught in his own lectures and writings), we give partly as an answer to a criticism which was made by a most competent critic upon some of our own expressions as to the special interest and importance of the study of diseases of women.

THE BRITISH AND FOREIGN *Medico-Chirurgical Review*, January, 1869, is not at all complimentary in its notice of *Thomas on Diseases of Females:*

"Thomas' work on the diseases of women is simply a compilation. The surgery, illustrations as well as matter for the text, taken from Sims, the medicine and pathology from various well-known authors. Like all books of the kind, its real practical use is limited to giving the student some superficial information, acting as a kind of hand-post pointing out the direction which must be taken to arrive at real knowledge."

Now this is unjust. Dr. Thomas has written on many surgical diseases of women upon which Dr. Sims has never written a line, nor are his medicine and pathology exclusively derived from various well-known authors, and we must regard the book as an excellent compend, and, in some respects, in advance of any similar work from an American pen.

EXSECTION OF THE KNEE-JOINT, IN 1825.—(In the *Lancet*, January 8th, 1825, there is quite a racy sketch of the late Mr. Crampton given, and in the course of it the author refers in the severest terms to an operation performed by Mr. C., which is now established as perfectly judicious.)

He invariably performs the numerous experiments that are daily put forward in the world for well-known purposes, but which are very often nurtured in ignorance and propagated by credulity. While we profess ourselves the ardent admirers of rational experiment, we shall never countenance, by a concealment of our feelings, an innovation which would give one moment's pain to a fellow creature, without a well-grounded prospect of ameliorating his condition.

We happened to be present, some time back, at one of those scenes of scientific butchery at the Meath Hospital. The patient was a female; the complaint, if we recollect rightly, open scrofula of the knee-joint. A great concourse assembled to witness the operation: it was quite a *gala* day with the dissectors—a festival, seemingly, held in honor of the virtues of "*Steel.*" It was the first time, we believe, that the removal of the knee-joint was attempted here; we earnestly hope it will be the last. The operator, of course, accomplished his purpose with his usual dexterity. But could he have beheld, as we did, the contorted countenances of the spectators, the knife would have fallen from his hand, never to be resumed where it was not more imperiously indicated. To be present was indeed to be in torture. One man vented his feelings in a *wink;* a second in a *hem;* a third overcame his sympathies in a forced fit of laughter; a fourth put his fingers in his ears to shut out the wretch's screams; all, to be sure, admired, yet all disapproved; and before the performance was entirely finished, Colles cried out, in rather an audible tone, *"by J——s!"—drew the door after him, and vanished. We saw this poor creature a long time after, endeavoring to drag her limb with her, by means of sundry *wooden* contrivances. How much more preferable would amputation have been in this case? A wooden leg to a useless member, kept from falling asunder by bandages and splints. And, forsooth, this is called cleverness! admirable surgery! Very well, let it be called by whatever name the sanguinary desperadoes of the profession choose, but we shall never be cheated out of our judgment, or fear to expose such practice when it falls under our observation.

*Colles was as famous for this oath as a late President of the United States for "*By the Eternal,*" or as a noted New York obstetrician is for "*By Jove.*"

IT PAINS US to announce the death of Dr. William Hays, of Covington, Kentucky. Dr. H. had been a contributor to this journal, and he was one of its warm friends. Only a short time before his untimely death, we received a most kind and encouraging letter from him. Personal acquaintance with him, though not intimate, led us to appreciate him highly. We regret that the action of the Covington profession, in reference to their late associate, which ought to have been received ere this, has, so far, failed to reach us; we hope, however, it will appear in our next issue.

THE NEW YORK *Medical Gazette*, after being in a state of suspended animation for several weeks, makes its appearance again, and is sprightly and vigorous as ever. We hope it will meet with liberal patronage.

BARON ANSELM DE ROTHSCHILD has given the sum of two hundred thousand florins for the erection of an hospital for Jews, to contain one hundred beds, in Vienna.

MORTALITY FROM SNAKE BITES IN INDIA.—It appears from the Oude Administration Report, that during the past year, one thousand, one hundred and twenty-seven persons died from the effects of snake bites in that province; and from the Central Provinces Administration Report, that one thousand, eight hundred and seventy-four deaths had occurred in them from the same cause, during the three preceding years.

THE *Neue Presse* states that eleven men and three women died in Ickutsk, in 1867, all of whom were over one hundred years old; of these, six are said to have been over one hundred and ten, one being one hundred and twenty-six, and another one hundred and thirty-one years of age.

IN REFERENCE to the failure of the attack lately made on the faculty of Paris, by the Bishops, Ricord is said to have remarked that it was an evidence of *mitral insufficiency*.

WANTED—A few copies of the *Cincinnati Journal of Medicine*, for February, 1866, and of the *Western Journal* for April, 1868.

FOR SALE.—An order for an artificial limb.

WE CALL attention to the advertisement of *Practice for Sale*—an excellent opportunity for a physician with a little capital and some experience.

THE WESTERN JOURNAL OF MEDICINE,

(*Formerly*, "CINCINNATI JOURNAL OF MEDICINE.")

Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

VOL. IV. INDIANAPOLIS, APRIL, 1869. No. IV.

ADDRESS BY THE HON. WM. M. DICKSON, AT THE ANNUAL COMMENCEMENT OF THE MEDICAL COLLEGE OF OHIO, MARCH 1, 1869.

GENTLEMEN: It has been customary upon these occasions, for the President of the Board of Trustees to address a few words of congratulation and advice to the graduating class. Perhaps it is a custom that were better broken than observed; yet homilies and platitudes have their uses, and a kind word from your *Alma Mater* may make your separation the more agreeable.

The profession you have chosen opens to you a wide field of usefulness. More than either of the others, is it allied to, and connected with that which particularly marks the age in which we live.

The law can not, in our time, claim any particular preëminence over the past. It is a question whether we have made any real progress—whether, indeed, our law, as a system of remedial jurisprudence and a rule of property, equals that of the old Roman law. Nor in the domain of theology, have we any to equal the great names of the past. Even in metaphysics, modern speculations it is said are but chips knocked off the original granite rock of Plato.

In the department, however, of experimental science, our age is specially distinguished. In this, the ancients made comparatively little progress. Cicero writes that "the investigation of nature either

seeks after things which nobody can know, or after such things as nobody needs to know."

Now, to this department of knowledge, your profession is closely related. To it mainly, in certain branches, must our country look for the maintenance of its rank among the nations, in the generous rivalry of the developments of science. For example: Your profession involves a knowledge of chemistry and its kindred subjects, electricity, magnetism, &c. These introduce you to investigations, in which the greatest results have been reached, and the end is yet afar off. Almost while we are speaking, in the wonderful revelations of the spectroscope, we have a striking illustration of the kinship and inter-dependence of the sciences. With the vapors of chemistry and the spectrum of optics are revealed the constituent elements of the heavenly bodies; and thus the boundaries of astronomical science are enlarged. Nor have these discoveries been a thing of chance, but the result of intelligent, well directed effort.

By a happy coincidence, the investigations of the Frenchman, Janssen, made in India, and those of the Englishman, Lockyer, made in England, were crowned with success at about the same time, each independently making the same discovery—the nature of the red flames of the solar eclipse. Nor did the coincidence stop here. M. De La-Rue had scarcely finished the announcement of Lockyer's discovery to the French Academy, when French patriotism was gratified by the reception of Janssen's letter announcing his own independent discovery of the same thing.

To come more closely to your own profession. A French chemist discovers chloroform, and the inquiring genius of a Scotch physician utilizes it in the discovery of its anæsthetic properties. Thus one discovery prepares the way and leads to another. This fact is also illustrated in the progressive discoveries in electricity and magnetism, utilized in the invention of the telegraph.

Again. Your profession requires a knowledge of anatomy, physiology and zoology. These bring you into close connection with the inquiries now pressed with unwonted zeal and almost startling results in the departments of comparative anatomy, pre-historic archæology, biology, involving the questions of "the origin of species," and "man's place in nature." These inquiries relate to the most hidden things in nature, yet of surpassing interest. For "to search out the whence and whither of existence, is an unquenchable instinct of the human mind." But I will not detain you longer on these matters.

Enough, perhaps more than enough, has been given to show you the intimate connection between your profession and the experimental sciences, the study of it leading to a knowledge of these, even when apparently far removed from it. Indeed, growth in medicine is, in great measure, dependent upon the growth of these sciences. There is not a discovery in chemistry, optics, electricity, magnetism, &c., that does not minister immediately or mediately to medicine. Science, the production of reason, is the natural enemy of charlatanry as well as superstition. With its advancement these must disappear. Beneath its white and gladsome light, they, twin offspring of ignorance, can not live. Medicine itself is a science, founded, like the other physical sciences, upon observation and induction. It is as erroneous as it is degrading to it, to suppose that it is a mere collection of nostrums or specifics, to be learned by rote by the student.

Nor is it to be narrowed down and circumscribed by any exclusive dogma. Water-cure, botanic remedies, infinitesimal doses, any special system, neither separately nor collectively constitute the philosophy or the entire remedial agencies of medicine. It is no Procrustean bed for the diversified forms of humanity and of human ailment. It is catholic in its nature, seeking knowledge wherever it may be obtained, and subjecting all science to its demands. It is the science of human nature, having for its end the "prevention of disease, the cure of disease and the improvement of the condition of man."

You will readily understand that mastery in it can only be reached through years of patient, devoted effort, guided by the spirit of scientific inquiry. Yet it invites to no unrequited toil; the rewards of science are among the greatest that wait upon human endeavor. I know under our democratic polity we are all necessarily more or less politicians; and hence, political success has had an undue preëminence. Yet who would prefer the pomp and circumstance of great office, to the pleasure and the fame of the student of the closet whose years of patient toil have at last been rewarded by the discovery of some great law of nature, or by an invention utilizing these laws to the benefit of mankind?

The Greek word *eureka* is domesticated in every language, because it is inseparably connected with an incident that touches the heart. Who does not sympathize with the philosopher of Syracuse, upon the solution of his problem, rushing from his bath crying, "*Eureka! eureka!*" "I have found it! I have found it!" Who does not sympathize with our own Franklin, when, having brought down the lightning from heaven,

thus establishing its identity with electricity, he tells us that he then felt that he was ready to die?

Agassiz has said that the name of our late lamented townsman, Prof. Mitchell, would live longer than that of the most distinguished politician—referring to his invention for sidereal observation.

Still, the universal stimulus with expectant parents is, "My son, you may be President," as if that were the acme of all greatness.

Yet, how many Presidents have left office with a reputation that any one would envy? And as to fame, with the flow of time and the brevity of their terms, the historian will soon cease to mark the order of events by a reference to their names. These will pass into tabular lists, and like the tables of Rome, sink into the forgotten rubbish of the past. A few, from their connection with great events, will escape this fate. But the names of science, associated with the discoveries and inventions, marking the developments of knowledge, will be as enduring as knowledge itself. When the blood ceases to circulate, and the hideous variola is no more, and pain shall have ended, the names of Harvey, Jenner, Morton and Simpson may pass from memory.

These are the benefactors of man. No fields of mangled victims, no ruined country, no mourning friends, no stricken revengeful foe attend the conquests of science. Nature joyously yields her treasures as the refreshing fountain flowed from the smitten rock.

I would not depreciate political eminence, but I feel that the disposition to seek office is wasting in our country talent and genius that might in the departments of science, be an ornament to our race. So that he is a public benefactor who leads one ingenuous, inquiring youth from the slough of office-seeking to science.

I would that you should devote yourselves to the noble profession you have chosen, with all its great opportunities for usefulness and fame. You are quite aware that the diplomas you have this day received, are not testimonials that you have finished your education. Indeed, they but indicate that you are now fairly prepared to begin your professional studies; and if you have learned how to study your profession, you have done well, and your teachers also.

It is not a difficult thing to commit to memory the teachings of a text book. But this alone is not sufficient. We must bring to the study of any subject we would master, a spirit of scepticism and criticism. Prove all things, hold fast that which is true. We are apt to take as truth that which our text books and teachers tell us, and quite

likely they are right; but knowledge obtained in this way does not become our own; it sits uneasily, as a garment made for another.

It only becomes our own when we have gone through for ourselves the process by which the original investigator reached his results, and have supplemented this by such independent modes of investigation and reflection as may occur to us. This manner of study, uniting with reading, well directed observation and reflection, gives knowledge and discipline of mind, securing soundness of judgment. These lead to wisdom, the true end of all education.

A credulous person of retentive memory and industrious habits, may fill his mind as a store-house, with facts, yet, without his own reflection there is no wisdom. There are men of much learning and little wisdom; and there are men of much wisdom, yet with little learning.

And this is well understood. We have in public life men of great and varied erudition, who pour it forth on every occasion in copious streams. People are startled and wonder, but in hours of trial, they do not look to them for guidance. They instinctively feel that wisdom is not here. There is a maxim, "beware of the man with one book"—that is, much reflection with little reading is better than much reading without reflection.

Do not mistake me, I am not underrating the importance of learning; but I would increase its value by adding that reflection and study which may make it our own.

While the investigator of science should doubt and criticise, let him not carry this unnecessarily into the domain of theology. There are men of science, of merit, who are continually contrasting their discoveries with the teachings of revelation. These commit the same error which theology did when the church invaded the province of science and commanded the earth to cease it revolution around the sun. "It moves, notwithstanding," said Gallieo.

Dr. Hooker advises: "Let each pursue the search for truth—the archæologist into the physical, the religious teacher into the spiritual history and condition of mankind." Enlarging upon this, I may add, let the scientific inquirer pursue his investigations after the methods of science, let the theologian pursue his studies in his own way. Each may be equal to his own, but not to both departments. There need be no apprehension of conflict if each reaches truth, for there is no discordance in the work of the Author of all harmony.

It may be inferred from what has been said, that while you should

endeavor to have a general, and, as far as may be, an accurate knowledge of all the branches of your profession—yet that you are more likely to reach high excellence if you make some particular branch, to the investigation of which your tastes, aptitudes and opportunities lead, the subject of your special inquiry. It is in this way that men of the old world study, and hence their great attainments. We, led by the multitude of matters, which, in a new country, demand our attention, spread ourselves over too much surface and dissipate our energies. Life is too short to permit any one, however great his capacity, to attain to a complete mastery of all science; yet, every one that pretends to scholarship, owes it to himself and to his fellow-man to so master some one branch of knowledge that he will be upon it an acknowledged authority. If each who can, does this, selecting different branches in the aggregate, the public will have the advantage of ripe scholarship in all the departments of knowledge.

You will observe, gentlemen, that I have not referred specially to the practice of your profession. It is not because I do not feel the exceeding importance of this branch of your duties. It is owing partly to the fact that on this you have already had the better instruction of your teachers; partly to the fact that whatever is likely to promote the money-making part of your profession will not be overlooked; but mainly because I would fain stimulate in you the desire to elevate and advance your noble calling. I would that you should look upon it as something higher than a mere money-getting art. Yet, even in this narrow view, a thorough knowledge of the principles of medicine will not hurt you. For I take it, notwithstanding the depressing example of successful charlatanism, that, other things being equal, your capacity and success will depend upon the mastery you obtain over the science of medicine.

It is true that there have been instances in your profession, of high scientific capacity not coupled with practical skill; yet this has been owing, perhaps, to the fact that the practice was neglected, or perhaps to some peculiarity of mind or temperament unfitting for practice. But there are many noble examples of high scientific capacity united with the highest practical skill.

You will pardon me if I shall name a living one. Dr. Simpson, of Edinburgh, is perhaps at the head of his profession in his country, having an unequaled practice: yet he has illustrated the annals of medicine with many happy inventions and important discoveries; and perhaps there is scarcely a number of the leading medical journals in

the United Kingdom which has not a contribution from his unwearied and productive pen. I mention him the more readily because there is that in his career which appeals peculiarly to American youth.

There is not a young man before me who commences his professional life under difficulties greater than those which surrounded Prof. Simpson in his youth. Living in a country where the classification of society opposes serious barriers to the advancement of the young man without family or fortune, he yet, beginning life the son of a baker, by his indomitable energy and perseverance, has risen to his present high position.

Gentlemen, your *Alma Mater* and your country expect much from you. May they never be disappointed. Let it be your worthy ambition to be masters in the science of medicine; so study it as to make it your own. Select some branch suited to your tastes and opportunities, and make this the object of your special, life-long investigation; and then, with the blessing of heaven, your name, may yet be written among those who have advanced the boundaries of knowledge.

CASE OF DIPHTHERITIC CROUP—OPERATION—DEATH.

BY DR. J. C. REEVE, DAYTON, OHIO.

January 29th, 1869, was called to see a boy aged seven years, under the care of Dr. Searles, of Osborn, with whom had been associated Dr. Green of Fairfield. For about a week before, the patient had been suffering under the symptoms of an ordinary cold; only on the second day preceding had he became severely ill, and only since the day before had his breathing been seriously affected. I learned that on the day previous he had passed part of the time looking at his book, nothing apparently the matter with him, except what was betrayed by cough, breathing and voice. He had been rapidly getting worse, however; during the night he had three suffocative attacks, so severe that his friends did not think he could survive another. I found him to be an extremely healthy looking child, of a very healthy family, but now presenting all the symptoms of suffocation from laryngeal obstruction; his cough suppressed, voice whispering, chest walls working violently with the efforts to respire, face and hands livid, pulse frequent and tolerably feeble. Upon the tonsils and larynx were scattered

patches of false membrane; they were not extensive or thick, but sufficient to characterize the case as one of diphtheria. In the opinion of the gentlemen in attendance, he had pneumonia, or broncho-pneumonia of the left lung; but the noise of respiration in the trachea so interfered with an examination that I could not distinguish it. I satisfied myself there was no hepatization. The treatment need not be detailed; he had frequently inhaled the vapor of slacking lime.

As soon as preparations could be made, and the parents had, after candid statement of the risks and probabilities of the operation, consented, I proceeded to perform tracheotomy. He was slowly and carefully brought under the influence of chloroform, which somewhat deepened the lividity of his countenance, but did not affect the pulse. Hæmorrhage was abundant, and so obscured the parts that the trachea was opened with great difficulty. Some delay was also occasioned by one branch of the dilating forceps not being in the trachea, but between the muscles. During this time only partial relief was afforded by the artificial opening. Some blood found its way into the air-passages, and the appearance of the patient was very critical. The instrument being adjusted, however, the intruding blood was expelled, the patient rallied and soon began to mend. Having to send home for a tracheotomy tube, the forceps were allowed to remain in place, the handles being tied together and fixed down to the sternum by adhesive plaster. The opening was free, and respiration through it perfect, so that when the tube arrived I decided not to introduce it, but to allow the forceps to remain; especially as I believed the tube to be too small for a patient of his age. In half an hour after the operation, the patient was asleep, breathing easily and regularly, color good, and pulse, by the testimony of all, better than before. Arrangements were made to fill the air of the room with steam. He was ordered milk for nourishment, and ice was allowed freely. At three o'clock P. M. I left on the train for home six hours after the operation, he was still doing well, so well that I felt strong hopes of his recovery; but was bitterly disappointed the next morning to learn that he died fifteen hours after I left and twenty-one after the operation.

As to the cause of death I can not be sure; he seems to have begun to fail about one o'clock in the morning. In the opinion of Dr. Green, the membrane had extended to the trachea, and by its dislodgment suddenly interfered with respiration and caused death. The manner of his death corresponds with this view; but the relative part played

by the diphtheria or the pneumonia, in producing the fatal result, is not clear.

REMARKS.—This case demands publication, if only for the rarity of the operation in this section of the country. So far as I can learn, tracheotomy for disease, has been performed in this city or vicinity in but one other case within fifteen years. In that case the patient died under the operation. I have also known of but one or two other cases where the operation would probably have been beneficial.

As to the case being one in which the operation was justifiable and presented a fair prospect of success, there is not a question in my mind, nor is there with the other gentlemen in attendance. His age, and his unimpaired powers from the short duration of the disease, were strong arguments in favor of it. It was impossible, of course, to decide how much the depression of the pulse depended upon the asphyxia or upon other conditions; but it certainly, in any case, was no contra-indication to an operation. Looking very carefully at the symptoms in every respect, and at his condition, the conviction was forced upon me that it was a fair case for tracheotomy, that he would certainly die without it, and that it was my duty to perform it.

By some it may, perhaps, be maintained that because it was *diphtheria* an operation should not have been performed; that in *croup* it may be resorted to, but that in a disease which is constitutional, the operation does not promise enough to justify it. Upon this point, the first necessary step would be to reconcile authorities and teachers as to the identity or non-identity of the two diseases. The membranes in both diseases are anatomically alike, and very high and very respectable authority can be cited in favor of the view that they are essentially the same disease. This doctrine is maintained by Hillier in his recent work on the Diseases of Children.*

Trousseau, while he admits that croup, as we understand the term—what he calls *croup d'emblee*—may occur, yet says that in the great majority of cases the membranous formation begins in the pharynx and extends from there to the larynx. Bretonneau held this doctrine, and Guersant adopted it after having held the other and more generally received view of the British school.

But whether the pathological unity of these diseases be established, admitted or denied, there should be practically no question in reference to an operation. Whenever the danger depends more upon the local than the general disease, the operation should be performed. The

*American Edition, page 141, and *American Journal Medical Sciences*, January, 1869.

case is well stated by Trousseau, an authority upon everything relating to the subject second to no other in the world, and I translate what he he says in regard to the probability of success of the operation:*

"It has a chance of success *when the local lesion, when the croup, constitutes the principal danger to the patient.*

"This restriction is important; for if the diphtheritic infection has profoundly affected the economy; if the skin, the nasal fossæ are attacked by the pecial inflammation; if the frequency of the pulse, the delirium, the prostration indicate a profound intoxication; if, in a word, you have a case of malignant diphtheria, where the peril is rather in the general condition than in the local lesion of the larynx or the trachea, *the operation should not be attempted*—it is invariably followed by death."

Thus, in contrast to the case under consideration, was one of about the same age treated this winter. Thick diphtheritic patches on the throat, were followed by well-marked symptoms of their extension to the larynx; but the general state of the patient was such that the question of an operation was not entertained for a moment; she was pale and strikingly anæmic, her pulse like a mere thread, and extreme depression marked upon every feature. She recovered, however, and is the only case I ever saw recover of laryngeal affection in diphtheria. The treatment was with tr. ferri mur., chlorate of potash, quinia and alcoholic stimulants with inhalation of the steam of slacking lime, and lime water and solution of tannin, alternately in vapor from the steam atomiser.

In giving authorities in favor of tracheotomy in diphtheritic laryngitis, I must not omit Dr. Jacobi of New York. In a recent article upon croup, which, in my humble opinion, is one of the best contributions ever made to the medical journal literature of this country, he acknowledges no contra-indication to the operation, if the patient be suffocating:†

"Now, while I admit that with symptoms of general diphtheria, complicating a case of laryngeal diphtheritis, called membranous croup, the prognosis of the operation becomes more doubtful, I lay stress on the very same fact, for the reason that even in such cases, the only indication for the operation rests in the local obstruction."

The same doctrine is taught by Guersant‡—marked evidence of general infection of the system lessens the chance of success.

"If there are false membranes in the nares, behind the ears where ulcerations

Clinique Medicale, tome I, page 451.

†*American Journal of Obstetrics*, May, 1868.

‡*Notices Sur la Chirurgie des Enfants*, Paris, 1864.

often exist; if the sub-maxillary ganglia are enlarged, and if the urine is albuminous, the operator should know that there is very little or no hope of success."

A debilitating course of treatment—"low diet, antimonials, leeches and blisters"—lessen the chances of the operation; but extension of the false membranes to the bronchiæ, are not for him, a contra-indication:

"We have seen patients spontaneously expel false membranes representing the cavity of the trachea and bronchial tubes, and recover without an operation, and others who have also thrown them up after tracheotomy, and also recover."

In a discussion of the operation by the Medical Faculty of the Hospitals of Paris,* M. Archambault recognised the existence of broncho-pneumonia as a complication exercising great influence upon the result of the operation. His remarks are of interest in reference to the case under our care:

"M. Archambault insisted upon broncho-pneumonia being among the gravest complications and one almost surely fatal if existing at the time of the operation or shortly afterwards. It is, he added, extremely difficult to recognize the physical signs during the asphyxial period of croup; it can be rather judged to be present, than diagnosticated, by the frequency of the pulse and respiratory movements, (140 and 40), while in cases where there is only croupal asphyxia, the frequency of pulse and respiration are much less."

Having begun with the simple intention of reporting a case, we have extended our remarks, perhaps, already too far, and will not, therefore, enter upon any statistical evidence to sustain the operation of tracheotomy in diphtheria. It might be doing good service to adduce it. True membranous croup occurs in this section so rarely, diphtheria with laryngeal affection and without too severe general symptoms for the operation, is but occasional anywhere, the situation is so painful for parents and trying for the medical man, that it would be well to have at hand the fair support which statistics will give to the measure. We must defer this task, however, to another time, and content ourselves with quoting here the noble words of Barthez:†

"If children, the subjects of bad croup, having reached the stage of confirmed asphyxia, and having no longer anything to expect of medicine, offer to the surgeon the chance of one recovery in ten, in twenty, or even less, I for one, have not the courage to refuse them."

Hillier, in his recent work on diseases of children, teaches the doctrine of operation whenever death is threatened from laryngeal obstruction.

*Archives Generales de Medecin, Juillet, 1868.

†Medical Times and Gazette, August 8, 1868.

We may all of us at least expect as good success as Nelaton; he saved his first case and then operated twenty-three times without a recovery!* The particulars of the cases are not given; but it is to be presumed that the French rule was followed, of operating under any and all circumstances.

Finally, in considering the propriety of an operation, the relief to suffering given by it should have due weight. This was answered in the case reported. It is a strong point, for of all the painful scenes a medical man is called upon to witness, few are more distressing than that of a strong and vigorous child suffocating from laryngeal obstruction. If only a quiet and peaceful death be attained by the operation, that can not be considered a trifling gain.

CORRELATION OF THE PHYSICAL AND VITAL FORCES.

BY JAS. F. HIBBERD, M. D., RICHMOND, IND.

On the 12th of October, 1868, the winter course of lectures in the Jefferson Medical College of Philadelphia, was opened by an inaugural address by J. Aitken Meigs, M. D., recently appointed to the chair of Institutes of Medicine and Medical Jurisprudence in that honored seat of learning.

Prof. Meigs takes for the theme of his address, the Correlation of the Physical and Vital forces, and after a somewhat elaborate review of the progress of science in this regard during the last one hundred years, apparently arrives at the conclusion that at the present day there is no man of eminence or ability who is not a convert to the doctrine of the correlation of physical and vital force. Possibly this was not the author's intention; but the reader is certainly led to this view of his labor. One would hope that the erudite and accomplished professor is not going to make of himself an addition to that not inconsiderable class of teachers in medicine, who having adopted a theory, bring forward abundantly of authority facts and arguments to sustain their views, without intimating that the opposite opinion has earnest and honest advocates to support it.

The status of scientific opinion in relation to vital force in the last half of the eighteenth century, is fixed by Prof. M., by citing the

*Clinical Lectures on Surgery, Philadelphia, 1855, page 54.

ideas promulgated at that time by John Hunter, in England, Humboldt, in Germany, and Bichat, in France, all of whom were earnest advocates of the doctrine that vital force is something *sui generis*, a special endowment of living things. He refers to many other eminent men, active and of authority, in the earlier part of the present century, who held the same views strongly, one of them declaring that in the whole range of medical literature there is not a single author of note who does not admit the existence of "a governing vital principle as a distinct entity, distinct from all other things in nature."

He then alludes to the work of Dr. S. L. Metcalfe, of Philadelphia, on "*Caloric*," published in 1843, as being the first complete treatise that clearly set out and maintained the doctrine of the unity of all force; vital phenomena being the product of one of its correlated phases.

Dr. Metcalfe's book did not meet with much recognition as an exponent of the truth of science. Indeed, Dr. Richardson spoke of the author as an "immortal heretic in science," and Dr. Carpenter characterized him as "an enthusiast and system maker, and declared that his views were very unphilosophical." Now, however, these two eminent London physiologists are among the most earnest advocates of the doctrine which they almost ridiculed a quarter of a century ago.

Prof. Meigs recounts the labors and recites the opinions of a host of the leading medical men of to-day, who in various ways illustrate the correctness of the idea of a unity of force. After informing us that recently "Wurtz announced that he had effected the synthesis of neurine; while Kolbe, at a late meeting of the chemical society, stated that he had obtained urea from carbonate of ammonia," Prof. M. continues: "It is highly probable, indeed, that the time will come when all the products of living organisms will be created or closely imitated by the chemist. The complete realization of this probability will shortly tend to deprive nutrition or assimilation of its mysterious vitalistic character, and bring it, in common with other organic or vegetable functions, within the pale of physico-chemical actions." He then quotes from Dr. Gull, the great practical physician of London, and a profound thinker, this sentence: "Daily advances in science make it more and more probable that organized beings are the necessary development of the physical condition of our globe." Other distinguished scientists are cited to the same general tenor.

The microscope, by its revelations, has revolutionized many of the histological notions that were very confidently taught thirty years ago.

The most important point, for our present purpose, that it has revealed, is the fact, now accorded such by all classes of biologists, that the cell is the unit of vital activity in all organic existences. The theory of cyto-genesis, in the animal kingdom, is in its infancy yet; but it is a vigorous and a popular infant, recognized by all wise men as the coming giant in biological science, its growth assured and its development rapidly promoted, by the fostering attention of such untiring and zealous scientific wet-nurses as "Remak, Virchow, Weber, Redfern, His, Bottcher, Billroth, Paget, Beale, Max Schultze, Robin and many others."

According to Prof. Meigs, the physico-vital correlation of force is as much an established fact as the cyto-genesis of tissues, and as fully accepted by biologists. He calls it he "highway of research leading to the true theory of life," and tells us that among the great men who are radiating this highway with their intellectual light, are to be found Vanuxem, Metcalfe, Grove, Carpenter, Faraday, Mayer, Radcliffe, Hinton, Lecomte, Vierordt, Donders, Fick and Wislicenus, Ranke, Tyndall, Frankland, Lawes and Gilbert, Parkes, Odling, the Rev. Dr. Haughton, Bence Jones, &c.

The careful reader will notice that this last catalogue of names, long as it is, omits all mention of one of the most industrious, painstaking, and candid microscopists in the world, an English biologist whose enviable reputation extends throughout the borders of civilization, a penetrating observer and a profound reasoner, who quarrels with no one, but gives the results of his labors with a clearness and perspicacity that others might follow with advantage; we mean Dr. Lionel S. Beale, of London.

Beale, in his work "on the structure and growth of tissues, and on life," devotes the last chapter to a consideration of Life in the light of the histological facts presented in the preceding part of the book. He had already shown that the cell consists essentially of two parts, the "*germinal matter*" and the "*formed material;*" of these, the latter exists exteriorly and the former centrally. The pabulum for the nutrition of the cell is received into the center of the germinal matter, and there begins its outward course, and as it progresses, undergoing the metamorphsis into the living structure of the cell, so that by the time it has reached the limit of the germinal matter it has become formed material, and is no longer subject to vital processes carried on in the cell. Now, according to Beale, when this unorganized pabulum reaches the center of the germinal matter and begins its out-

ward progress, its transformation is accomplished by a force having no unison with any conceivable plan of physical force; but on the contrary, it is acting in direct antagonism to all recognized laws of that force.

There is nothing in Ascherson's observations of the oil globules taking a coating of albumen—nothing in the "progressive physical changes which take place in the chyle as it passes onwards through the lacteals into the thoracic duct"—nothing in Prof. Bennett's lecture on the "Origin of Infusoria," that satisfactorily accounts for the phenomena that Beale asserts are accomplished only by a vital force, a force unlike anything else in nature, and he claims that it is a special endowment of living matter conferred on it by the great Author of the universe.

Quite possibly Beale may be mistaken, and in a little while some lynx-eyed philosopher may penetrate the mystery of interior cell action and show us clearly enough that it is but a peculiar modification of common physical force, so ordered by the Creator for the construction of organized living tissues; and when this is done, no man will be more ready to say it is done than Beale. But until we attain to such knowledge, it must be regarded as something in the nature of a sin of omission in even so good a man as Prof. Meigs, when he, summing up the status of the scientific world upon the point, in an inaugural address to a house full of students and others, conveys the idea that there is no one of meritorious eminence who does not yield credence to the theory that sun force and vital force are correlated—are but phases of the same power that floats the æronaut through the air—that holds the ocean in its bed in the diurnal whirl of the earth—that forces the melted viscera of the earth up through the volcano's crater, and that sends our thoughts through the wires bounding over the continent, or shooting beneath the deep sea from hemisphere to hemisphere.

A CHILD BORN WITHOUT CALVARIA OR ENCEPHALON.

BY DR. C. H. SMITH, KIRKLIN, IND.

July 27th, 1867, was called to see Mrs. H——, aged thirty years—German—vito-motor temperament—finely developed—mother of three living children.

On arrival, found she had given birth to a healthy male child which was separated and given to the nurse, and within twenty minutes more a female, breech presenting, was delivered still-born and without cranium or brain.

Some ten minutes were taken up in attentions to the patient, and removing placenta, which was double, when the monstrosity was more closely observed.

The parietal bones were entirely absent. The occipital and frontal were absent, except the inferior part of the former and orbital plates of the latter. The superior part of the temporal bones was also wanting. The eyes were quite prominent, but the optic nerves dwindled to a shred before decussating. A thin, transparent membrane stretched loosely across the base of the skull, beneath which was a small amount of pulpy substance, and serous fluid tinged with red. The medulla spinalis terminated in a soft, roundish mass. Development otherwise normal and child of medium size.

Up to this time, no signs of life had been manifested, neither heart sounds nor respiratory gasp; but on touching the superior termination of the medulla spinalis, convulsive movements of the limbs followed repeatedly, but no reflex action could be elicited by irritating the peripheries.

Parturition was natural, except an excessive amount of liquor amnii with second birth. Neither was there any occurrence during gestation that would likely have influenced development. In October, 1865, patient had typhoid fever, and in December following, empyema, from both of which she had made an excellent recovery. It might be well to state that the husband was a very intelligent and healthy farmer. We leave the subject without comment.

ON LITHOTOMY OF THE GALL-BLADDER.

BY GEO. C. BLACKMAN, M. D.,
Professor of Surgery in the Medical College of Ohio; Surgeon to the Samaritan Hospital, Cincinnati, Ohio; etc., etc.

Continued from page 87, February number.

Mr. Samuel Sharpe, who was surgeon to Guy's Hospital, in his *Critical Enquiry into the Present State of Surgery*, London, 1750, at page 222, thus remarks: "I have hinted that though the opening of the

gall-bladder is exceedingly dangerous, where it remains loose, yet when it happens to adhere to the peritoneum, the operation may be advisable. The gall-bladder, like the urinary-bladder, by excessive distension is sometimes burst; but if previous to the rupture, it adheres to the neighboring parts with which it falls into contact, as is usual with inflamed membranes, it will be proper to make an incision in the upper part, lest it should burst into a part that should evacuate the bile into the abdomen. There are several examples recorded where it has broke externally, and the patients by this accident have done well. These examples, therefore, show the fitness of making such an opening, where an adhesion is certain; but what recommends an operation still more, is the possibility of extracting a stone or stones from the gall-bladder, which by their residence, would continue to keep up the inflammation and the consequential complaints. This operation was first performed where it was not originally intended, the surgeon only proposing to cure by dilatation a small fistula of the gall-bladder; but in examining the cavity with his probe, he felt a stone as large as a pigeon's egg, which he extracted, and the patient recovered. It is true, this operation is not yet established; but besides the case here recited, there are several histories of patients whose gall-bladders have burst externally, and whose stones have worked out of themselves, which ought to encourage a skillful surgeon always to examine if there are any stones in the gall-bladder, whether the opening into it be made by nature or art."

Wm. Bromfield, Surgeon to Her Majesty, and to St. George's Hospital, in his *Chirurgical Observations and Cases*, published in London, 1773, volume ii, page 174, speaking of distended gall-bladders, adds: "The tumor in this part has often been mistaken for an abscess of the liver, which at length bursting, has given credit to the person who attended the case; for by dilating the orifice, some biliary calculi have been discovered, which were then extracted with great solemnity, as if the whole operation was done in consequence of the superior skill of the operator. The same thing has happened in abscesses of the kidneys from the same cause; and authors very gravely describe the operation of nephrotomy, as if an able anatomist, once convinced of a stone being generated in the kidneys, and too large to pass into the ureter, would judge it might be taken out as safely as from the bladder. Surely this want of candor is unpardonable, as the credit, if any, is certainly due to chance; but relying on the reputation of the relator, a young rash practitioner may think the authority sufficient

for him to make the attempt. I am afraid some of my brother authors are rather too fond of relating cases of the marvelous kind, attended with success, without mentioning those which miscarried. The integrity of Hippocrates has done more service to physicians, in setting down the practice when unsuccessful, as well as where the patients recovered, than if he had put down twenty times the number that did well, and omitted those that died under his care."

Delpech, in his *Précis Elémentaire des Maladies reputées Chirurgicale*, Paris, 1816, *tome* ii, page 189, thus comments upon the operations which have been proposed for the removal of biliary calculi: "After the spontaneous or artificial opening of tumors formed by distended gall-bladders, it has often happened that biliary concretions have been found and easily extracted. This has been followed by an abundant escape of bile, which these foreign bodies had caused to be retained, and in some instances the patients have been cured. From this it has been inferred that when biliary tumors have terminated in such openings, a grooved sound might be introduced and calculi detected, as well as removed by enlarging the opening. But very few cases have been brought forward to prove that biliary concretions have been extracted from the gall-bladder itself. Judging from observation, it would seem that almost always these bodies have been removed from the thickness of the abdominal walls, where they had become engaged, and often they have been found in a sinus in the abdominal muscles, or beneath the integuments, which sinus has been caused by the infiltration of bile in the cellular tissue. If it must be admitted that, in certain cases, these concretions had been formed in the gall-bladder, and were afterwards thrown towards the surface by the process of suppuration, we are led also by analogy, to believe that under certain circumstances these biliary concretions have been formed in the sinuses in which they were found. It is an important rule, taught by experience, that we must not touch biliary tumors except where there has been evidence of external inflammation which has led to adhesions of the abdominal walls and the surface of the gall-bladder. But even then, how can we be assured that in carrying the knife to this or that point of the circumference of the abdominal ulceration or opening, we may not pass beyond the limits of adhesion, and give rise to infiltration of bile in the peritoneal cavity with all its dreaded consequences? In cases where the opening has been of long standing, and has become fistulous from the escape of bile, there may be less difficulty and danger from the proceeding. Cases have been observed in which the ad-

hesions between the gall-bladder and the walls of the abdomen have resembled an elongated ligament. Into this cord-like substance, which may be compared to a vessel—a narrow sinus existing—a sound penetrates only with difficulty, showing on the one hand an external orifice, while the other end communicates with the gall-bladder, the cavity of the latter containing several biliary concretions, which are not free, but closely embraced by the walls of the gall-bladder. It is evident that in such a case, the facility with which the gall-bladder has emptied itself of the bile deposited in its cavity, has permitted it to contract closely upon the concretions which it contains, and hence the formation of the pouches in which they have been found. It is evident, also, that however limited may be our incision through the coats of the cord-like sinus, bile may escape into the abdominal cavity. Finally, it is very doubtful whether, even if we should penetrate safely into the cavity of the gall-bladder, we could seize and extract the calculi there deposited."

Delpech then lays down the following precepts:

The immediate removal of biliary concretions by means of the knife, should be attempted only in those cases where they present themselves at the external opening in the abdominal walls, or are engaged in the sinuses connected with this opening. In no case should such operation be attempted where they are still enclosed in the gall-bladder. Dilating instruments, incapable of destroying the walls of the sinus, are the only means by which an attempt should be made to reach calculi in the gall-bladder, especially if the biliary tumor has long been open.

M. Cruveilhier, in his *Traité D'Anatomie Pathologique Générale*, Paris. 1852, *tome deuxieme*, page 570, reports the following case which occurred in the practice of M. Robert, then surgeon to the Hôpital Beaujon: "In 1836, a female, æt 35, was admitted with an umbilical fistula of eight months duration. It was the result of an abscess which spontaneously opened, giving issue to a yellowish pus. A sound detected a calculus at the bottom, which M. Robert deemed to be about the size of a hazel-nut. He thought that by breaking it into fragments with the crushing forceps, it might be the more readily extracted; but the simple introduction of the dressing forceps into the fistula for the purpose of exploration, gave rise to a peritonitis which destroyed the patient. The fistula, being opened at the umbilicus, followed the course of the suspensory ligament of the liver, and terminated in the gall-bladder which was extensively ulcerated. Here was

found a biliary calculus the size of a peach stone, which was just within the fistula, the walls of which presented considerable resistance."

Chaissaignac, in his *Traité Pratique de la Suppuration, et du Drainage Chirurgical*, Paris, 1859, *tome* ii, at page 368–9, after referring to the cases quoted by Ploucquet, in which biliary calculi through an abscess have escaped spontaneously, remarks: When the abscess opens spontaneously, if the opening is too narrow, or too remote from its fundus, we should enlarge it by means of caustics, and especially the Vienna paste, and he adds that a cure of the biliary fistula generally takes place after the extraction of the calculi.

At a meeting of the Medical Society of London, October 17th, 1859, Mr. Thudicum read a paper *On the Pathology and Treatment of Gall-Stones*. From the report published in the *London Lancet*, October 22, of the same year, we extract the following: "After some remarks upon the dietary and hygienic rules to be observed by gall-bladder patients, the author suggested that in some appropriate cases, an operation for the removal of gall-stones through the abdominal walls, should become a subject of consideration for surgeons. Dr. Richardson having alluded to the effects of loss of bile by a biliary fistula in animals, which he thought was contra-indicating the proposed operation, referred to points of diagnosis. The President (Mr. Hilton) remarked upon the operation which the author had hinted at, and thought there were many difficulties in its way. He should like to hear from physicians, the number, nature and prospects of such cases in which the operation for extracting gall-stones could be thought of. The operation would be impossible in cases where the calculus was closely embraced by the bladder. But, from his knowledge, he thought it not impossible that cases fit for operative relief might present themselves; and in cases of distended gall-bladder, (which might occur with calculi), an operation, such as the author had mentioned, had actually been performed with success."

Mr. Thudicum, in his excellent *Treatise on Gall-Stones*, London, 1863, page 45, says that Petit's plan was adopted in Germany by A. G. Richter, and that the latter in his work on Surgery, gives an excellent description of biliary fistulæ and their treatment, and of enlargements of the gall-bladder from calculi, and their treatment by surgical operations. He adds: "The essays of Petit and Richter must be carefully perused in order to see that the propositions of their authors were by no means so chimerical as subsequent writers have endeavored to make out." At page 251, Mr. T. refers to a case in which,

according to Schurigius (*Lithologia*, page 268), J. Fabricius removed two biliary concretions from a living man by means of cutting. At page 253, he mentions the case of Lespine, in which the abscess was opened with the knife, and the calculus reached.

Mr. Thudicum has copied from the London *Medical Times and Gazette*, May 10th, 1862, the report of a very interesting case, under the care of Dr. Cockle, at the Royal Free Hospital, in which a number of biliary calculi were discharged through a spontaneous opening about two inches below the umbilicus. This opening was about the size of a crow's quill, and from its orifice there was a constant oozing of nearly colorless mucus. A probe passed readily obliquely upwards when it came in contact with a solid body. After several ineffectual attempts to extract it with the dilating forceps constructed expressly for the purpose, Dr. Cockle was compelled to slit up the sinus as far as the stone, and then readily removed it. The wound quickly healed; but at the end of two or three weeks, the old symptoms returned and another calculus was detected about two inches distant from the outer orifice. "Mr. Hill again tried to dilate the sinus and grasp the stone, but after a few attempts, so much tenderness and purulent discharge followed, that it was not considered safe to interfere further at present. Recently, these signs have ceased, and the fistula has again relapsed into its former indolent state, contracting, and only discharging nearly colorless mucus. The patient has now returned to her ordinary occupation; but there can be no doubt that the sinus will again open from time to time, as many calculi are still in the gall-bladder." Dr. C. then refers to the case which we have already quoted in the practice of M. Robert, to show that fatal results may easily follow the attempt in some of these cases to dilate a sinus and extract the calculus.

In the *Gazette des Hopitaux*, Paris, March 24th, 1866, is a paper on the *Treatment of Biliary Tumor*, by M. Luton de Reims, who is also the author of the article *Biliaires* (*Voies*) in the *Nouv. Dict. de Med. et de Chirurgie Pratiques*, *tom.* 5th, Paris, 1866. In this he gives an analysis of the case reported in the *Bull. de la Soc. Anat.*, 1856, where Leclerc (*de Senlis*), in a female æt. 62, opened a fluctuating tumor in the right hypochondriac region by means of caustic potash, and from which at first a serous looking fluid escaped, followed by a large number of biliary calculi. The patient made a complete recovery. M. Luton adds that some two years before, Demarquay communicated to the *Societé de Chirurgie* the particulars of a case in which a man, æt. 35, had in the inferior part of the right hypochondrium a fistulous

opening succeeding to an abscess of the gall-bladder, and through which, from time to time, biliary calculi escaped. A careful examination showed that the fistulous passage and the gall-bladder were filled with concretions of the same nature. With the forceps, it was easy to remove those which were of small size and which occupied the vicinity of the external orifice of the fistula; but those of greater size could not be removed until they had been crushed with a small *brispierre*. The patient was restored to perfect health. From which he remarks that lithotrity, as well as lithotomy, may be applied to the treatment of biliary calculi. M. Luton states, in conclusion, that he has seen a patient who, after an attack of jaundice, had a biliary tumor which increased rapidly. An opening was made hy means of caustic potash, and in the course of a month, a few calculi escaped. Four months afterwards the fistula was still open, when the track was injected with iodine. Three years afterwards it was not closed, and yet the patient's health was good.

It is well known that cases have been reported of congenital absence of the gall-bladder, and yet no inconvenience seemed to have attended such defect. Whether the cases reported are sufficient to warrant the following statement by Matthew Baillie in his *Morbid Anatomy*, London, third edition, 1807, page 251, we do not pretend to determine. Under the head of *The Gall-Bladder Wanting*, he remarks: "The gall-bladder has also been known to be wanting, from a defect in the original formation. (See Dr. Soemmering's Germ. Translat., page 150.) It has never occurred to me to see an example of this kind of monstrosity; but it may be the more readily believed sometimes to happen, as the gall-bladder does not serve any necessary purpose in the body. There are many classes of animals which are naturally without a gall-bladder."

According to Malgaigne, (*Traite d' Anatomie Chirurgicale et de Chirurgié Experimentale*, Paris, 1859, *tome* ii, page 363), Herlin and Campaignac have proposed either the extirpation or the ligature of the gall-bladder, both for the purpose of removing biliary calculi and preventing their return. Herlin advised the application of the ligature to the neck; but Campaignac to the gall-bladder itself. The former tried his experiment on a cat, which retained its appetite and all its functions unimpaired.

According to Malgaigne, Langlas and Duchainois extirpated the gall-bladder in three dogs, and they recovered. The well known fatality of wounds of the gall-bladder in the human subject, except where

adhesions had formed, is well understood, and their results lead no support to the heroic operation above proposed.

M. Luton in his article in the *Nouv. Dict. de Med. et de Chir.*, *tome* v, page 98, states that in cases of doubtful diagnosis we may venture to puncture with an exploring trocar, even when we have reason to believe that no adhesions have formed between the tumor and the abdominal parietes. He adds that this "petite operation" is devoid of danger, and that he has himself resorted to it in one instance without accident. He has also seen at the clinic of the Hotel Dieu of Reims, M. Thomas, by this means, detect the nature of a tumor in the right hypochondrium, which was formed by a distended gall-bladder, and in which the instrument struck a biliary calculus. This exploring trocar should not exceed one *millimetre* in diameter.

In conclusion, we will now present an analysis of the very interesting case reported by Dr. J. S. Bobbs, of Indianapolis, in the *Transactions of the Indiana State Medical Society* for 1868, pages 68–73. As will be seen from the report, the Doctor, with all the counsel called in, could form no accurate diagnosis, nor even an approach to it. It is stated that although the tumor had the position and appearance of ovarian, she was informed that its ovarian character was very doubtful; but it is not even hinted that it had any connection with the gall-bladder. We mention this, not in the spirit of criticism, but to show that the difficulties, until the cavity was laid open, were, in this respect, insurmountable. Even after the exploratory incision had been made, the embarrassment was sufficiently great to perplex the most experienced surgeon, and Dr. Bobbs is certainly to be congratulated on the fortunate termination of the operation and the subsequent progress of the case. Old Mr. Bromfield, from what we have quoted of his writings, would certainly have questioned the propriety of the heading given to Dr. Bobbs' report, viz: Lithotomy of the Gall-Bladder, and this, simply upon the ground that no such operation seems to have been contemplated when the removal of the tumor was commenced. But as this may, perhaps, after all, be regarded merely as a matter of taste, it can not detract from the skill displayed in the performance of this difficult, and in many respects, unique operation. With these few reflections, we now copy from the *Transactions* in the Doctor's own language, the most important details of the case:

"E. W., aged thirty years, requested my advice by request of Dr. Newcomer, for an enlargement in the right side. She is of spare habit, medium size, and nervous temperament. Has usually enjoyed pretty good, but never robust health.

About four years ago she observed an enlargement in the right iliac region, about the size of a hickory nut. Its position she represented to have been low down in the iliac region. There was no tenderness of the part. Her health at the time was bad, and continued so for several months. She had neuralgia of the stomach, and food and drink created much distress. This was produced by much exercise also, and usually lasted three or four hours. The enlargement continued to increase in size, and become tender after exercise, and ultimately disabled her from walking, or, as she expressed it, 'last winter (1867) she could not put her foot to the floor.' Since January, 1867, the enlargement has grown faster and given more trouble.

"Examination revealed a tumor just inside the right iliac bone, tender to pressure. Its outline could not be well made out, except on the right side, where its boundary was pretty distinctly defined. The course of the tumor could be traced on its lower border, while its inner margin, toward the spine, was less distinctly defined, and its upper limits still more obscurely marked. It admitted of a slight degree of motion from side to side and upward, but its movements left it uncertain whether the most prominent portion was the chief part of the enlargement, or only a projection from a deeper-seated growth. The walls of the abdomen were tense and slightly protuberant. The most careful examination, per vaginam and otherwise, disclosed no connection with the uterus or its appendages, although the limited motion in the parts did not demonstrate that no such connection existed. The uterus was tender, but did not seem to be enlarged, as it could not be felt above the pubis.

"So much obscurity surrounded the case that I requested further examination and consideration at some subsequent period, before attempting to diagnose the character of the tumor. This examination was made, but revealed nothing new, and tended to confirm the opinion partially arrived at on the previous occasion, that the enlargement had no connection with the uterine organs; but beyond this, nothing definite as to its character or connections could be made out. It had the position and appearance of ovarian tumor, and the patient so regarded it, from the opinion of other physicians whom she had consulted. She was informed that its ovarian character was very doubtful, and its true nature very uncertain, and that if it were the former I could give no assurance that it could be successfully removed. She, however, so persisted in the request that I should undertake its removal, that I finally consented to make the attempt, and on the 16th of June, 1867, assisted by Drs. Newcomer, Todd, Comingor, Mears, Avery, and a medical student, proceeded to do so.

"An exploratory incision was made between the umbilicus and pubis, the patient being under the influence of chloroform. The omentum was found to be thickened and adherent to the walls of the abdomen. It was separated by a finger, as far as this could reach, toward the right side, along the whole extent of the section—about four inches in length—in hopes of reaching some part where no adhesion existed. Failing in this, with two fingers of either hand the omentum was torn through over the tumor, so as to admit the finger which came upon the protuberant portion of it. Passing the finger around this, some adhesions were broken up, and the tumor traced upward. Other adhesions which it had formed

with the parts around it, were also discovered, and what seemed to be a smaller lobe in its upper part, but no pedicle or attachment could be felt. Enlarging the opening through the omentum, the tumor was plainly visible, but the orifice would not admit of its exit. The wound through the abdominal walls was carried an inch above the umbilicus on the right side, over the prominent part of the enlargement, which was made to pass through it. This was found to be oval in form, about five inches in length, and two inches in diameter at the widest part, tense, and evidently contained a pellucid fluid. No pedicle could be made out, and the sack showing its contents to be transparent, its lower margin was cut through, when a perfectly limpid fluid escaped, propelling with considerable force, several solid bodies about the size of ordinary rifle bullets. Introducing the finger, other solid bodies were felt, but not in the main sack. A number were hooked out with the finger, and varied in size from that of a mustard seed to that of a bullet. One of the latter size could be distinctly felt, but no communication between the space containing this and the main sack could be found, and it was not removed, being situated at the extreme end of the finger. The sack had the appearance, externally, of an hydatid, its walls were of the thickness of ordinary cuticle, smooth in its inner aspect, and were whitish and semi-pellucid. Pulling it downward, after being evacuated, brought into plain view the right lobe of the liver, to the lower surface of which it was attached by a broad linear base like the gall-bladder. The finger introduced into the sack detected what seemed to be smaller sacculi, opening into the main one.

"It had the appearance of an enlarged gall-bladder, or an appendage to this, although its size, the clear serous character of its contents, and the thickness and semi-transparency of its walls, might justify some degree of doubt upon this subject. From its form, attachments and solid accretions, one of which could be so distinctly felt in a diverticulum, but which I did not succeed in removing, seemed to mark its identity with the gall-bladder, and deterred me from the excision of the sack, as I should otherwise have done. I therefore put a stitch in the cut lips of its walls and cut the ends closely. This step was suggested by the apprehension that if any portion of its solid contents should have been overlooked, their escape into the cavity of the abdomen would be prevented, and the belief that the sack, in the event of its refilling with fluid, would become adherent to the walls of the abdomen, and be within the reach of a trochar, and make it practicable to obliterate it by injection, if it became necessary.

"It would have been gratifying to have determined the condition and relation of the parts more satisfactorily, but the adhesions existing, as the result of past peritoneal inflammation, rendered this impracticable, without increased hazard to the patient.

"The wound was closed by sutures and adhesive plaster, no vessel requiring to be ligated, and thirty drops of laudanum given after the patient was placed in bed.

"From the 22d, her recovery was progressive and requires no special remark. In about two weeks she was permitted to sit up, and in three weeks to move about her room, and in four to ride out.

"Careful examination of the solid concretions removed, leaves no doubt of their being biliary calculi. They are irregularly spherical in shape, smooth on the

surface, which is of a mahogany color, and polished. The interior is of a whitish yellow, striated and porous. They are of light specific gravity, and numbered some forty or fifty, the majority being of the size of small shot. When access to the enlargement was reached, the surrounding parts were so agglutinated by old adhesions as to prevent a satisfactory inspection of its deeper portion. After the sack was opened, more space was obtained, and its attachment to the under surface of the liver could be both seen and felt, and had the appearance of an hypertrophied gall-bladder. Its lower extremity projected about five inches from the free margin of the liver. The cystic duct was probably obliterated from irritation produced by these concretions, and the one felt at the extremity of the finger was probably lodged in one of the biliary ducts.

"Various authors have reported cases of hypertrophy of the gall-bladder, but I believe they have usually found traces of healthy or vitiated biliary matter in the fluids contained in the cysts. In this instance, the fluid was perfectly pellucid and watery, the solid and coloring matter having either been appropriated by the concretions, or had become absorbed or diffused."

Dr. Bobbs' case is not the only one in which the fluid found in the cyst has been "pellucid and watery." Thus, M. Luton in his article on *Biliaires (Voies) in the Nouveau Dictionnaire de Medecine et de Chirurgie*, pages 100–1, quotes the cases reported by Sonnié-Moret in the *Bull. de la Soc. Anat.;* by Barth and by Bourdon, in the same journal, 1840. The same Bulletin, &c., for 1847, contains also similar cases reported by Deville, and Lacaze-Duthiers. We have found several cases reported in which a biliary fistula was not productive of the serious consequences referred to by Dr. Richardson, when he opposed the operation approved by Dr. Thudicum in the discussion already noticed, and yet, after examining all that we have been able to find upon the subject, were we required to decide in reference to the propriety of the so-called lithotomy of the gall-bladder, we should unhesitatingly follow the suggestions of Boyer and Durand, viz: wait until the unmistakable evidences presented of adhesions between the tumor and the abdominal walls, indeed, until it assumed the appearance of an abscess about to open spontaneously, when the operation is sure to be one of the greatest simplicity, (*de la derniere simplicité.*) There is nothing in the special treatises of Bonnet, Budd, Frerich, or Thudicum, which could have enabled us, in a case like that reported by Dr. Bobbs, to have formed a positive diagnosis as to the real character of the tumor; and as the same doubt must exist in many of the cases which present themselves, we should feel disposed to restrict the operation to the cases in which adhesions have formed.

DR. COHNHEIM'S RESEARCHES ON INFLAMMATION AND SUPPURATION.

Translated from an article by Dr. WRANY, in the ninety-ninth volume of the *Prager Vierteljahrsschrift*,

BY SAMUEL NICKLES, M. D.,

Demonstrator of Anatomy in the Medical College of Ohio.

The researches of Dr. Cohnheim (*Virch. Arch.*, xl, page 1) on inflammation and suppuration, have been attended with new and highly interesting results. He commenced his inquiries with the study of keratitis, which he produced artificially in frogs and rabbits, either by brushing the cornea with tincture of cantharides, or by cauterizing it with a stick of nitrate of silver, or by drawing a piece of thread transversely across the globe or the cornea. By all these methods, he obtained corresponding results, which differ, however, from the views generally received; for it has been held, since the investigations of His and Strube, that the changes taking place in inflammation of the cornea are confined to the stellate corpuscles of this structure, which become enlarged, and partly by direct division, partly by endogenous development, produce pus corpuscles. C., it is true, confirms the opinion that the dimness of the cornea depends on the presence of elements resembling lymph corpuscles—*i. e.*, pus corpuscles—and its degree upon their number, but he became convinced that the stellate corpuscles of the cornea are present, besides the pus corpuscles, in the same regular distribution and without any material deviation with regard to form and deportment, as in the normal transparent cornea. The stellate corpuscles do indeed exhibit, as long as the tissue has not perished, all the manifold forms which living pus corpuscles assume by virtue of their contractility; but the pus corpuscles, in consequence of their more considerable size, duller lustre and characteristic prolongations (offshoots), are easily distinguished from the latter. Moreover, the stellate corpuscles of the cornea retain their normal distribution, while, on the contrary, the arrangement of the pus cells is quite irregular, since many of them lie on the same plane with the former and may be seen scattered among them at the same focal distance, while others occupy the interspaces between the successive parellel layers of the corneal corpuscles, occasionally lying immediately over and partly concealing some of them. Sometimes they are found isolated, dispersed here and there in the tissue, or they are collected

in larger or smaller groups; but, as Recklinghausen has already shown of the lymph corpuscles of the normal cornea, all wander or change their place by virtue of their contractility. Thus, in the course of a few hours one may see a pus corpuscle gradually move onward, mount a stellate corpuscle, or recede from it; further, one may observe a small group disperse, so that a previously-conccaled corneal corpuscle comes into full view; and again, a number of isolated pus cells are seen successively to unite to form a group, so as completely to hide from view a stellate element.

Although our author has become convinced that *the corneal corpuscles with their protrusions are preserved in their normal distribution, however great the number of pus corpuscles at any one place may be*, yet he does not wish to be understood that they are not sympathetically affected by the inflammatory process. Of course, this participation is only of a passive subordinate kind, limited, in very advanced keratitis, and particularly in the immediate vicinity of a highly inflamed spot, to the assumption, on the part of the stellate corpuscles, of a very granular aspect, retraction of their protrusions, and sometimes of the appearance of vacuoles in their protoplasma.

In the inquiry as to the origin of pus cells, it was now possible, in conformity with the observations described, possitively to exclude the stellate corpuscles of the cornea, and to take into consideration but two possible sources. Either the pus corpuscles had their origin in the pre-existing migratory lymph corpuscles, or they did not originate in the cornea at all, but had an external source. As to the first source, it may be objected, on the one hand, that the number and distribution of the wandering lymph corpuscles in the normal cornea vary so much that it is hardly possible to account for the constant and homogeneous course of inflammation by their increase, and, on the other hand, that nobody has really observed the process of cell-formation and cell-multiplication in lymph and pus corpuscles. The second possible source alone need, therefore, be considered, especially as the results of a systematic series of experiments on the course of traumatic keratitis point in this direction. C., namely, has come to the conclusion that simple traumatic keratitis—*i. e.*, the cloudiness produced thereby, always commences at the margin of the cornea and then gradually approaches the center. This observation rendered it improbable that the corpuscles, perchance immigrating into the cornea, could come from any other source than its outer periphery; nevertheless, C. submitted the possibility of an anterior or posterior entrance to an expe-

rimental investigation, adopting the method pursued by Recklinghausen for a similar purpose. Anilin blue, namely, was applied in one instance to the conjunctival sac, which was then closed by suture; in another experiment it was injected, by means of a Pravat's syringe, into the anterior chamber; but in neither experiment were corneal corpuscles with blue granules observed.

A third possible source, the entrance of the pus corpuscles from the sclerotica could forthwith be excluded, as the sclerotica of the frog consists of cartilage in which pus cells are never observed, neither in its normal nor pathological state. Under these circumstances, there were but two ways left by which the pus corpuscles might have advanced to the cornea, namely, the lymphatics and the blood vessels.

C. now injected anilin blue into a lymphatic vessel of a frog and observed in an artificial keratitis subsequently produced, that a part of the pus cells always contained granules of coloring matter, whilst the tissues of an animal treated in the same manner, and especially the cornea, presented no granules of coloring matter, either free or within the cells. But the circumstance that it made no difference as to the result, whether the anilin blue was injected into a lymphatic vessel of the head, back, lower limb, or abdomen, as long as the amount of fluid injected was considerable, rendered the direct transition of pus corpuscles from the lymphatics to the tissue of the cornea less probable, and suggested the idea that the blood vessels are the medium of their passage, particularly as Recklinghausen had already shown that corpuscular elements introduced into the lymphatics of the frog very readily enter into the blood vessels. Indeed, on the same day after injecting anilin blue into a lymphatic vessel, and still more on the following day, C. found blue granules in the blood, most of them situated within the colorless blood corpuscles. The direct injection of the coloring matter into the blood was now to decide whether the appearance of pus corpuscles with colored granules in the inflamed cornea was independent of the presence of colored granules in the white blood corpuscles, or connected to the latter as an intermediate step. The result of this experiment corresponds fully with that of the injection into the lymphatic vessels; in a short time a number of colorless blood corpuscles admitted colored granules into their interior; and whilst one never, even weeks after these injections, if they are carefully conducted, meets with colorless granules in the tissues, either free or in the interior of cells, in keratitis, on the contrary, no matter how produced, there immediately appears a more or less large number

of pus corpuscles, which are distinguishable by colored granules. From this it may be concluded *that some pus corpuscles in the inflamed cornea were formerly colorless blood corpuscles and that they have forced their way into the cornea from the blood vessels.* As to the modes in which the pus corpuscles move onward in the cornea, C. considers the doctrine of Recklinghausen, of nutrient canals in the connective tistues, as that best founded.

The investigation having arrived at this point, further researshes could not be pursued in a tissue having no vessels like the cornea; hence the field of observation had to be a vascular structure and therefore C. transferred it to the mesentery of frogs, firmly fixed, and made motionless with curare poison; but he also obtained the same results in subsequent experiments on rabbits and kittens. An inflammation is easily produced in the serous membrane by brushing with tincture cantharides, or by applying nitrate of silver; indeed, exposure of the intestine with the mesentery to the atmosphere, suffices for this purpose. Hyperemia is pretty rapidly developed, and in the course of several hours, a light cloudiness appears which gradually becomes dimmer and denser, so that the individual vessels become very indistinct. Finally, after fifteen, eighteen, or not until twenty-four hours, or even thirty-six hours, the intestine is wholly incrusted with a thin, soft, pale-grey, or greyish-yellow, somewhat adhesive layer which can be removed in smaller or larger shreds, and which consists entirely of closely crowded contractile pus corpuscles and isolated red blood corpuscles, all imbedded in an amorphous faintly granular material, which may be completely cleared with acetic acid. In short, peritonitis with fibrino-purulent exudation, has been developed. Before passing to the microscopical analysis of the details of the process, it would seem necessary to determine the normal conditions of the circulation. Respecting the current of the blood in the arteries, it is characterized by four peculiarities. *First*—By its direction, which, in the mesentery, is from the fixed point to the intestine. *Secondly*—By its extreme rapidity, which renders it impossible to distinguish a single corpuscle in the current of blood. *Thirdly*—By the presence of an axial current carrying all the red blood corpuscles, while the colorless plasma near the walls of the vessels here and there contains a white corpuscle. *Finally*—By the rythmical acceleration and retardation of the current of blood. In the veins, the direction of the circulation is the opposite of that of the arteries; the rapidity of the current is considerably less, hence, one is able faintly to distinguish the outlines of some of the

corpuscles; the stratum of plasma is narrow, and carries isolated colorless blood corpuscles in regular order, which slowly move onward, and occasionally stand still. Finally, the current is uniform and continuous. The circulation of the capillaries differs from both the arterial and venous. According to their capacity they permit two red blood corpuscles, or a red and a white one, to pass side by side, or admit but a single one, and they do not present a special axial stream. The current, as a general rule, is directed from the arteries to the veins, but frequently stagnates for a longer or shorter time in some branch or other, and may turn back at some points. The rapidity is, therefore, unequal, and always so inconsiderable that the individual corpuscles can easily be distinguished; besides, the colorless corpuscles always advance more slowly than the colored ones. In the capillaries, as is well known, there are no intimations whatever of pulsation. During the development of inflammation, the individual stages of the process exhibit a very changable duration, always, however, succeeding each other in a definite order in which they will be considered in the following pages. First of all, a *dilatation* of the arteries takes place without previous contraction. This constantly increases with, at furthest, but slight and short intermissions and remissions, and has generally arrived at its acme in one or two hours, at which it remains during the succeeding stages of the process. The extent of the dilatation may exceed two-fold the original diameter. At the same time the vessels become elongated, which is exhibited in pretty well marked sinuosities. Dilatation of the arteries is succeeded by a like condition in the veins, in which, though supervening much more slowly, it yet reaches and even exceeds double the amount of the original diameter. In these vessels, however, meanderings and sinuosities, as well as partial contractions and dilatations, are absent.

The dilatation of the vessels having continued one or two hours, a *diminution of the rapidity of the current* takes place without exception; the circumference of the individual corpuscles may now be readily distinguished; and the pulsation of the arteries becomes very evident; but the current has lost its axial character, and the arteries show unmistakably that the colorless corpuscles tend to the walls of the vessel. The deportment of the peripheral zone of the current of blood in the veins now becomes highly interesting, since here and under the eyes of the observer *the original stratum of plasma becomes filled with numberless colorless blood corpuscles* which, finally, adhere to the periphery of the vessel in a single wall-like layer within which the red

blood column floats onward with uniform rapidity. This condition does not continue long, however, before the eye of the observer is captivated by an unexpected event. On the external surface of the venous wall, there appear small bud-like isolated elevations, which slowly and gradually enlarge. After a while, there seems to rest on the exterior of the vessel, a hemisphere, about half the size of a white blood corpuscle which gradually assumes a pyriform shape, and, finally, protrudes from its periphery very delicate offshoots and processes which impart to the previously rounded contour a variety of forms The principal mass of this small body, the swollen indented end, recedes more and more from the surface of the vessel, whilst the narrow extremity elongates to a very fine pedicle. But ultimately, this pedicle separates from the wall of the vessel and we now observe a colorless, somewhat brilliant contractile corpuscle, with some short and a very long offshoot; this fully coincides in size, as well as in the possession of one or more nuclei, with the colorless elements of the blood. This process is repeated at many other points of the wall of the vessel, so that one may observe simultaneously all the stages which were successively displayed in the individual corpuscle. Within three or four hours after the appearance of the first elevation on the external surface of the vein, this latter is encircled by a simple, but dense layer of such corpuscles, and after the lapse of a few more hours, an immense swarm of them encloses the vessel. Moreover, the corpuscles situated in the outermost rows present shorter and shorter protrusions, so that, finally, nothing else is seen than the ever changing forms of contractile blood or pus corpuscles. During this gradual and gradually increasing *passage of colorless blood corpuscles from the interior of the vein through its unbroken wall*, the previously perfect condition of the blood-current remains unaltered; as before, the inner peripheral stratum presents a simple, uninterrupted layer of white blood corpuscles, within which the red blood discs glide onward in a continuous current. It is necessary to call attention to the fact that not a single red blood corpuscle is seen among the colorless corpuscles which have passed through the walls of the vessel. In order to avoid deception, C. also observed the whole process in other animals in which some of the white blood corpuscles had been impregnated with coloring matter by means of the proceeding already detailed, and found the correctness of his observations most clearly confirmed.

About the same time, when the arteries, and subsequently the veins,

become so much dilated, the capillaries also increase in volume; but their augmentation is only one-sixth, or at most, one-fourth of their diameter. Their current of blood exhibits, in regard to direction, rapidity and uniformity, the same variations as in the normal state. In some of the capillaries, the blood corpuscles move onward with unaltered rapidity, and uniformly in the same direction, and with the same regularity; in others, on the contrary, their movement is gradually more and more retarded, and, finally, ceases entirely for hours, so that the capillary seems to be crammed for longer or shorter distances with unmoved red and white blood corpuscles. Lastly, one may observe, particularly in the more capacious capillaries, a resting, and a moving stratum, and the first may occupy the whole of the periphery, or only one-half of the caliber with the corresponding half of the periphery. Moreover, we would specially note that the quiescent stratum does not only contain colorless corpuscles, but also red ones.

Corresponding fully with these inequalities, the subsequent events take place in various ways. In those capillaries whose blood-stream goes on continuously and with the same uniform rapidity, no kind of change supervenes. But wherever, on the contrary, partial or complete stagnation has become established, there a new state of things begins to be developed in a short time. The first thing observed at such places, is an alteration of form of the spherical colorless blood corpuscle, taking place more or less rapidly and completely, but always exhibiting the well known amœboid movements. Soon afterwards, a bud-like elevation, or a spinous protrusion, is observed on the external surface of the capillary wall at a point corresponding to the situation of a white corpuscle on its inner surface. This offshoot gradually increases in size, and is, finally, changed, just as was observed with the veins, into a colorless corpuscle which is now connected with the capillary wall only by a much elongated pedicle which is subsequently completely detached. During this often very protracted process, a state of things is frequently seen which is not obtained in the profile view of the large veins on account of the relative thickness of their walls, and which must banish every doubt as to the interpretation of the process—namely, a corpuscle situated partly within and partly without the capillary wall. But in the capillaries, not only the colorless blood corpuscles, as is the case with the veins, but also *the red discs pass through the wall to the exterior*. Views are now presented to the eye like those described by Stricker as existing in the amputated

tails of tadpoles, namely, red blood corpuscles are seen, one-half of whose bulk has already penetrated through the wall of the vessel, while the part containing the nucleus is still within the capillary, and connected with the external portion by a narrow neck which is encircled by the capillary wall. Generally the inner half follows the outer portion in the course of a few hours; but if the current of blood is reëstablished during the process, the red blood corpuscles rolling by communicate an oscillatory motion to the inner half which may, even, with a gradual return of the current, be separated and floated away from the external portion which preserves the most undisturbed rest. Thus it happens that twelve, eighteen, twenty-four hours after exposure of the mesentery, a large number of capillaries are encircled by dense rings of corpuscular elements, consisting mostly of colorless contractile blood corpusles, and measurably of red blood corpuscles, the latter presenting ordinary, uninjured, nucleated blood discs, and smaller spherical or elliptical, apparently homogeneous bodies without a nucleus, the remains undoubtedly of the red blood corpuscles mutilated in the manner described.

C. now discusses the question, *how it happens that the colorless blood corpuscles accumulate in the marginal layer of the veins*, and calls attention to their movements in the liquor sanguinis under normal conditions, in explaining which, he adopts the views of Donders. According to this opinion, as the rapidity of the current increases towards the axis of the vessel, that half of the spherical colorless blood corpuscles which is nearest the axis is impelled by a more rapid current than that half which is turned away from it. The corpuscle, is therefore, not only urged on in the direction of the current, but also turned round its own axis, and under this combined influence, it is at last forced towards the periphery of the vessel. On the contrary, the flattened form of the red blood corpuscles whose long diameter advances parallel with the axis of the vessel, permits but a small portion of their border to be infringed upon by the current, and hence rotation does not occur. If now the rapidity of the current is diminished in consequence of dilatation of the vessel, this change must be most apparent in the peripheral stratum where the current is slowest in the normal state; and hence the colorless corpuscles which were before impelled in short and protracted movements, may now become wholly quiescent. But as every fresh quantity of blood conveys more white corpuscles, these must ultimately fill the whole domain of the peripheral part of the dilated veins.

C. endeavors, further, to answer the question, *By what mode and by what power the blood corpuscles pass through the walls of the vessels into the surrounding tissues?* Respecting the first part of this question, one is forced *a priori* to the admission that the blood discs advance only by pre-formed ways penetrating through canal-like spaces in the walls of the vessel, as it is not possible that they can perforate a solid unbroken wall. As the principal part of the walls of the vessels consists of connective tissue, and the possibility of movement of the lymph corpuscles in this tissue has been sufficiently established, there remains only the simple epithelial layer of the inner coat, of which kind of structure the capillary wall also consists, according to the researches of the last few years. Now C. believes that he has demonstrated openings (stomata) between the individual epithelial plates, by means of injections of silver, and therefore considers the existence of canal-like spaces in the wall of the vessel more than hypothetical, and does not doubt, every dilatation of the vessel increasing their size, that they may come into play in the simple process of exudation.

In regard to the second part of the question, it is necessary to observe that the white corpuscles, as long as they advance in an uninterrupted stream, preserve the spherical form, the state of their greatest contraction; that, on the contrary, as soon as they rest for any length of time, amœboid movements rapidly become manifest. When, therefore, under the pathological conditions above considered, the colorless corpuscles stagnate in the peripheral stratum of the veins, it is an easy matter to see that the ultimate effect of the amœboid movements which now supervene, must be a penetration into the wall of the vessel, as they can extend the protrusions now formed only against those points which offer the least or no resistance, and these are the stomata and canals of the connective tissue. The red blood corpuscles, as is well known, do not possess the power of contraction so as spontaneously to alter their form, and all their movements must be attributed to impulses exerted upon them from without. There remains, therefore, nothing to explain their exit from the capillaries, but the increased pressure of the blood, which, in consequence of the simultaneous diminution of the resistance of the arteries with their dilatation, must supervene in the capillaries to the same extent as in the arteries. Whether the augmented pressure of the blood can become sufficient to force the red blood corpuscles through the somewhat distended, but otherwise unprepared wall of the vessel remains undecided; experi-

ence, however, teaches that red blood corpuscles are never seen to force their way through the wall of the vessel, unless white ones have passed through before, and have thus caused a certain dilatation of the stomata.

While the described processes have taken place in the vessels, the remaining tissue of the mesentery has been in no way altered; *the basis-substance of the connective tissue is just as transparent as before, the nuclei, the epithelial, as well as those of the connective tissue, are seen in the same form and at the same place, with undiminished distinctness,* provided that they are not concealed by exuded blood corpuscles. While most of the exuded red blood corpuscles remain in the immediate neighborhood of their capillaries, the white ones recede further and further from the vessels, to make room for other emigrants, and gradually, thickly crowded, break through the tissue, and arrive, finally, by way of the "stomata," shown to exist between the epithelial scales by Recklinghausen, Oedmanson, and others, on the surface of the serous membrane, where they take part, with the plasma exuded at the same time, in the formation of the fibrino-cellular layer characteristic of peritonitis. After carefully separating this latter, the epithelium may very often be brought to view again, a proof *that the latter also* takes no part in the cell-formation of inflammation, but only perishes, if at all, when cast off.

In the microscopic examination of spontaneous fibrino-purulent pleuritis and peritonitis, C. observed the same conditions, and there can be no doubt that the laws found to obtain in serous membranes are generally valid for all acute inflammations. The new formation of the "pus cells," which was formerly attributed to the inflamed tissue itself, must now be wholly transposed to those organs of which we know by sure physiological experiments that colorless blood corpuscles are produced in them, *namely, the lyphatic ganglions and the spleen;* and, indeed, during the inflammatory process, these organs are found to be in a state of marked hyperplasia. Moreover, without vessels there is no inflammation; *dilatation, injection, and hyperemia necessarily form its first part;* in vascular parts the vessels normally appertaining to them are implicated; in non-vascular ones, the neighboring vessels, which being the medium of their nutrition under normal circumstances, also constitute the point of origin of their inflammatory changes. The presence of vacant spaces permitting the passage of the colorless blood corpuscles, has proved to be the second condition. Such canal-like

dilatable spaces are present in the connective tissue, and this is the reason why the suppurative process is still united to the connective tissue, why suppuration in the compound organs runs its course in the interstitial substance. In cartilage, which belongs to the series of connective tissues, but in which canal-like hollow spaces are wanting, nobody has, as yet, observed real suppuration. The daily observation that an inflammation may retrograde without any injury to the integrity of the affected part, is now construed without difficulty, by the explanation that just as the exuded plasma may be absorbed, so also the lymph corpuscles which have wandered out of the vessels to a new position, may leave this and be "discussed" in the neighborhood and in the lymphatic vessels, and thus the affected part which has not been essentially injured, may remain unaltered. C. observes, furthermore, that there is now a rational explication of the beneficial effects of local and general blood-letting, and that the old experience now seems very plausible, that the development of pus may be restrained under the influence of energetic cold which prevents the dilatation of the vessels, while increased warmth, on the contrary, must promote suppuration. He also alludes to the fact, to which Traube first called attention, that pus corpuscles make their appearance in the urine in every case of nephritis, although *post-mortem* examination does not show any complicating cystitis or pyelitis, and explains this phenomenon by the emigration of colorless blood corpuscles from the glomeruli, and he, finally, directs attention to pneumonia, in the course of which such immense numbers of pus corpuscles may accumulate in the alveoli without any trace of change in the surrounding connective tissue, and without any alteration in the flattened epithelial scales of the air cells, pointing to them as the source of the pus corpuscles.

We would only remark, in addition, that recently, Fried. A. Hoffman, in a paper on the development of the pus in the cornea, (*Virch. Arch. tom 42*, page 204), has confirmed the observations of Cohnheim, and Prof. Thiersch, (*Pitha und Billroth Hdb. d. Chirurgie, tom 1, Abth. 2, Heft 2*, page 539), has also in part convinced himself of their correctness, although he withholds all criticism until further investigations.

CORRESPONDENCE.

LETTER FROM PHILADELPHIA.

PHILADELPHIA, MARCH 15, 1869.

EDITOR OF THE WESTERN JOURNAL OF MEDICINE—*Dear Sir:* As mortuary and hospital reports are always interesting to the profession, I venture to commence my letter with brief extracts from the annual reports of the Board of Health, and Officers of the Philadelphia and Pennsylvania Hospitals, issued for the year 1868.

The first report exhibits the mortality of the city, as follows:

Total number of deaths,	14,163
Adults,	6,888
Minors,	7,805
Males,	7,674
Females,	7,109
Boys,	4,153
Girls,	3,652

Among the adults, the largest number of deaths occurred in the month of April—seven hundred and nineteen.

The month of July was the most fatal to the children, as indicated by the great number of deaths occurring during that month—one thousand, two hundred and seven.

July shows the highest number of deaths—one thousand, nine hundred.

November the lowest number—eight hundred and seventy-eight.

Nativities of the deceased were:

United States,	11,080
Foreign,	2,969
People of color,	769
Unknown,	644

Among the diseases enumerated as "causes of death," "Phthisis" stands first on the list, contributing to the adults one thousand, five hundred and eighty, and to the minors two hundred and sixty-six. Then follow,

Inflammation of the Lungs—	
Adults,	308
Minors,	385
Diseases of the Heart—	
Adults,	327
Minors,	58

Among fevers, typhoid is the most prominent in the adult class—scarlet with the children. Coup de soleil, one hundred and four. Casualties, one hundred and sixty-eight. Suicides, twenty-nine. Murders, twenty.

These close a list embracing fifty diseases and conditions given as "causes of death." The two last do not speak well for the social and moral condition of the inhabitants of the "City of Brotherly Love."

Turning to the hospital reports, we have that of the Philadelphia Hospital, by the recording clerk, incorporated with the report of the Board of Guardians of the Poor, this institution being a department of the Blockley Almshouse. The Almshouse is one of the largest eleemosynary institutions in the country, and embraces the Out-Door Department, Out-Ward Department, Philadelphia Hospital, Philadelphia, Hospital for the Insane, and the Children's Asylum.

Almshouse—	
Number receiving out-door relief,	144,542
Number admitted into the House during the year,	38,627
Insane Department—	
Number treated during the year,	1,015
Discharged as cured, improved and unimproved,	224
Died,	111
Remaining,	680
Hospital Department—	
Patients treated,	6,202
Discharged—cured,	3,925
Improved,	900
Died,	569
Remaining,	808

Mortality for the entire hospital, nine and seventeen-one hundredths per cent. Excluding the foundlings and the phthisis, it is reduced to seven per cent.

The Pennsylvania Hospital Report is a more elaborate document, and is presented to the public in the form of a handsome octavo volume, bound in cloth. The plan adopted in the preparation of the report is the same as that of the London hospitals, and I think this hospital is the only one in this country issuing its report in this way.

This volume, the second thus far issued, is edited by Dr. J. M. DaCosta and William Hunt, members of the Medical and Surgical Staff, and is dedicated to Prof. Geo. B. Wood, M. D., who was for many years physician to the institution. Besides "Abstract of Cases and Statistics," it contains papers of a practical character, based chiefly on observation made at the hospital. I hope at some future day to notice at length this very valuable work. At present, time and space only permit me to commend it to the attentive perusal of all the members of the profession who are interested in the development of our hospitals, and in the proper utilization of the vast amount of material they contain.

From the statistics for the year 1867–68, we learn that the number of patients treated was one thousand, nine hundred and fifty-eight.

Of the patients discharged, the proportion cured was,	71.43	per cent.
" relieved,	10.99	"
" removed without material improvement,	7.27	"
" discharged for misconduct or eloped,	1.78	"
" died,	8 53	"
Cases of accidental injury treated during the year,	768	

Since the establishment of the Hospital in 1752, there have been admitted into it eighty thousand, nine hundred and sixty-eight patients, of whom fifty-two thousand, four hundred and fifty-four were cured, and seven thousand, seven hundred and eight died. During the year, a new *Clinique* has been erected, connected to the main building by a short covered passage way. A building designed especially for clinical instruction has been long needed, and the one erected, though defective in some very important particulars, is a decided improvement upon the contracted quarters in the "cupola" of the hospital building.

I have on my table a monograph by Dr. Addinell Hewson, "On the influence of the weather over the results of surgical operations, and on the value of the barometer as a guide in the choice of the time for and the prognosis in such operations as shown by the results of immediate amputations, during a period of thirty years in the Pennsylvania Hospital." This is certainly a new field of investigation, and the conclusions arrived at are both novel and interesting. An examination of the tables prepared by Dr. H., shows that the most unfavorable results have followed operations performed in the months of December and May, two months almost as much antipodal of each other, as regards temperature, as any other two in the whole year. From the fatal effects of shock, we have December also taking the lead, and

immediately followed by November, June and May, as giving the next highest in order. For deaths from pyæmia, etc., we have the last months of the summer and spring terms giving the highest rates for the year.

As to successes, the month which stands preëminent in total results, is that of October, then comes January, and then April. October, eighty-nine per cent.—April, over eighty-six per cent.

From the effects of shock, it will be observed that there was not a single death amongst all the cases operated on in the months of October during the whole thirty years. The months which follow this as yielding the least mortality from this cause, are September, August, January, March and April.

From fever, pyæmia, etc., we find the months of February presenting the same clean record that October did for shock, and after it we have the months of November, December and January giving the next least mortality.

The conclusions are, that fatal results from shock occur in a constant ratio with the dryness of the weather, and that those from fever, pyæmia, etc., bear a direct ratio to the opposite state.

In connection with this subject, it may be interesting to note the fact that the mean temperature of the past forty-four years, as shown by the records kept at the Pennsylvania Hospital by Dr. John Conrad, is fifty-three and one-half degrees. The warmest year was 1828, fifty-five and three-fourth degrees; and the coldest, 1837, forty-nine degrees.

During the past two weeks, the various medical institutions of this city have held their annual commencements. I think that we have *nine* of all kinds—two Eclectic, two Homœopathic, one Woman's, two Dental, the Jefferson College and the University of Pennsylvania. It is safe to assert that four hundred and fifty degrees were conferred by these different institutions.

At the seventeenth annual commencement of the Women's Medical College of Pennsylvania, the degree of Doctor of Medicine was conferred upon fifteen graduates. Latterly, much interest has been manifested in the question of the status of female physicians, and the relations which should exist between them and members of the profession. If it is true, as asserted, that three of the most prominent physicians of this city, one of them a distinguished professor, have accepted positions as consulting physicians to the hospital in charge of the Women's Medical College, then this fact must be accepted as an evidence

of a decided reaction in public opinion. It is also stated that the reason given by these gentlemen for their action is, as they are unable to prevent the movement, the next best thing for them to do, is to guide it properly. Certainly very good logic if the premises are correct.

Leaving the entangling question of women's rights, I return to note briefly the incidents connected with the annual commencements at the University of Pennsylvania and the Jefferson Medical College. As has lately become the custom, and a very good one it is, the commencement exercises of the University were held in the Academy of Music. The degree of Doctor of Medicine was conferred upon one hundred and twenty-eight graduates, representing twenty-three States, and the valedictory address was delivered by Prof. Alfred Stillé, M. D. This address, as with everything which emanates from the pen of the distinguished professor, was an able production and well suited to the occasion.

The forty-fourth annual commencement of the Jefferson Medical College was held at the Musical Fund Hall. The degree of Doctor of Medicine was conferred upon one hundred and twenty-six graduates, representing twenty-three States. The valedictory address, by Prof. Samuel Henry Dickson, was one of the gentleman's happy efforts, graceful and learned. The alumni of the college will fully appreciate his remarks upon the retirement of Prof. Robley Dunglison. I give you the following extract:

"Many of you have missed personally, and all traditionally, during the past session, as we lament to miss now from among us, a once familiar face, a manly presence, full of intelligence and dignified simplicity. The place which he of whom I speak, long occupied, shall know him no more forever; but he has left imperishable records of worth and usefulness as teacher, author and administrator; honored and loved as instructor; "primus inter pares," in the midst of his colleagues. The annals of our school contain no name more distinguished than that of Robley Dunglison; none more dear to those who have had the happiness to enjoy his society and profit by his wise counsels, his frank cordiality, his kindly and courteous manner. We offer him the homage of our respectful remembrance in his patient retirement, our profound sympathy with his suffering."

The classes this year were not as large as usual, owing, no doubt, to the re-opening of the schools of the south and west. For the past two or three years, summer courses of lectures have been given at the University and Jefferson College. At the former, the subjects lectured upon are, Zoology and Comparative Anatomy, Botany, Mineralogy and Geology, Hygiene, and Medical Jurisprudence and Toxicology. In

the autumn, a preliminary course is given upon Microscopy, Regional Anatomy, Physical Diagnosis, Diseases of the Skin, and Morbid Anatomy. At the Jefferson College, the course is strictly practical, embracing important specialties in medicine and surgery, with extensive clinical illustrations, as Clinical Surgery, Clinical Obstetrics, Medical Jurisprudence and Toxicology, Materia Medica and Therapeutics, Clinical Medicine, Visceral and Surgical Anatomy, Operative and Minor Surgery, Operative and Aural Surgery, Venereal and Cutaneous Diseases, Pathological Anatomy, and Surgical Diseases of the Genito-Urinary Organs.

While on a visit to a friend at Newport, Rhode Island, last October, I had the opportunity of examining the Earth-Closet, the invention of Rev. Henry Moule, of Fordington Vicarge, Dorsetshire, England. My friend, during a recent visit to England, became so fully impressed with their value as substitutes under almost all circumstances, for the ordinary privies and water-closets, that he imported two Commodes. Recently, one of these was sent to this city, and placed, by the direction of Dr. Addinel Hewson, in the lower surgical wards of the Pennsylvania Hospital. In these wards it was used by twenty patients, (the hod is calculated to hold from eighteen to twenty evacuations), and the contents were not removed until evening. Patients in the fracture-beds were each given a paper bag, holding about a pound of dry earth, and were required after using the bed-pan (attached to each fracture-bed), to empty the contents of the bag into the pan. Although the Commode stood in the middle of the ward, surrounded only by a screen, still there was not the slightest odor perceptible.

Col. Geo. E. Waring, of Newport, Rhode Island, in a pamphlet upon the subject, states the principle to be "the power of clay and the decomposed organic matter found in the soil to absorb and retain all offensive odors and all fertilizing matters; and it (the closet) consists, essentially, of a mechanical contrivance (attached to the ordinary seat) for measuring out and discharging into the vault or pan below, a sufficient quantity of sifted *dry* earth to entirely cover the solid ordure and to absorb the urine."

Reflecting upon this absorbent power of clay, Dr. Hewson was led to use it as a dressing to suppurating wounds, and so satisfactory were the results obtained in these cases, that since February 9th, every case, no matter of what character, has been submitted to the dry earth dressing. Its advantages have been most fully demonstrated in cases of scald and burns, and intractable bed-sores. In the former, when

applied immediately upon receipt of the injury, the pain is at once relieved, and the reparative process goes on rapidly. In the latter, and also in all chronic ulcers, its action is most decided. In one case of paraplegia, in which there was dribbling of urine, the offensive urinous odor was entirely removed, and the patient made comfortable, by placing a layer of earth, protected by the sheet, beneath the buttocks. The patients speak of it in the highest terms, as a cool and pleasant dressing, and it is by far a *cleaner* application than those ordinarily employed. The results are truly remarkable, and have been critically examined by Dr. H. His experience thus far, confirms him in the belief that the earth acts not alone mechanically, but chemically—that, under its application, chemical action takes place as indicated by the fact that the pus, from the wounds, is found by the litmus paper to be neutral, instead of alkaline, its normal state. May it not act, he suggests, upon the exudations from the tissues so as to prevent alkaline fermentation, and thus prevent the formation of pus?

This subject is of great interest, and its consideration by Dr. Hewson, will furnish an article in the next Pennsylvania Hospital Reports.

I observe, by a circular sent me, that an earth-closet company has been established in this country, at Hartford, Connecticut. This will, I hope, secure the speedy introduction into use of this valuable invention. Yours, very truly, J. E. M.

FROM BERLIN TO VIENNA.

VIENNA, JANUARY 8, 1869.

DEAR EDITOR: Almost embowered among a grove of trees at the far end of a broad boulevard that skirts the crumbling old wall which formed her medieval ramparts, stands a handsome, square, stone building of the chaste Doric style, which is known as the University of Halle Saxony. Ascending a broad flight of stone steps, graced on each side by a recumbent statue of a bronze lion, we enter a high, spacious hall, around which in small wire-protected frames the announcements of lectures are posted. Another flight, and we stand upon the level of the various lecture rooms of all the departments of science. Four fluted columns of stone on each side, support the ornamented roof, extending the distance of the second and third stories. The rooms are all small, and furnished simply with the long wooden

benches of our country school houses, and a small pulpit for the lecturer. The hours of lectures are denoted by placards on the various doors, and are so arranged that several departments of science are taught in the same apartment during different hours of the same day; thus discourses on philosophy, medicine, mathematics or theology, may all be delivered in the same room. The clinical instruction always occurs in the hospital building; and except the branches of anatomy, physiology and chemistry, all the branches of medicine in this, as in all the schools of Germany, are taught there. The University of Halle numbers now some seven hundred students in all its departments—mostly theologians. The school was founded in 1694, in the old building, and received a considerable accession in 1817 by the transfer of the college at Wittenberg, the scene of Luther's action. The proximity of the city, however, to Leipsic and Berlin, injures it very materially, in its medical advantages, as the celebrities of the profession are always attracted there. Oldhausen is the professor of obstetrics at present; being, however, one of Martin's assistants, it was fair to suppose that his views were mostly imbibitions. And as our haste to Vienna was rendered urgent by the fact that most of the short courses would commence in the following week, we were fain to content ourselves with the above mentioned visit to the University.

We pushed on through Leipsic—only a day for the city and its old University, a long pile of yellow buildings, part of the Augusteum, facing the main square of the city, a hurried glance through its lecture rooms, and its aula, a large saloon of busts and statues of Saxon Princes, with twelve reliefs of the history of education, then a peep into several of the old antiquarian book stores, which only made us lament our limited means, for all the curiosities and relics of literature in all languages are there. Leipsic is the grand center of the book trade in Germany. It has some one hundred and ninety-two book stores, forty printing offices, one hundred and nine hand and one hundred and thirty-nine machine presses. During the Mässe, which are great fairs held three times a year, and which attracts "Armenians, Turks, and dwellers beyond Jordan," book dealers from all civilized lands visit the city for purchase and sale. A few years ago they erected their own exchange, which is now their business resort.

Two days travel on a rather circuitous route, carries us into Würzberg, one of the wealthy cities of the little kingdom of Bavaria, whither we have come to see and hear Scanzoni. Most of the public buildings of the city were erected at a time when Würzberg was a free

city, the capital of an episcopal see, which position it held upwards of a thousand years, under the successive jurisdiction of some eighty-two bishops. Hence the buildings have been erected with that lavishment of means which the very large revenues of such positions permit. The hospital is an immense structure, covering more than two solid squares, inclusive of the medical college in its rear. The endowment of the whole institution is some two and a half million dollars in gold; it contains about six hundred inmates, of whom not more than one-half are patients; a large, handsome bronze statue of Julius Echter, its founder, one of the city's primates towards the latter part of the sixteenth century, stands at the front. The appointments of the whole building are even much finer than those of the Charité of Berlin. The consequence of this rich endowment, is the security of a magnificent faculty, for which this institution has always been famous. Kölliker on microscopic anatomy, Bamberger on internal medicine, Recklinghausen on pathology, and Scanzoni on obstetrics, are among the most famous. The lying-in hospital stands apart from the main building, forming a neat, rather small two story stuccoed building, with accommodations for about fifty cases, which is a fair allowance for a city of only forty thousand inhabitants. By the kindness of Dr. Mundi, Prof. Scanzoni's first assistant, we were permitted to visit the building and make the rounds with him. Patients are divided into first, second and third classes, according to their means, the latter class being charity patients, and private apartments are furnished for those sad cases in the upper circles in which "a child is found for the cradle before a husband for the bed." Except one or two cases of pelvic abscess, the wards were remarkably free from disease of any character on our visit, much to our wonder, for every window throughout was as hermetically sealed as the general German hygiene in practice demands—the peculiar puerperal odor was actually sickening. The immunity of disease under such conditions can only be explained on the thorough habituation from infancy on, and the intense aversion every son of Teutonia cherishes against a draught. The babies were all bundled and rolled, and their little arms tied down inside, so that they could be lifted by any one of half a dozen hands and tossed about like a papoose with perfect impunity. The delivery bed was elevated at the back to such an extent as to cause the assumption of a semi-recumbent posture in labor, resembling no little some of the old Gebär Stühle or delivery chairs, which were so common in Germany fifty or sixty years ago, and which are now universally discarded. The lec-

ture room contains a very fine array of instruments and a valuable collection of deformed pelves; the original Robert's pelvis, in which the transverse diameter was contracted to two inches, while the conjugate remains normal, being among the number. Among the novelties may be mentioned a peculiar cephalotribe, an invention of Scanzoni's, which merits a description. In addition to the two blades of the ordinary cephalotribe, the instrument was provided with a perforator, whose extremity was a pointed ovoid of perhaps an inch in diameter, the outer surface grooved or threaded like a screw; after the cephalotribe is applied in the usual manner, the perforator is passed between the handles, thrust through the cranium or fontanelle, as the case may be, and then carried on through the brain until its point ledges in the foramen magnum, several turns of the handle screw it into the foramen, when the handle of the perforator is attached to the handles of the cephalotribe by a clamp. The advantage claimed for it is solidity of grasp; the attachment at the base of the head and in its most unyielding bone, even into the commencement of the spinal canal, will not permit it to glide. We were informed that on the manikin the instrument worked charmingly; an opportunity for its application in utero had not, as yet, presented. The only objection that occurred to us, would be the adjustment of the machine, for its complicated character certainly entitles it to that name. A finger, provided with the educated obstetrical eye, might recognise the foramen, if it could reach it; but the ocularisation (?) if of the end of a twelve inch steel rod, would imply a delicacy of tactile sensibility in the hands of the manipulator, that it would require an eye of faith to take cognisance thereof. We do wrong, however, in attempting a jest on a scientific subject. If the pointed end could be fastened into the occipital bone anywhere, it is probable that it would answer the purpose. Scanzoni, himself, is a type of a gentleman and a scholar, and we could not avoid contrasting him in this light with some of his numerous detractors, who all suffer by the comparison. In person, rather portly, now that he is verging on to his sixth decade, with a genial, placid face, pleasant to look upon and that feels at peace with itself and mankind, a clear, rather full eye, beneath a lid with that redundancy of tissue which the physiognomists tell us is a sign of decision, never dull or slow of comprehension, for it shoots a quick glance out of its angles occasionally, which takes cognisance of things which are not always mentioned; in manner affable, courteous, more, even inviting, delivery easy, elegant, chaste; as he leaned on the bed, with one hand in gesture over it and one slipped

in his pocket, in perfect self-possession, expressing himself on his subject in the most beautiful language, without effort or affectation, we felt our respect for him rapidly warming from curiosity to veneration, and left him finally, in our regard, as our ideal of an obstetrician.

The discourse was on the subject of hæmatoma, selected, as he said, from dearth of material, a difficulty, we were informed, with which his clinic is frequently afflicted; yet he pictured the case so clearly and forcibly as almost to render the presence of a patient unnecessary.

Scanzoni is a disbeliever in the frequency of this disease. In twenty-five years he has met with but *three* cases in which he could conscientiously state that hæmatoma existed. Just from a school, as we were, in which this was a disease of daily diagnosis, this was rather a strange statement, explicably partly, however, from the difference of different authors' conceptions of the disease; Scanzoni only regarding those cases as blood tumors, in which an effusion really occurred in the peritoneal cavity, and that generally in the cavity of Douglas, retro-uterine; whereas, according to Martin, the most frequent seat of extravasations is between the folds of the broad ligaments, the most of which cases Scanzoni regards as simple perimetritis without effusion.

In his lecture, Scanzoni narrated a peculiar case in which it became necessary to establish a diagnosis between a hæmatoma and a retroverted pregnant uterus. The introduction of the sound, which in other cases would have been sufficient, was here, for evident reasons, necessarily excluded. By placing the patient on elbows and knees, however, he succeeded in establishing a reposition of the retroverted uterus as the case thus proved to be, and the pregnancy terminated favorably. Scanzoni is deservedly a great favorite among his patients, of whom, as you can well imagine, he has a goodly quantity, and a choice. For two visits to the Empress of Russia, recently, during one of which he was only present in case his aid might be called, he received, as his assistant informed us, some thirty thousand dollars in gold, besides a residence and a handsome equipage. He has refused a dazzling offer from Baden Baden, one of the former assistants in the hospital there informed us, as it would remove him from his school.

We were unable to see Kölliker, who would not lecture until the following day. Bamberger we met at a post-mortem by Recklinghausen. He is altogether about the last man whose outward appearance presents any index of the ability which characterises him. Small in stature, with heavy side whiskers which almost completely conceal his features; he stood there the picture of wrapt attention over an autopsy

of one of his patients which he had followed to the end. He enjoys the reputation of being one of the finest clinicians of Germany. His two late works on Diseases of the Heart and Abdomen, are considered standard.

Munich has a very fine university, a spacious stone structure, with elegant appointments, erected by the late King Lewis I, whose munificence in every respect has contributed so much towards rendering this one of the most beautiful cities of the world externally, as well as enriching her galleries and nurseries of art and science, with untold treasures within.

During our entire stay in the city, although we made it exceedingly profitable and interesting in sight-seeing, we were unable to glean anything of medical interest, on account of the inopportune season of one of the numerous church holidays, which are religiously observed by all the schools. We contented ourselves, therefore, with the purchase of photographs of Liebig and Pettenkofer, of world wide fame, and of Hecker, the present professor of obstetrics, and hastened on our way. As true disciples of Esculapius, however, we could not resist the temptation of visiting the home and haunts of Paracelsus, so that we were detained another day at Salzburg, Austria. A beautiful little city we found it, encamped down amongst some of the loveliest scenery which nature could command, and rich in historical interest. Mozart's birthplace and home, Hayden's home, the residence of the family of Weber, three of the world's greatest composers. What being who has ever heard the music of these three inspired men as rendered by the royal operas of these Calliope-worshiping people, who would not feel an inspiration in traversing the scenes of their daily lives? Not far from the bridge crossing the river which bisects the town, crowded in among its neighbors, stands a high house with dark weather-scarred walls, bearing about its centre a half-effaced portrait of the celebrated naturalist and empiric, Paracelsus. This was his home—nothing else to be learned of him there. His manifold virtues, which he himself heralded forth trumpet-tongued, have not been sufficient to have preserved a single relic of our hero's greatness. The first half dozen whom we interrogated, could not direct us to his house. A little more than three centuries have elapsed since our great medical Munchausen, the prince of braggarts, flourished in the hight of his glory, healing diseases like the traveling charlatans who take up a temporary abode in our western cities until suffering humanity elsewhere makes a sudden call for relief in other quarters; but his reputation has been, alas! almost as evanes-

cent as theirs. Paracelsus adopted every precaution to propagate his name and fame to posterity. In the vestibule of the church of St. Sebastian, there is a large monument built into the wall over his grave, a tall column of red marble of obelisk shape, resting on a square base, on the anterior surface of which a scroll bears the following modest epitaph: "Insignis medicinae doctor, qui dira illa vulnera lepram podagram hydropsim aliaque insanabilia corporis artes subtulit."

Another day *en route* and we are snugly domiciled in Vienna, the place of the present writing; and still another beholds us in avail of the magnificent advantages of the clinics of, perhaps, the most practical school of medicine in the world, of which, anon.

WHITTAKER.

BIBLIOGRAPHY.

A TREATISE ON THE DISEASES OF THE EAR.

BY ANTON VON TROLTSCH, M. D.,

Professor in the University of Wurzburg. Translated by D. B. St. John Roosa, M. D., Clinical Professor of the Diseases of the Eye and Ear in the University of New York. Second American, from the Fourth German Edition. Wm. Wood: New York, 1869. For sale by C. P. Wilder, Indianapolis; Robert Clarke & Co., Cincinnati.

No branch of the noble art of healing has been so much neglected as that of aural surgery. This neglect has certainly been due to a very general impression that very little could be done for the affections of the organ in question. But a patient and concentrated attention given to its pathology, has lately done much to enlighten the obscurity surrounding the subject, and demonstrated the practicability of doing much for the relief of aural diseases. This is certainly a *desideratum*, when we consider how frequently they present, and how generally one of the most important senses is thereby impaired. To the busy, general practitioner, few sources of information on this subject, have been accessible. In fact, hitherto, the only one was the very excellent work of Toynbee.

In the volume under consideration, the medical man will find a complete exposition of all that relates to aural science, with all the latest improvements in treatment, which have done so much to force a recog-

nition of the importance of this branch of the medical art. It is a consideration of facts, garnered in years of patient investigation and practice. The book is presented in the form of lectures, but is much more systematic than is usual in such arrangement. The classification and nomenclature of diseases, is not entirely satisfactory, after having considered the admirable system of Toynbee; but this is a point of minor importance, especially when the great practical excellence of the book is so patent. Every detail of practice is thoroughly illustrated and explained; more than a hundred pages being devoted to the most improved plans of examining the outer ear, the use of the eustachian catheter, and Politzer's and Valsalva's methods of investigating the diseases of the tympanum. The anatomy of the organ is given in a clear but concise manner. As regards therapeutics, the most approved plans and agents are minutely considered. Most of them will be found to be novel; but, based as they are, on simple principles of science, will command confidence.

The American physician is deeply indebted to the translator for presenting this admirable work, as well as for his translation of Stellwag on the Eye, the latter, filling, as it did, a wide chasm in English ophthalmological literature. J. G. R.

PATHOLOGICAL ANATOMY OF THE FEMALE SEXUAL ORGANS.

BY JULIUS M. KLOB, M. D.,

Professor in the University of Vienna. Translated by Joseph Kammerer, M. D., and Benjamin F. Dawson, M. D. New York: Wm. Wood & Co. For sale by C. P. Wilder, Indianapolis; Robert Clarke & Co., Cincinnati.

This translation, first issued about a year since by a New York firm no longer in existence, has now become the property of the veteran publishers, Wm. Wood & Co. In a previous number of the *Journal, we made a brief analysis of the book, giving it such hearty commendation as its careful study led us to believe was quite just. By the judgment then expressed we are quite willing to abide. The highest critical †authority in Great Britain in our profession, has recently, January last, spoken of it thus: "A translation of *Klob's Patholog-*

*Western Journal of Medicine, 1866, page 376.
†British and Foreign Medico-Chirurgical Review.

ical Anatomy of the Female Sexual Organs, has been fairly accomplished by Drs. Kammerer and Dawson, of New York, and we welcome it here as a work of great use to those whose attention is specially directed to those organs." T. P.

PENNSYLVANIA HOSPITAL REPORTS, VOLUME 11, 1869.

Philadelphia: Lindsay & Blakiston. For sale by C. P. Wilder, Indianapolis; Robert Clarke & Co., Cincinnati.

The contributors to this handsome volume are Drs. Hewson, Morton, Da Costa, Hutchinson, Edward Hartshorne, Ashhurst, Hunt, J. F. Meigs, Packard, Agnew, Harlan, Richardson and Pepper.

As our talented Philadelphia correspondent, Dr. J. Ewing Mears, proposes the consideration of this volume in a future communication, we will now merely say that these reports are nearly, if not quite, equal to those for 1868, and that they are creditable alike to the editors and publisher. We hope both parties may be encouraged by seeing this annual widely circulated. T. P.

A HAND-BOOK OF UTERINE THERAPEUTICS, AND OF DISEASES OF WOMEN.

BY EDWARD JOHN TILT, M. D.

Second American edition, thoroughly revised and amended. New York: D. Appleton & Co. Received through Bowen, Stewart & Co., Indianapolis.

The author has revised the third British edition of his well known work, for re-publication in this country, and contributes a preface to this American issue.

A communication made a few months since to the *Lancet*, and which struck us as being of such interest that we re-published it in this *Journal*,* constitutes a large portion of this preface. In the course of it, Dr. Tilt compliments "the splendid achievements of those American surgeons who have taught us that we can safely remove ovarian tumors, and how to cure vesico-vaginal fistula;" and justly speaks of his admiration of "the surgical genius, great skill, and the perfect honesty of purpose that characterize Dr. Marion Sims, who is an honor to his country and to our profession."

Western Journal of Medicine, 1868, page 310.

The author states that the main points to be developed in "*Uterine Therapeutics*," are:

"*Firstly*—The paramount importance of hygiene for the relief and cure of diseases of women.

"*Secondly*—The constitutional nature of many diseases of women, and the impo sibility of curing them without constitutional remedies.

"*Thirdly*—The manifest reaction of uterine diseases on the female system, and the impossibility of curing many uterine complaints, without surgical measures.

"*Fourthly*—The great value of therapeutics to assuage and cure diseases of women, and the belief in the value of those remedial measures, that are as old as medicine itself—such as venesection, emetics and caustics."

The preface concludes thus:

"It affords me very great pleasure to shake hands, as it were, in this preface, with so many valued American friends. A common language unites the members of the same profession in America and Great Britain, by the strongest bonds of affection; and there is no danger of it being severed by difference of climate and form of government, or even by those occasional causes of misunderstanding that, for party purposes, are magnified by professional wire-pullers.

"This union of the two professions is the type of the perfect unity that should ever exist between the great Anglo-Saxon nations, to whom Providence has given progenies to people the waste places of the earth, and the firm determination to weigh more and more heavily in the scale of nations for the welfare of mankind."

Following the preface, is the *Introduction*, in which various topics are discussed, e. g., Difficulties Besetting the Study of Uterine Complaints, Lady Practitioners and their Chances of Success, Old and Modern Pathology, Diseases of Women to be Studied by the Light of Menstruation, *et cet.*, *et cet.*

The following observations we commend to all our readers, especially to the junior members of the profession:

"To be successful in the treatment of the diseases of women, a young medical man should make women the study of his life, so as to understand their mental peculiarities as well as their physical constitution; and if, with equality of medical skill, the senior practitioner is much more successful in the treatment of women than the junior, it is that he has discovered how to bespeak their confidence, to stimulate their hope, and to keep up their perseverance until the recovery of health."

The conclusion of this chapter, too, is admirable:

"We must trust in nature, and believe that an Almighty power is operating in the human frame, ever working to restore health by successive changes and renewals, having definite laws and successful issues, often erroneously ascribed to our remedies. Let our motto be that of the father of French surgery: "JE LA PANSAY, DIEU LA GUARIT."

In referring to female physicians, the author states that the principal reason why the knowledge of diseases of women has so little advanced, is, the hitherto undisturbed belief that one sex only is qualified, by education and powers of mind, to investigate and cure what the other sex has alone to suffer; and then a little while after, pointedly averts that the great majority of women will continue to consult us, so long as they recognize the mental superiority of man. We have quoted the author's very words, and we fail to be able to reconcile the assertion of man's mental superiority, with the retarding influence which the fact of these diseases not being made the subject of investigation and the object of cure by woman herself, has had upon the advance of knowledge of such diseases. Either the one or the other assertion is wrong.

The first chapter treats of Surgical Appliances and Modes of Examination, and will be found quite up with the most recent inventions in this department of art, e. g., the sponge tents of Dr. Ellis, prepared with carbolic acid, and those of Dr. Aveling, in which permanganate of potash is placed, both of which were presented only last year to the London Obstetrical Society, are referred to. We are somewhat surprised to read from the pen of an author whose generally chaste and classic composition we never weary of admiring, this expression: "pottering on for months." Pottering on may be forcible, but it surely does not come from the "pure well of English undefiled."

The second chapter is upon Uterine Dietetics and Home Treatment; the third, upon Tonics; the fourth, Sedatives; the fifth, Antiphlogistic Treatment; the sixth, Caustics; the seventh, Emmenagogues; the eighth, Hæmostatics; the ninth, Specifics; the tenth, Uterine Misplacements; the eleventh, Treatment of Uterine Complications; twelfth, Treatment of Sterility; thirteenth, On the Treatment and on the Prevention of Uterine Inflammation in India—a chapter which few American readers will ever find of any practical value; chapter fourteenth, Prevention of Uterine Inflammation; and, finally, Formulæ: *et cet.*

Did time and space permit, we would gladly present an analysis of some of these chapters. We must conclude, however, with expressing our very high appreciation of this book as one of eminently practical value. The physician will find its perusal exceedingly interesting, and frequent reference to it exceedingly useful. It is hardly necessary to say, since it is issued by Appleton & Company, that in paper, typography, &c., the book is all that could be desired.

T. P.

A TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD.

BY J. LEWIS SMITH, M. D.,

Physician to the Infant's Hospital, Ward's Island; Professor in Bellevue Hospital, &c. Published by H. C. Lea, Philadelphia. For sale by C. P. Wilder, Indianapolis; Robert Clarke & Co., Cincinnati.
Price, $5.75.

We believe that the profession generally, feel that there is a place and a need for a good, practical treatise on diseases of children, in American medical literature. We have good works in considerable number, by importation and translation, but we have not now, any native production that is satisfactory. Our author has probably felt this deficiency, though he makes no comparisons, but simply offers his labors so as "to meet the requirements of the medical student and practitioner."

The author has included in his treatise, something more than the mere diseases of children and infants. The first part is taken up with chapters on Infancy and Childhood, Care of the Mother During Pregnancy, Mortality of Early Life, Lactation, Selection of a Wet-Nurse, Course of Lactation, Weaning, Artificial Feeding and Diagnosis of Infantile Diseases. These topics are not treated at any great length, but afford occasion for judicious remark and advice. There are some points that we would like to have seen more elaborated. One of them is concerning the management of the mother, who has become, either directly or indirectly, syphilitic. Details of management and treatment might have been made a satisfactory feature in this chapter, inasmuch as we not infrequently meet with such cases. In his subsequent chapter on syphilis, he treats of it as developed in the child.

In the chapter on Mortality in Early Life, we have the well known causes of it given; but we think, though we may be mistaken, that New York could have afforded sufficiently forcible statistics without relying almost entirely upon those of European cities and countries. His only mention of the proportion of mortality which any particular disease shows is, that scarlet fever is one of the most fatal diseases in New York city. Another suggestive topic too briefly mentioned, is the influence of our school-system on the mortality of early life.

The chapter on Lactation contains brief but pointed remarks on its difficulties and contraindications, such as depressed nipple, too long delay before applying the infant to the breast, tuberculosis in the

mother, constitutional syphilis, inflammatory affections and mammary inflammation. Prominently among the galactagogues are mentioned the use of electrical currents and the castor oil plant. Among the anti-galactics he seems to confide somewhat in Belladonna, a matter in which he does not agree with the editor of the *Western Journal*.

We do not find anything new or suggestive in the chapter on the Diagnosis of Infantile Diseases.

Part II is the practical part of the book, beginning with Diseases of the Cerebro-Spinal System. Here we have a very proper recommendation of the opthalmoscope as a means of diagnosis in diseases of the brain. The results of its use, in the hands of Dr. Clifford Albutt and others, are sufficient to prove that it should not be confined to the specialist.

The chapter on Congestion of the Brain, is wanting in fullness of description, pathology and treatment. In such cases, the young practitioner is glad to have the benefit of the fullest experience. This deficiency is not observed in the author's treatment of the subject of Eclampsia. His remarks on the inhalation and internal use of chloroform, opium and bromide of potasium, will interest and instruct. The use of opium, where the brain is directly or indirectly concerned, requires nice discrimination, and any one who reads and follows his directions, will profit by them. This section closes with an interesting review of the subject of Internal Convulsions.

The section on Diseases of the Respiratory System, occupies about eighty pages. When we come to examine the chapters on Croup and Pneumonia, there are modes of treatment of these diseases which attract notice because of their variance from the established plans. "Loss of blood is not required in the treatment of croup." That, we presume, to be in accordance with American practice. For it are substituted aconite and veratrum viride. A fuller account of the author's experience in the use of these articles would have been better. He employs the tincture of veratrum viride "in doses of half a drop to one drop every three or four hours, for those over the age of three years." As a substitute for calomel in liquefying and removing the false membrane, he says "physicians of this city are using more and more a mixture of chlorate of potassa or of soda and muriate of ammonia given frequently." As a local remedy, he highly recommends from personal experience, the sub-sulphate of iron. He devotes some pages to Tracheotomy of Croup, giving the statistics of Drs. Krackewvizer and Voss. In the treatment of Pneumonia, he gives one drop

of tincture veratrum every three hours, to a child of five years of vigorous constitution; also, antimony with morphia, in the second stage. In feeble children he advises a different course—ipecac, carb. ammon., senega, &c. In blistering, he advises applying cantharidal collodion, in spots of the size of a ten cent piece, half a dozen or more. As the blister treatment of disease is being discussed, we mention this, with some belief in its usefulness.

We have not time to more than allude to one or two topics in the section on Diseases of the Digestive Apparatus. Cholera Infantum is one in which every physician in this country is particularly interested. He does not devote much space to it; we observe, however, that he faintly praises calomel in small doses.

Under the head of Zymotic Diseases, first appears Diphtheria. For treatment, first mention is given to sulphites; but he has no experience that would recommend them. Chlorate of potash and iron are recommended, and also local applications, such as he advises in croup.

Quite a number of important diseases of children are not mentioned. We leave the book with an impression of its incompleteness in many matters. Yet it is the basis of a good treatise. Possibly an addition of clinical matter or matured personal experience, will bring it up to the standard which the author sets up in his preface.

W. C.

OUTLINES OF PHYSIOLOGY—HUMAN AND COMPARATIVE.

BY JOHN MARSHALL, F. R. S.,

Professor of Surgery in the University College, London; Surgeon to the University College Hospital; with additions by Francis G. Smith, M. D., Professor of the University of Pennsylvania. Published in Philadelphia, by Henry C. Lea, 1868. Price, $7.50.

Nothing has appeared in our language, since the last edition of Carpenter's great work, that is comparable to this of Mr. Marshall; and, it is quite singular that it should be produced by a surgeon. Every one interested in physiology has been looking and waiting patiently for a new edition of Carpenter, which should bring us up to the latest accumulations of this subject; but it is to be feared our expectations will not be realized. But Mr. Marshall has given us a work equal in arrangement, and more full and satisfactory on many of the

topics than Carpenter's. So that while expressing our regrets for the apparent close of this great man's labors, we can rejoice in the successful work of the new author.

I wish I could spare the time to offer an extended review of this superb work. It really merits an elaborate comparison with other recent and familiar works, not for the purpose of showing its superiority, so much as to exhibit the rapid and splendid development this attractive science is making. Physiology may be studied in this work from the lowest forms of vegetable and animal existence, to man, the richest and noblest observer of all the marvelous works of the Creator.

Science has discovered that a law of *progression* actually pervades the whole universe, not in the sense of the Darwinian, or kindred theories of *universal development*, which have no established facts nor stringent analogies to sustain them; but the unbroken series in the works of nature which present themselves from the phenomena of bare forms up to the highest manifestations of organization and the vital forces.

In the presentation of the cell doctrine, Mr. Marshall makes allusion to a subject that I have never seen referred to by any other writer, but which I have ventured to teach for fifteen years past as a reasonable inference from the phenomena of all proliferation, and that is, that each tissue and organ is represented in the spermatazoon, when it penetrates the germ cell or ovum of the female and finds there the peculiar pabulum for the beginning of organization. In other words, the different organs of the body cast off imperfect cells or gemmules, which in the generative organs becomes elaborated into the spermatazoa. I do not say that the reader will find the statement I have made so definitely stated; but well defined allusions are made to it.

In a most interesting department, this work falls below our wishes, and that is, in those profound, yet luminous psychological and metaphysical discussions into which Carpenter has entered in his views of the structure and functions of the brain.

I have been struck with the prominence which many of his original views have in recent works, such as Luys (French) on the *Nervous System*, and Maudsley's *Physiology and Pathology of the Brain*, which latter seems to be leading some into the unsatisfactory doctrines of materialism. And while both writers use freely Carpenter's scheme, they are devoid of that reverence and veneration of God which marks that great man's work.

For the present at least, the vaunted pride of science had better

accept the statement of Prof. Tyndall in his recent address as president of the British Association: "That while a definite thought and a definite molecular action may occur simultaneously in the brain, we do not possess the intellectual organ, nor, apparently, any endowment of the organ which would enable us to span by a process of reasoning, from the one phenomenon to the other."

One thing is always to be regretted in the re-publication of English works by the house to which we are indebted for so many, and that is, the miserable wood-cuts; they usually disgrace the works which they are intended to illustrate. Why not get them from our transatlantic friends, if we can not get them made here? C. G. C.

EDITORIAL AND MEDICAL NEWS.

We hope the meeting of the American Medical Association at New Orleans will be largely attended. For years, a great gulf divided between north and south; and now that gracious peace has bridged that gulf, now that the "war-drum throbs no longer," and all battle-flags are furled, the devotees of Medicine—which knows neither clime nor caste, neither political nor sectarian beliefs, which is all-embracing the race as the atmosphere the earth—ought to hasten together with the throbbing of fraternal hearts and to the grasping of fraternal hands. Let the men of the north and of the south, of the east and of the west, meet together in an everlasting peace, revive old memories of harmony and union, and inaugurate new measures for the honor, the dignity and usefulness of the profession. Space does not permit us to urge upon our readers the importance of sustaining by sympathy, and by presence at its annual convocation, the American Medical Association, and especially of attending this New Orleans meeting; nor can we urge certain subjects which we hope will be presented to the Association. However, there is one thing we want to suggest to our brother editors, viz: That we have a meeting of our own at New Orleans, sometime during the period when the Association is in session. We can meet together, become better acquainted, agree, possibly, upon some plan of medical education, for example, upon the most advisable scheme of State medical legislation, and advocate these measures in our journals. What say you, gentlemen of the medical journals, to this suggestion?

LIST OF QUESTIONS AT THE RECENT EXAMINATIONS IN THE MEDICAL COLLEGE OF OHIO.

Prof. Blackman: Surgery—

1. What is an abscess and how diagnosed?
2. Definition and treatment of aneurism.
3. Describe Carden's amputation at knee-joint.
4. Indications for trephining cranium.
5. Best method of reducing verticle luxation of patella.
6. Describe ordinary operation for strangulated oblique hernia.
7. Difference between Colles' and Barton's fracture of radius.
8. Diagnosis between luxation of humerus and fracture of the neck.
9. Differential diagnosis of fracture of neck of femur and luxation on dorsum ilii.
10. Characteristics of luxation in sciatic notch.
11. Best method of reducing luxation of femur.

Prof. Graham: Theory and Practice of Medicine—

1. What are the physical signs of different stages of pneumonia?
2. In valvular disease of the heart, how find the particular valve affected?
3. Diagnose between remittent and typhoid fever.
4. Diagnose between peritonitis and enteritis.
5. Diagnose between lumbago and nephritis.
6. How would you treat a case of acute dysentery?

Prof. Wright: Obstetrics—

1. What are the boundaries of the inferior strait?
2. Name the vertex presentations and the one most frequent.
3. What direction must the *face* assume to make a natural labor?
4. What are the *positive* signs of labor?
5. How manage prolapse of funis in *first* stage of labor?
6. Give symptoms and treatment of puerperal fever.
7. How treat puerperal convulsions?
8. Give signs of rupture of uterus in labor.
9. How treat *unavoidable* hemorrhage?
10. How treat retained placenta?

Prof. Comegys: Physiology—

1. Describe a cell.
2. How is food classified, how digested and how absorbed?
3. What are the chief constituents of the blood and what is the average proportion to the weight of the body?
4. What time is required for the whole to pass through the heart?
5. How rapid is the capillary circulation, and what condition of the vessels is necessary to maintain the normal movement?

6. What effect on the capillary movements results from increased heart action in fever?

7. What is the theory of respiration?

8. What amount of space for each person should be allowed, due regard to ventilation being had?

9. What constitutes a nervous system, and what are the functions of its parts?

10. Give an example of excito-motor, sensori-motor and ideo-motor acts.

Prof. Parvin: Medical and Surgical Diseases of Women—

1. What are the normal dimensions of the unimpregnated uterus?

2. How would you distinguish a simple from a specific vaginitis?

3. The differential diagnosis of a fibroid of the posterior wall and retroflexion of the uterus.

4. Diagnosis between uterine prolapse and hypertrophic elongation of the infra-vaginal neck.

5. The treatment of asthenic amenorrhœa.

6. The treatment of intra-uterine polypus.

7. The treatment of epithelioma of the uterine neck.

8. The treatment of uterine catarrh.

9. How are ulcers of the neck of the uterus divided?

10. The different methods of treating the pedicle in ovariotomy.

Prof. Gobrecht: Anatomy—

1. Describe a rib.

2. Describe a bony thorax.

3. What parts are necessary to form *any* movable joint.

4. Describe the hip-joint.

5. What muscles form the quadriceps extensor cruris, and how are they inserted?

6. What is a satellite muscle (give an example)?

7. Describe the heart.

8. Give the coats of an artery.

9. Describe the lungs.

10. Give the principle divisions of the encephalic nervous mass.

Prof. Bartholow: Materi Medica and Therapeutics—

1. Give rule for administering arsenic.

2. Write a prescription containing Fowler's solution.

3. Describe physiological effects of Calabar bean.

4. What is the nature of the physiological antagonism of morphia and atropia?

5. Under what circumstance would you prescribe morphia and atropia together?

6. Describe the physiological effects of the bromides.

7. What is the therapeutic value of oil and water in the treatment of skin diseases?

8. Give rules for the hypodermic use of remedies.

9. Describe the preparation of calomel.

10. How administer tartar emetic to produce emesis?

Prof. Seely: Diseases of the Eye and Ear—

1. Of what does the organ of sight consist?
2. How many bones enter into the composition of the orbit, and name them?
3. Name the ocular muscles, give their origin and insertion, and the nerves that inervate them.
4. Give structure of the lids.
5. Define accommodation, by a change in what structure is it brought about, and what produces the change?
6. What is the macula lutea, and what the blind spot of Mariotte?
7. Bound the anterior and posterior chamber.
8. What are granulations, divisions, diagnosis, etiology and treatment?
9. Iritis, what its diagnosis, cause, and treatments?
10. What is cataract?

Prof. Conner: Chemistry—

1. Define *base, acid, salt, haloid, body*, with examples of each.
2. *Iodine*—From what source obtained, physical properties, combination with other elements, methods of distinguishing iodide from bromide of potassium.
3. *Iron*—Oxides, method of preparing *hydrated sesquioxide* for use in cases of poisoning by arsenic.
4. *Lead*—Physical properties, oxides, lists, effect as poison.
5. General difference between *inorganic* and *organic* compounds.
6. *Carbolic Acid*—From what source obtained, physical properties, solvents of, strength of saturated aqueous solution.
7. *Products of Decomposition of Mineral matter*—Action upon lead pipe of water containing decomposing animal matter; method of purifying water containing animal matter.
8. *Disenfectants*—Classes of, actions of, those commonly employed, methods of employing them.
9. *Alkaloids*—In general, from what obtained, physical properties? Morphia and quinine, how distinguished one from the other?
10. *Urine*—normal and abnormal constituents—tests for each.

THE COMMENCEMENT exercises of the Medical College of Ohio took place on the 1st of March. Judge Dickson—whose scholarly, thoughtful and useful *address upon the occasion, we are sure our readers will rejoice in having the opportunity of reading—represented the trustees in conferring the degrees. Prof. Graham delivered the valedictory, its subject being *Faith in Medicine*, and it is needless to add, that in composition it had the peculiar, vigorous and logical style which characterize the author's habits of thought, and that it was delivered with that graceful oratory which all who have ever heard Prof. Graham know that he possesses.

*In this address, page 197, line 36, for "connected" read associated; also, page 196, second line from foot of page, for "true" substitute good.

GRADUATES OF MEDICAL COLLEGE OF OHIO, SESSION 1868–69

S. W. Anderson, - - Ohio
Henry J. Abbett, - - Kentucky
John D Axline, - - - Ohio
Charles F. Basford, - - - Ohio
William E. Burch, - Kentucky
Daniel N. Brown, - - - Ohio
John H. Bruce, - - - Ohio
Clinton Brown, - - - Ohio
Joseph R. Ballard, - - Ohio
Simon L. B. Blacke, - - - Ohio
Samuel L. Beeler, - - Ohio
A. L. Chenoweth - - - Ohio
Geo. B. Crawford, - - Ohio
Robert H. Calvert, - - Indiana
Robert H. Culbertson, - Indiana
Perry D. Covington, - - Ohio
Lawson Drais, - - - Ohio
Eber G. Dorr, - - - - Ohio
W. Elijah de Courcy, - Kentucky
Jesse O. Davy, - - - Ohio
S. B. Emerson, - - - Ohio
John Ford, - - - - Ohio
Elijah W. Ford, - - - Ohio
John P. Freeland, - - Indiana
John B. Graham, - - Indiana
Douglass H. Harding, - Indiana
Thomas H. Harrison, - Indiana
P. C. Holland, - - - Indiana
S. S. Horne, - - - Indiana
Henry Haacke, - - - Ohio
Asa B. Isham, - - - Ohio
William H. Jones, - - Kentucky
J. S. Kelsey, - - Indiana
John E. Markle, - - Indiana
J. B. F. Morgan, - - - Ohio
Dennis F. Moss, - - Indiana
I. W. McGinnis, - - Kentucky
John Mackoy, Jr., - - Kentucky
Thomas C. Moore, - - Ohio
John G. McVay, - - - Ohio
Samuel B. Morgan, - Indiana
Nathan T. Noble, - - - Ohio
Thomas Orr, - - Kentucky
Geo. B. Orr, - - - - Ohio
T. S. Potter, - - - Ohio
Lieutellis L. Porter, - Pennsylvania
L. S. Rice, - - - - Ohio
John C. Rickey, - - Illinois
Theodore N. Rafferty, - Indiana
Robert G. Redd, - - Kentucky
William H. Rogers, - Indiana
Henly C. Rutter, - - - Ohio
John C. Sloan, - Pennsylvania
William G. Smith, - Indiana
N. W. Spring, - - - - Ohio.
Oliver H. Saxton - - - Ohio
Beverly W. Sullivan, - Indiana
Edwin I. Thorn, - - - Ohio
William E. Tucker, - - - Ohio
Waddy Thompson, South Carolina
George F. Thomin, - - - Ohio
Will. W. Vinnedge, - - Indiana
Daniel Wilson, - - Indiana
J. Owen Wall, - - - Ohio
Jno. H. Williard, - - - Ohio
James M. Wood, - - - Indiana
Jonathan M. Wright, - - Ohio
Holmes T. Wilson, - - Ohio
Jeff. D. Young, - - - Ohio
Martin V. Young, - - Indiana

Internes appointed at the Hospitals:

CINCINNATI HOSPITAL.

S. W. Anderson, - - - Ohio
J. W. Dawson, - - - Ohio
J. L. Quinn, - - - - Ohio
J. B. Ritchy, - - - Ohio
H. Illoway, - - - - Ohio
W. W. Vinnedge - - - Indiana

GOOD SAMARITAN HOSPITAL.

W. Elijah de Courcy, - Kentucky
Henry C. Hutter, - - - Ohio
E. J. Galbraith, - - Indiana

AMERICAN MEDICAL ASSOCIATION, south-west corner Broad and Pine streets, Philadelphia. Wm. B. Atkinson, M. D., Permanent Secretary. The twelfth annual session will be held in New Orleans, Louisiana, May 4th, 1869, at 11 A. M. The following committees are expected to report:

On Diseases of the Cornea, Dr. J. S. Hildreth, Illinois, chairman.

On cultivation of the Chinchona tree, Dr. Lemuel J. Deal, Pennsylvania, chairman.

On Excision of Joints for Injuries, Dr. J. B. Reed, Georgia, chairman.

On Alcohol, and its Relation to Medicine, Dr. John Bell, Pennsylvania, chairman.

On the Cryptogamic Origin of Disease, with Special Reference to Recent Microscopic Investigations on that subject, Dr. Edward Curtis, U. S. A., chairman.

On Operations for Hare-Lip, Dr. A. Hammer, Missouri, chairman.

On Clinical Thermometery in Diphtheria, Dr. Joseph G. Richardson, New York, chairman.

On Inebriate Asylums, Dr. C. H. Nichols, D. C., chairman.

On the Influence of the Pneumogastric Nerve on Spasmodic and Rythmical Movements of the Lungs, Dr. Thomas Antisell, D. C., chairman.

To Examine into the Present Plan of Organization and Management of the United States Marine Hospitals, Dr. D. W. Bliss, D. C., chairman.

On the Utilization of Sewerage, Dr. Stephen Smith, New York, chairman.

On the Influence of Quarantine in Preventing the Introduction of Disease into the ports of the United States, Dr. Elisha Harris, New York, chairman.

On Nurse Training Institutions, Dr. Samuel D. Gross, Pennsylvania, chairman.

On Commissioners to aid in Trials Involving Scientific Testimony, Dr. John Ordronaux, New York, chairman.

On Annual Medical Register, Dr. John H. Packard, Pennsylvania, chairman.

On Devising a Plan for the Relief of Widows and Orphans of Medical Men, Dr. John H. Griscom, New York, chairman.

On Veterinary Colleges, Dr. Thomas Antisell, D. C., chairman.

On Specialties in Medicine, and the Propriety of Specialists advertising, Dr. B. Lloyd Howard, Maryland, chairman.

On Library of American Medical Works, Dr. J. M. Toner, D. C., chairman.

On Vaccination, Dr. Henry A. Martin, Massachusetts, chairman.

On the Decomposition of Urea in Uræmic Poisoning, Dr. H. R. Noel, Maryland, chairman.

On the Best Method of Treatment for the Different Forms of Cleft Palate, Dr. J. R. Whitehead, New York, chairman.

On Rank of Medical Men in the Navy, Dr. N. S. Davis, Illinois, chairman.

On Medical Ethics, Dr. D. Francis Condie, Pennsylvania, chairman.

On American Medical Necrology, Dr. C. C. Cox, Maryland, chairman.

On Medical Education, Dr. J. C. Reeve, Ohio, chairman.

On Medical Literature, Dr. E. Warren, Maryland, chairman.

On Prize Essays, Dr. S. M. Bemiss, Louisiana, chairman.

On the Climatology and Epidemics of Maine, Dr. J. C. Weston; New Hampshire, Dr. P. A. Stackpole; Vermont, Dr. Henry Janes; Massachusetts, Dr. H. I. Bowditch; Rhode Island, Dr. C. W. Parsons; Connecticut, Dr. E. K. Hunt; New York, Dr. W. F. Thoms; New Jersey, Dr. Ezra M. Hunt; Pennsylvania, Dr. D. F. Condie; Maryland, Dr. O. S. Mahon; Georgia, Dr. Juriah Harris; Missouri, Dr. Geo. Engelman; Alabama, Dr. R. F. Michel; Texas, Dr. T. J. Heard; Illinois, Dr. R. C. Hamil; Indiana, Dr. J. F. Hibberd; District of Columbia, Dr. T. Antisell; Iowa, Dr. J. C. Hughes; Michigan, Dr. Abm. Sager; Ohio, Dr. T. L. Neal; California, Dr. F. W. Hatch; Tennessee, Dr. B. W. Avent; West Virginia, Dr. E. A. Hildreth; Minnesota, Dr. Samuel Wiley; Virginia, Dr. W. O. Owen; Delaware, Dr. L. B. Bush; Arkansas, G. W. Lawrence; Mississippi, Dr. —— Compton; Louisiana, Dr. L. T. Pimm.

Secretaries of all medical organizations are requested to forward lists of their delegates as soon as elected, to the Permanent Secretary.

Any respectable physician who may desire to attend, but can not do so as a delegate, may be made a *member by invitation*, upon the recommendation of the Committee of Arrangements.

W. B. ATKINSON.

AMERICAN MEDICAL ASSOCIATION—Meeting at New Orleans, Tuesday, May 4th, 1869.

I am authorized by the Atlantic & Mississippi Steamship Company of St. Louis to say, that they will carry doctors and their ladies to attend the meeting of the Association, at the following rates, viz:

From St. Louis to New Orleans, each passenger,	$20.00
" Cairo " " " "	18.00
" Memphis " " " "	15.00
Returning,	
From New Orleans to Memphis, each passenger,	$15.00
" " " Cairo, " "	18.00
" " " St. Louis, " "	20.00

The Company start a first class steamer from St. Louis every forty eight hours, Sundays included, and the usual time from St. Louis to New Orleans, is about six days, and from Cairo to New Orleans, about four and a half days. Passengers can go on any of their boats at the above rates, which includes meals and state-rooms.

The steamer which will, however, take down the great body of the doctors wishing to travel by the river, will leave St. Louis at five o'clock P. M., on Wednesday, the 28th of April; Cairo on Thursday evening, after the arrival of the afternoon train on the Illinois Central Railroad; and Memphis on Friday evening, reaching New Orleans from Monday noon to Tuesday morning.

Parties arriving by railroad, to take this boat, at either St. Louis, Cairo, or Memphis, had better make their calculations to reach the point of embarkation, at least one train in advance of the time of the boat's departure. But, if any one should arrive at Cairo or Memphis too late for this boat, he will find one or more boats passing for New Orleans every day, at ordinary fare.

It was deemed best to make the arrangement for a definite fare each way, so that one can go either down or up, or both, as he may choose, by the river, and know in advance just what he will have to pay.

To avail himself of this boat, one may apply on board, making it known that he is on his way to attend the Association, or, perhaps, better write me a line as early as convenient, stating how many ladies, if any, will accompany him.

Good steamers also leave Louisville for New Orleans every two or three days, occupying from six to seven days in the passage down. If a considerable number of doctors should wish to take passage from Louisville, and would make application in a body to E. T. Sturgeon, Superintendent Louisville & New Orleans Packet Company, at Louisville, or the Captain of a Steamer, starting at the proper time, he would probably give them a liberal reduction from the ordinary fare, which varies from thirty to forty dollars, acccording to the style and accommodation of the boat.

From Cincinnati, no suitable boat can be taken through to New Orleans, but the Cincinnati & Louisville U. S. Mail Line, will take one going to the Association, from Cincinnati to Louisville, on one of their fine boats, and from thence to New Orleans by rail, for forty dollars, and return him on the same route to Cincinnati, free. Two Mail Boats leave Cincinnati every day at twelve M., and six o'clock P. M., except Sundays, one at twelve M. I am not advised as to what arrangements have been made with other railroads. JAMES F. HIBBERD, M. D., *Richmond, Ind.*

A SUBSCRIBER in Missouri presents the following interrogatories, and we shall be very grateful if some of our readers will respond to them; indeed we believe the *Journal* can be rendered especially interesting and instructive, by having a department devoted to the presentation of professional inquiries and answers to them:

"What is the pathology of dropsy setting in suddenly, in cases where persons have been constant drinkers for years? Is it necessary in such cases of dropsy, that some organic lesion of the heart should be first superinduced? Is dropsy affecting persons who have drunk say from five to ten years, ever curable? What is the most rational treatment in such cases? Having had a large experience in cases similar to the above named, and not finding any very satisfactory description of them in any work, I take the liberty of making the above inquiries."

AN INDIANA physician recently wrote us, protesting against that feature of the law, recently before the Indiana Legisiature, to regulate the practice of medicine and surgery, which permits a man, no matter how infamous a quack he may be, to continue his nefarious trade, if he has been engaged in it for at least ten years—thus recognizing long continuance in crime as a license.

We must frankly say that we have but little faith in any law being sustained in the courts, should the test be made, which interferes with those already engaged in practice. A right once even tacitly granted

by the State, and accepted and exercised, can not readily be withdrawn; or, in other words, an *ex post facto* law will not be upheld. And our hope for better qualified physicians is not in legislating for those who are already in the profession, but for those who are yet to enter it. But be this as it may, one thing is certain, as long as colleges are dependent upon students for support, a higher standard of qualifications for license or diplomas is not soon probable; and hence, the great step to be taken is, *divorce teaching from licensing*—let the men who examine and give degrees, have no connection whatever with medical colleges—be entirely independent of them. But we must defer other remarks upon this subject to a future number.

AT A MEETING of the Covington and Newport Medical Society, held at Covington, Kentucky, February 19th, 1869, at the residence of Dr. R. Pretlow, the death of Wm. Hays was announced, whereupon a committee consisting of Drs. T. N. Wise, Henderson and Jessup, was appointed to draft resolutions expressive of the sense of the Society in regard to the sad event. The committee reported the following:

WHEREAS, It has pleased Almighty God, in the wise dispensation of his Providence, to take from among us our friend and co-laborer, Dr. Wm. Hays, in the morning of his professional usefulness; therefore,

Resolved, That we proudly bear testimony to the calmness with which our friend met the rapid approach of the fell destroyer, death, and that we are beyond measure gratified in knowing that it found him all prepared.

Resolved, That we sincerely deplore the death of our friend, who had bound himself with strong cords to our hearts, by a most consistent professional deportment and his many manly virtues.

Resolved, That in the death of Dr. Hays, our profession has lost one of its brilliant ornaments, and society a most useful member.

Resolved, That the Medical Society offers to the bereaved family of Dr. Hays our warmest and most heartfelt sympathy.

Resolved, That a copy of these resolutions be published in the city papers and in the Cincinnati medical journals, the *Western Journal of Medicine*, the *Richmond and Louisville Medical Journal*, and that a copy also be sent to the family of the deceased.

ON THE 29th of March, just as the last form of the *Journal* was going to press, we received from the office of the *Richmond and Louisville Medical Journal*, the proof-sheets of two letters from Dr. Baldwin, of Montgomery, Alabama, President of the American Medical Association, and one from Dr. J. C. Nott, formerly of Mobile, now of New York, accompanied with the statement: "Dr. Baldwin desires the medical journals of the country to publish these letters in full, or give

an analysis of them in April." The correspondence came altogether too late, even if it were not too long, for publication; and we must be content with a brief reference to some of its salient features.

Dr. Baldwin, under date of March 2d, writes to Dr. Nott, urging his attendance at the approaching meeting of the Association, states that the great mass of southern physicians are in full sympathy with the Association, that the few who are dissatisfied ground their complaint upon the rejection of the Gardner resolutions in 1864; he then discusses these resolutions, as to the propriety of the action of the Association, &c., &c.; finally, promising a hospitable welcome to the delegates at New Orleans next May.

Dr. Nott replies briefly under date of March 9th, speaks of the kindness of the profession to him in New York, refers briefly to the Gardner resolutions, &c., and concludes thus: "My many old friends must throw aside all minor considerations and come forward in sustaining your efforts to maintain the true honor of the south, the dignity of the profession and the cause of humanity."

The third letter is to Dr. Gaillard. If Dr G., who lost an arm in the war, if Dr. Nott, who lost his two sons thus, and Dr. Baldwin, whose only son likewise perished in the strife, are foremost in the cultivation of amity and cordial friendship, not even the smallest fragment of the southern profession ought to feel or act otherwise.

VACCINE AGENT OF WESTERN VIRGINIA.—Dr. J. C. Hupp was appointed State Vaccine Agent a few days since by Governor Stevenson. Dr. Hupp, we believe, has filled this position since the formation of the State, and has given universal satisfaction.

OUR FRIEND Dr. J. D. Jackson, of Kentucky, requests us to make the following announcement: All the railroads in Kentucky, the "Kentucky Central" excepted, have offered *half-fare* (full fare going, return free,) to delegates attending the "American Medical Association" at New Orleans, in May next. The "Louisville & Nashville & Memphis Railway," have very kindly effected an arrangement with the roads connecting with it south, by which through half-fare tickets to New Orleans can be obtained at Louisville.

NOTWITHSTANDING the addition of four pages to this number of the *Journal*, we still find ourselves compelled to defer several matters, bibliographic, items of news, editorial notices, *et cet.*, until our next issue.

THE WESTERN JOURNAL OF MEDICINE,

(*Formerly*, "CINCINNATI JOURNAL OF MEDICINE.")

Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

VOL. IV. INDIANAPOLIS, MAY, 1869. No. V.

ACCOMMODATIVE ASTHENOPIA.

BY DR. J. G. ROGERS, MADISON, IND.

This annoying affection of the eyes, the source of so much physical and mental misery, remained a subject of pure speculation and empiricism, from the birthday of medical science almost to the present time. In the last decade, however, Donders and others, in their exhaustive researches in the physiology of the eye, have been led to a complete elucidation of the pathology of this hitherto mysterious malady, so that now it is so clear and exact that he that runs may read. As a consequence of this exact pathology, sadly too often lacking in many instances of diseases, the treatment and cure are now as fixed and certain as any thing relating to so complex a machine as the physical man can be.

Asthenopia is characterized by intermittent blurring of vision, tension around eyes and frontal region, various facial neuralgiæ, lachrymation, congestion of conjunctiva, slight intolerance of light, &c., all induced or aggravated by reading, sewing, or other close work. It is essentially an irritability of the ciliary apparatus of the eye. This irritability is due to excessive straining in the effort to accommodate the vision for near objects. This excess of effort may either be *relative*, as where, owing to debility, the muscle is not able to do a normal

amount of work in accommodating, or it may be necessitated by the condition of the hypermetropia, an abnormal proximity of retina and crystalline lens. This arrangement of the optical apparatus requires an abnormal intensity of action on the part of the cilliary muscle in all positive accommodation, such as is essential in viewing near objects. This strain can be borne without inconvenience, until the age of thirty or thirty-five years, if *not excessive*. Then, by the gradual failure of accommodative power, it will have increased to such an extent as to induce an irritability of the muscle itself, and if continued, finally, a train of reflex irritations referable to the various nerves of the head and face, and sometimes of the whole nervous system. Such cases are truly pitiable, for often the suffering has continued for years, in spite of all sorts of empirical efforts.

At a much earlier age, asthenopia will supervene, in hypermetropic eyes, if the strain *is excessive and continued*, as in all employments requiring close and fixed vision. These two varieties of accommodative asthenopia, that from hypermetropia, and that from debility, may cöincide in the same cases, and generally do, as even when the congenital defect is very considerable, unless debility assists in the evil, the powers of the cilliary muscle will be able to overcome the deficiency without any unpleasant result, until age weakens them. Hence, asthenopia is oftenest found in constitutions broken down by uterine disease, spermatorrhœa, indulgence in prostrating vices, &c. However, it is present sometimes in the most robust persons. In such cases, there is always marked hypermetropia.

The indications for treatment are to afford artificial accommodative power, and remove nervous and muscular debility and their causes. As to the latter, the requisite therapeutics, all will know and need not to be particularized. The artificial assistance to the accommodation is afforded by a convex lens. As before intimated, hypermetropia is due to an abnormal nearness of retina and crystalline lens. This makes requisite a relatively abnormal increase of convergent power on the part of the lens, in order to concentrate the rays emanating from any object on the retina. This increase of power may be obtained by interposing an artificial lens. Its strength should be proportionate to the natural deficiency. The degree of this deficiency may be determined by several methods. The simplest is that of comparing the nearest point of distinct vision in a given case, with the near point normal to that age. The working formula is as follows: Unity divided by normal near point, minus unity divided by given near point, equals the hyperme-

tropia. The denominator of the last fraction indicates the focal length of a glass which will totally annul the hypermetropia. In practice, however, it is found to be better to use a glass of somewhat less power, as the habit of over-exertion is not to be suddenly laid aside without inconvenience. Eventually, the whole deficiency may be artificially supplied.

The following cases illustrate the foregoing: S. W——, aged ten years, strong and healthy, presented herself as suffering severely from neuralgia of the forehead. In answer to questions, complained of inability to read without inducing severe pain and tension in frontal region, watering of eyes, blurring of vision, headache, &c. On careful examination by the means before noted, also by ophthalmoscope and by test glasses at distance, I found a hypermetropia of one-thirtieth, that is, a deficiency of convergent power equivalent to the force of a thirty inch lens. The asthenopia had supervened, in the course of a winter's severe study at school, the patient being remarkably diligent for one of her age. It had been increasing for six months, and lately had entirely prevented her from reading. A forty-eight inch glass was applied; with it all the discomfort was gone at once, and she was able to read for half an hour or more with ease and distinctness. She was ordered to wear *spectacles* with the same power, until all trouble had disappeared. This she did for three weeks, during which time she experienced little or no suffering, being able, in the meantime, to continue her studies at school. They were then laid aside. Vacation, with its rest, completed the cure. A year later, the same causes induced the return of asthenopia, but a short term of assistance from the spectacles again afforded complete relief. Another year has since passed; no occasion for treatment has occurred, but the little patient cherishes her glasses, well knowing, from experience, what good friends they may be in time of need, although they have brought upon her the *soubriquet* of "little old woman," a title which the serio-comic appearance of a child of ten years with spectacles, would induce one naturally to apply.

In this case, asthenopia was induced by excessive straining of accommodation in a case of marked hypermetropia.

In the following, debility coöperated with the congenital deficiency, to induce the same condition, but in a hundred fold more painful degree, and much more obstinate:

Mrs. ——, aged thirty years, when first seen, had suffered for two years from asthenopia to such an extent that the mere effort of fixing

vision for a moment induced severe frontal pains, toothache, lachrymation, palpitation of the heart, and an intolerably "nervous" condition of the whole system, even pains in the lower extremities. Coupled with this, was an inability to walk or make any marked exertion without the same exhibition of inability of the whole muscular and nervous system. The foundation of all this trouble was, chronic metritis with retroversion, which had existed for several years. On examining the eyes, I found a hypermetropia of one twenty-fourth. Number thirty glasses were ordered to be worn constantly. The habit of over exertion on the part of the accommodative apparatus, was so fixed, however, that their assistance was not kindly accepted, and no change was experienced. Thereupon the ciliary muscle was paralyzed by instillations of atropia, and it was found necessary to continue this for five months before the habit was obviated. Then the glasses were comfortably borne, and began to fulfil the indication of doing part of the work of accommodation, which, in ordinary cases, they will do from the moment of applying them. From that time to the present, two years, the irritability of the eyes has gradually lessened, and now the patient can read for a short time quite comfortably. In the meantime, the glasses are constantly worn, though at times, they are laid aside without discomfort. Moreover, by rational application of every possible means, the general nervous irritability and its cause, the organic uterine lesions, have been slowly made to succumb, until now, although yet somewhat an invalid, the patient expresses herself as enjoying a comparative elysium, when she refers to the torments she once suffered.

In practice, cases of asthenopia present themselves, affording great variety of symptoms. Some are very readily relieved by simple means; others require great perseverance with every measure that can be brought to bear. The latter, are those in which general nervous debility is prominent. All of them should be objects of careful attention from the medical man, and it is to be hoped that the profession will improve its very generally insufficient knowledge upon this subject, for then relief will be accessible to thousands of sufferers who now bear their ills with hopeless fortitude.

For a full consideration of the subject, the interested reader is referred to Soelberg Wells' late work, or Donders on *Refraction and Accommodation*, this article being merely a hurried note written for the purpose of suggesting attention to an *opprobrium medicorum* which ought no longer to remain such.

THE CONVERSION OF GRAVITY INTO ORGANIC FORCE IN RESUSCITATION FROM IMPENDING DEATH FROM OVER-DOSES OF CHLOROFORM.

BY Z. C. M'ELROY, M. D., ZANESVILLE, OHIO.

Some months since, a leading editorial appeared in a widely circulating eastern medical journal "on the medico-legal relations of chloroform," the purpose of which was to show the necessity for coroners to secure the services of "experts" to determine definitely whether death was due to chloroform in all suspected or known cases. The whole tenor of the article was so absurd, that within a few hours after the reception of the journal, a criticism was prepared, embodying the only possible definite conception of "how chloroform destroys life," consistent with the known facts of the anatomy, physiology and pathology of the human body, and sent to the editor. As the criticism had no sugar-coating, but few expectations were indulged that it would be published. But it was published, (including many typographical blunders), and elicited a short communication from a southern correspondent, commenting on it favorably, and asking for "more light" on the subject; and detailing a case of impending death from chloroform, rescued, apparently, by the depression of the patient's head and shoulders. Though considerable time has elapsed, it is no fault of mine that a reply has not been published before.

"ACTION OF CHLOROFORM.— * * * * I amputated, at the junction of the upper and middle third, the right arm of a boy four years old, in consequence of a severe injury to the limb. It required a good deal of chloroform to produce anæsthesia. After I had ligated the vessel, it was discovered that the little fellow was rapidly sinking. Several teaspoonfuls of whisky were given, as long as he could swallow, water was thrown in his face, etc. By this time, the pulse had become almost imperceptible, and the movements of the thorax had almost ceased. Just at this juncture I thought of elevating the table, and as soon as the body was brought to about an angle of forty-five, the respiration and pulse almost *immediately improved*. This was even readily observed by unprofessional persons present. * * * *

"Now, will Dr. McElroy tell me how this was brought about? Of course I know the additional flow of blood to the head caused the train of more remote vital processes which ended in recovery; but the brain was not empty, and in what way does the additional amount cause the effect produced? Does chloroform have any tendency to *decrease* the amount of blood in the brain, thereby causing the heart to fail in its functions, or does the drug directly act upon the heart?

"Hoping that Dr. M. will bring his erudition in the "Philosophy of Force" to bear on this subject, I remain very respectfully. J. C. MOBLEY, M. D.

"HERNANDO, MISSISSIPPI."

To understand the whole matter from the beginning, it may be proper to state that when death occurs from chloroform, it is always due to paralysis of the heart or lungs, or both; further, that the paralysis is invariably owing to arrest of destructive metamorphosis in the nerve masses supplying their dynamics, viz: cerebellum and medulla oblongata; and that all possible lesions are confined to the distribution of the circulation, the points of congestion determined, to some extent, by the primary failure of the heart or lungs. If the lungs fail first, they would present accumulations of the circulation; if the heart, the greater vessels, organs, &c., and no two alike, for these reasons. Hence, a very slender amount of thought and study would qualify one man, quite as much as another with large experience, to determine by *post-mortem*, whether death was due to chloroform. In replying, then, to Dr. Mobley, it may be proper to state certain fundamental propositions applicable alike to his case, and to the study of the phenomena of all organic life.

First—The hitherto regarded vital force or forces of organic life, seem to be confined entirely to the preservation of the types and forms of organs, tissues and textures, in the midst of constantly dissolving and renewing materials.

The so-called vital force, or forces, have hitherto been the great stumbling block in the pathway of investigation of the phenomena of organic life. As evidence of the truth of this first proposition, the whole of pathological anatomy, disease and death are offered, for, if the types and forms of organic life were constantly reproduced, in full dynamic integrity, all organized beings would be immortal. As an appropriate designation of the so-called vital force, or forces, and as expressive of its objects and purposes, *form force* or *architect of organization* is suggested—the preserver of form with changing material.

Second—The organizing force, that which builds up formless organic matter, as well as the various organs, tissues and textures of the human body, under the control of the form force, or architect of organization, is common to all organic nature, and is connected with the ordinary physical forces of the universe.

These two propositions, in the shape in which they are here given, are, to a great extent, original with myself, and as they are given almost for the first time in print, lack confirmation and acceptance by the

scientific world. They are assumed to be true, because they account for and explain more satisfactorily than any previous formulation of force, all the varied phenomena of organic life.

Third—That the dynamics of the human body are due, in the main, to the destructive metamorphosis of its own nerve and other tissues.

That arrest of destructive metamorphosis is death. After death, putrefactive decomposition restores the elements of organic matter back to their states in the inorganic world.

Fourth—That fluids, in or out of the human body, obey the ordinary laws of gravity, when uncontrolled by superior forces or dynamics.

Chloroform, by suspending destructive metamorphosis, arrests the liberation of force, and with the decrease of organic force, the circulation comes under the control of the ordinary laws of gravitation, and settles to the most dependent parts of its circuit in the dying body. Some parts losing blood would appear pale and flabby, while others gaining it would present congestions, &c.

With these fundamental principles for our guidance, Dr. Mobley's inquiries can be satisfactorily answered.

The facts of the boy's case, so far as they concern the present investigation, may be summed up as follows:

First—That he must have been severely shocked by the accident to the limb, rendering amputation necessary.

By shock must be understood a more or less complete suspension of nutrition, or constructive metamorphosis, as well as of oxidation, or destructive metamorphosis. These organic processes of life at the time of deepest depression, are nearly brought to a stand-still. What is called reaction, is a practical resumption of nutrition, with a largely increased waste, or oxidation, the increased waste being more generally manifested by increased temperature of the body, though occasionally by mechanical results in addition, as spasms, convulsions and tetanus.

Second—Chloroform has to be given largely and for a considerable time, to obtain the desired anæsthesia.

Third—That in obtaining the requisite degree of anæsthesia, the motor power of the heart and lungs was nearly, if not quite, suspended.

Fourth—That he was resuscitated from impending death, apparently, by placing his head and chest in a dependent position—angle of forty-five degrees, though other means were used.

A careful study of these facts, guided by the propositions hereto-

fore laid down, will, it is believed, point to and justify the following conclusions:

First—That from the shock of the accident to the patient, nutrition in his system was very nearly, if not wholly arrrested.

Second—That oxidation, waste, or destructive metamorphosis, if reaction had been established, was largely increased.

What are called *stimulants*, as alcohol and malt liquors, opium, &c., simply serve to hold this waste in partial check, while they are used. They do not add anything to the sum of the forces of life, they simply supply conditions to limit molecular transformations, both of nutrition and oxidation, but more notably of oxidation or destructive metamorphosis. Dr. M. does not say anything about his temperature either before, during, or after the operation, but it is well nigh certain that it must have been several degrees above natural, at the time the chloroform was given.

With nutrition arrested, and the waste of the body more or less increased, as would have been shown by an increase of temperature, though the waste was probably less in the nerve masses than elsewhere, as would have been shown by the state of the pupil, and the absence of mechanical phenomena, as spasms, and convulsions, the correlation of the waste, was, most likely, increased heat, which always indicates increased waste of tissue.

Third—That the chloroform, did, in fact, suspend the molecular transformations in the nerve masses furnishing the force or dynamics for the working of the heart and lungs.

Though it may never be vouchsafed to material vision to watch with the naked eye, each little molecule or particle of organic matter, break away from its highest state of organization, combining with its beloved oxygen, forming new and simple compounds, simultaneously liberating the dynamics or forces of organic life; yet, as the antecedent and consequent are definitely known, definite conceptions of the mode or modes by which the ends are accomplished, are best obtained by studying matter and force in more elementary states. Conclusions arrived at in this way, have probabilities of truth, and if they explain and harmonize all the facts, conditions and circumstances present, must be so accepted. Mental vision, however, can alone comprehend them.

Fourth—That the diminished motor power of the heart and lungs, owing to the nearly total arrest of oxidation, placed the circulation more and more under the control of the ordinary force of gravitation than it was before the chloroform was given, and as a consequence,

blood arrived at and departed from the brain and nerve masses much more slowly and imperfectly, with less of the destructive as well as life giving oxygen than was necessary to carry on destructive metamorphosis to furnish the requisite force for their functions. Diminished respiration supplied less oxygen, diminished volume of circulation less blood, than was needful for the purposes of life.

Fifth—That by depressing the head and chest of the patient, the blood, obeying the law of gravity, passed to the brain and nerve masses, the then lowest portions of the body, in fuller quantity; and with the increased volume of blood, increased quantity of destructive oxygen: the conditions being supplied, destructive metamorphosis was resumed in the nerve masses, with the result of liberating more force, and with increasing force, the lungs and heart slowly resumed their functions. Dr. Mobley then and there transmuted gravity into organic force—gravity disappearing—organic force reappearing—the correlation of one mode of force into another—with the result of saving his patient's life, for the other means employed, in the absence of the conversion of gravity into organic force, must have surely failed.

This, it seems to me, presents an understandable, and to my mental vision, a *most practical* explanation of the phenomena attending Dr. Mobley's case of impending death from the inhalation of chloroform, and the rescue of his patient by the depression of his head and chest.

ON THE INTERNAL ADMINISTRATION OF ASTRINGENTS IN HEMORRHAGE.*

BY DR. J. R. WEIST, RICHMOND, IND.

In former times, when the parts played by *nature* and *art* in the cure of disease were less definitely known than now, theory led to the administration of many and various drugs in cases of disease, and the *post hoc, ergo propter hoc* mode of reasoning, so common among physicians, decided upon their curative or non-curative influence, while the respect that attaches to the dicta of the fathers of medicine, lead, in many instances, to an almost universal belief in the remedial action of agents, that are now known to be either without influence, or decidedly harmful, in the conditions in which they were administered.

*Read before the Wayne County Medical Society, April 1, 1869.

We can not flatter ourselves with the belief that the errors of this kind are things of the past only, for it is a fact that can not be questioned, that despite the floods of light that have been thrown upon the real nature of many diseases, and the therapeutic action of most medicines during the last few decades by the aid of pathology, chemistry and the microscope, many physicians, at the present time, daily administer drugs with full faith and confidence in their medical action, whose claim to a place among the medical agents applicable to the condition observed, is unreal and unsubstantial.

Reflections of this kind lately passed through my mind while witnessing an alarming attack of pulmonary hemorrhage, and seeking to decide upon the best measures, medical and otherwise, to be instituted for the well being of my patient. Within the last few days, a serious case of uterine hemorrhage, of which I have had charge, has served to recall them; therefore, I propose to briefly present some of the conclusions arrived at in relation to the value in these cases of a certain class of medicines that have been, from almost "time immemorial," much relied on in the treatment of these same hemorrhages—pulmonary and uterine: I refer to astringents. I can hardly deem it necessary to refer to authorities, to sustain the statement that astringents are much relied on by the majority of the profession in the treatment of hemorrhage from the lungs and uterus, when scarcely an author is known to me, who, when detailing the treatment to be practiced in these cases, does not recommend their use upon the ground that their property of astringency will exert, if not a curative influence, at least a restraining one on the bleeding.

In presuming to question the truth of the opinions so generally held, in relation to the value of astringents when administered internally in the hemorrhages referred to, I do not for a moment deny that a certain remedial value may, and perhaps often does attach to them under such circumstances, only that this value comes from and is dependent on their astringent qualities.

To show what I mean, Prof. Harrison* among others, hold, in reference to the well known astringent, acetate of lead, that "its capability of arresting uterine hemorrhage has been most thoroughly tested by an enlarged experience of the entire body of the profession," and that "in hemoptysis its astringent property has been amply displayed." Now, while it is admitted that this "enlarged experience" may show that the medicine, acetate of lead, does sometimes exert some curative

*Elements of Materia Medica and Therapeutics, volume ii, page 410.

action in these cases, it entirely fails to show that it does so in consequence of any astringent quality it possesses, and that its good effects are not entirely owing to its action as a sedative. Yet this medicine, as well as alum, and the vegetable astringents, tannin, kino, catechu, rhatany, galls, &c., are administered daily in cases of hemorrhage, under the belief that they will do good in consequence of their exerting a constringing influence upon the capillary blood vessels, and the power they possess of coagulating or precipitating albumen—effects they are known to produce when externally applied to bleeding surfaces—that their action is the same, whether used as external or internal medicines.

In an effort to show that the assumption that astringents, when administered internally, control pulmonary and uterine hemorrhage by virtue of their astringency, is an entirely gratuitous one, it becomes necessary to examine the theories proposed, accounting for this supposed power, and see if they are truthful or fallacious in character.

According to Dr. Stille,* the manner in which astringents act in controlling hemorrhage, "is not regarded in the same light by all who have examined the subject." Some suppose that it is in consequence of their power to coagulate the albumen of the blood, while Dr. Headland† holds that they "act directly and especially on muscular fibre; they cause this to contract, whether it be striped and voluntary, or of the involuntary and unstriped kind." According to this view, "they are taken into the blood in a state of solution," they "pass through the walls of the capillaries to the muscular tissue," and "stimulate to contraction the unstriped muscular fibres existing in the middle coat of the arteries, in the walls of the capillary vessels, in the lining of the ducts of glands generally, in the substance of the heart, and in the coats of the stomach and intestines." How this contraction of the muscular fibre is brought about, is not very well explained. Dr. Headland, however, says that "it seems to depend somehow on the chemical power just mentioned, for astringents appear to constringe fibrinous as well as albuminous tissues by a chemical action." The "chemical power referred to," is that by which astringents coagulate and pricipitate an albuminous or fibrinous solution.

The slightest examination of the first theory, that astringents when internally administered, control hemorrhage because of their power to coagulate the albumen of the blood, will show it to be unworthy of consideration. If it is claimed that when so administered, they have

*Therapeutics and Materia Medica, vol. i, page 178.

†The Action of Medicines—Astringents.

the power of coagulating the blood within the vessels, how is it that this effect is not general? That it is not so, we know, because were it so, death would be the immediate and inevitable result. And what is the wonderful intelligence that holds in abeyance the chemical affinity, which in general, causes the coagulation and precipitation of albumen, where this substance and astringents are brought into contact, while it is being passed into the blood from the stomach, conveyed in this fluid to the heart, and from thence, in the one case, to the capillary vessels of the lungs, and in the other, to the vessels of the uterus, until the very vessels themselves are reached, which are the seat of the hemorrhage? Certainly no one who exercises his reason can conclude that in this way astringents may arrest a hemorrhage of the kind we are considering. The ground that these medicines increase the coagulability of the blood, is equally untenable. Indeed, there are no facts that give plausibility to the assumption, while all the knowledge that we have in relation to their direct action upon the blood, is inconsistent with this supposition. *"Mitscherlich, having partially immersed frogs in a solution of tannic acid, so that their blood became impregnated with it, found that the circulating fluid grew darker in color, coagulated more slowly than usual, and formed an imperfect and pasty clot." This experiment, which has been performed by others with a like result, positively contradicts the theory that astringents exercise any influence in the way of increasing the coagulability of the living blood.

To suppose that when taken into the blood in a state of solution, they pass through the walls of the capillaries to the muscular tissues, and stimulate the muscular fibres to contraction, is to believe with Mr. Headland, that as they form peculiar insoluble compounds, both with albumen and fibrin, it is "probably by virtue of their action on the latter that they are able to cause the contraction of muscular fibre, which is a fibrinous tissue," and that "the contraction thus set up chemically, is continued and propagated by the vital force of the muscle." While this view may serve well as a theory to explain the supposed action of astringent medicines, it is merely an assumption, it not even being proved that they constringe capillary vessels, or contract muscular fibres, except when they can be brought into direct contact with them. This view requires, *First*—That we assume the capillary vessels to be contracted by the action of astringents. *Sec-*

*Stille, op. cit.

ond—That this is owing to the contraction of muscular fibres. *Third*—That while these substances are passing through the blood on their way to these muscular fibres, their natural chemical tendencies are suspended, "being constrained by various forces;" and, *Fourth*—That "on the exit by secretion from the blood, they resume their original activity." Can we yield our assent to a doctrine based on such evidence? Certainly not. Although it is true that when astringents are applied to the web of a frog's foot, under the microscope, the capillary vessels are seen to become constringed, and the muscular fibres contracted, it does not follow that they ever act in a similar manner after having been received into the blood. Indeed, if we correctly understand their *modus operandi* when locally applied, it seems impossible to conclude that they ever can do so, for it seems to be pretty well established that the phenomena they are seen to produce when thus used, are the result of the strong affinity of the astringent substance for water, which it therefore abstracts from the tissues with which it is brought into contact, the constringent effect seen being actually the result of a partial desiccation of the part. It seems legitimate to conclude, that when an astringent substance is taken into the stomach in a case of pulmonary or uterine hemorrhage, this affinity will be gratified long before the medicine reaches the pulmonary or uterine capillaries.

If an appeal is made to clinical experience to substantiate the assumption, that astringents do, despite these theoretical objections, control these hemorrhages by virtue of their astringency, no positive and unequivocal testimony is obtained. If it is maintained that there are many medicines—quinine for instance—whose precise mode of action is unknown, yet whose curative influence is positively established, the truth of the claim will be unquestioned; but to my mind, the same kind of evidence has never been presented in favor of this reputed curative action of astringents as has been in the case of quinine and some other medicines, and I am so fully convinced that careful observation and dispassionate judgment will lead to the conviction that a negative result will follow, when they are administered internally in cases of pulmonary and uterine hemorrhage, in so far as such effect must depend upon their astringency, I am willing to submit the case without further argument, simply stating that I never administer them, in the kind of cases I have been considering, in the hope of obtaining curative results from this power.

CASE OF APHASIA.

BY G. W. H. KEMPER, M. D., MUNCIE, IND.

On January 3d, 1869, I was called to see, in consultation with Drs. Jump and Kerr, Mr. Thomas Stanford, residing near New Burlington, in this county.

Mr. S., at the time of his death, was seventy-four years old. His life had been characterized by extreme vigor of body and mind. For several years he was a member of our State legislature, and at various times has held minor county offices.

During the latter part of last December, he noticed that he had some trouble about taking the proper length of steps in walking. Sometimes he would, contrary to his will, step too far, and at other times not far enough. He noticed this irregularity and spoke of it to his family, but nothing serious was anticipated, until Tuesday, December 29th, when he sat down to breakfast and commenced saying grace, but kept repeating the same word for some little time. Finally, his wife spoke to him and asked what was the matter. He replied, nothing, and exclaimed "how singular," and then proceeded to eat. During all this day, his memory of words would fail him, and he found much difficulty in making known his wants. Desiring a younger son to start to school, he said, "Go to—to—to—," and seemed puzzled that he could not finish the sentence. Some one said, "To school, father?" and he replied yes. On Wednesday morning, having some business to transact with a neighbor, he attempted to write a note, but kept writing the same word. He tried for half an hour, but was compelled to give it up, although an excellent penman.

At this period, Dr. Jump was called to see him, and found his condition as follows: No pain in any locality, pulse one hundred, full and regular, tongue furred, pupils unchanged, temperature normal, appetite good as usual, no paralysis nor even numbness. Dr. Jump prescribed a mercurial cathartic, to be followed with oil or a saline cathartic in four hours, if the bowels were not moved, a warm pediluvium with mustard, restricted diet, and potass. iod. in five grain doses three times a day. Dr. Kerr, a son-in-law, who lived some distance, came on Friday and remained with him until his death.

We saw him, in consultation, at twelve M., on Sunday, January 3d. His condition was similar to what it had been since Wednesday. He

seemed cheerful and lively, and desirous of conversing, but forgot so many words that it was impossible, frequently, to understand him. He would smile at his inability to call words, and seemed much perplexed. Pointing to Dr. Kerr, I asked him if he knew him. He replied yes. What is his name? He smiled confusedly, and said, "It's —oh—it's—oh—." I named over several fictitious names, but he would reply no. I then said Kerr. He replied, "That is right." I was shown some of his writing, in which he attempted his own name as follows: "Thos. Thom. Stans." He remained in about the same condition until January 4th, at ten A. M., when he was seized with a convulsive fit, lasting about a minute and a half, and immediately expired. No *post-mortem* was made.

"PRIORITY IN THE USE OF WEIGHT EXTENSION."

BY GEO. C. BLACKMAN, M. D.,

Professor of Surgery in the Medical College of Ohio; Surgeon to the Samaritan Hospital; etc.

In the April number of the *American Journal of the Medical Sciences*, Dr. Edward Hartshorne, of Philadelphia, has published an elaborate and interesting paper under the above title, from which we extract the following:

"Some extended researches, in which I have been recently engaged for another purpose, have brought to my notice an interesting effect of second-hand quotation, and of erroneous compilation, in the European history of weight extension, which does not appear to have been noticed either in Edinburgh or London. The fact is, that the first European writer, *out of the Continent at least*, (italics ours) who definitely speaks of this mode of treating fractured thigh, and gives an unmistakable picture of the weight and its accessories, is John Bell, (*Principles of Surgery*, 4th edition, Edinburgh, 1801;) and he evidently does so without the slightest idea of suggesting anything new, although what he did present was, so far as the weight is concerned, the product of his own active and brilliant imagination."

Now, the *Chirurgical Observations and Cases* of William Bromfield, of St. George's Hospital, London, appeared in 1773. In the second volume of this valuable work, at page 111, we find the author extolling the advantages to be derived from the relaxation of the muscles in the reduction of fractures and their treatment. He then proceeds:

"Lately, indeed, I have heard that the practice is adopted by some surgeons of other hospitals in London; nevertheless, this is of as little weight almost as my

instructions were so long since, for even at this time, the advantages of this way are not sufficiently clear to some of the professors of surgery, as *short* splints and *stretched out* limbs are, by them, thought the best method of practice; *and even a large weight hung from the ankle joint, to keep the muscles of the thigh extended*, when the femur is fractured, *is not every where exploded.*"

We have placed in italics, sufficient, we think, to prove that Dr Hartshorne is himself in error in his comments on "the interesting effect of second-hand quotation, and of erroneous compilation, in the European history of weight extension," and it is evident that for many years prior to the publication of Mr. Bromfield's work, the practice which this surgeon condemns, of hanging large weights from the ankle joint in the treatment of fractures of the thigh, had been adopted by the British surgeons.

OPERATION FOR IMPERMEABLE STRICTURE OF THE URETHRA.

BY G. M. BURKE, M. D., SULPHUR SPRINGS, IND.

(Communicated by Prof. Blackman, Cincinnati.)

MR. EDITOR: The operation performed by Dr. Burke is worthy of record, not only on account of its success, but for its variety. The patient was under my care for a few weeks, at the Samaritan Hospital, and I was unable to pass the smallest sized instrument to the bladder. In one instance, the patient being fully under the influence of chloroform, administered by my friend, Dr. Schenck, of Reading, I tried with bougies and lancetted stilette, for more than an hour, but without success. I then proposed an operation by external incision, but the patient left for home on a temporary visit, and there became so much worse that he availed himself of the services of Dr. Burke, and with what success the report will show.

The only cases in which so extensive an operation has been performed, so far as we have been able to discover, are those in which it was done by Edward Molins in 1652, and by Solingen, also, in the latter part of the seventeenth century. Wiseman assisted in the first operation, and has given the details in the second volume of his *Chirurgical Treatises*, under the head of "The Ill Consequences of Gonorrhœa." At first, an incision was made in the perineum, but as with "probes and candles," the urethral passage could not be found, at the request of the patient, a few days afterwards, Molin "slit it the

whole length to the incision in perineo." The patient recovered, but a urinary fistula remained in the perineum.

For the notice of Solingen's case, we are indebted to Dr. Aristide Verneuil, who published in the *Arch. Gen. de Med.*, Paris, September, 1857, an interesting paper entitled *Note Historique et Critique Sur l'Urethrotomie Externe ou Section des Retrecissements de dehors en dedans, avant CXVIII Siecle.* We translate his remarks on the case of Solingen: "Planque, in the article *Carnosité*, having quoted a successful case of cauterization, adds: 'Van der Wiel approves this method in preference to that adopted by Solingins (Solingen) in the case of a soldier. As the Urethra, according to his report, was full of carnosities, a sonde crénelée, which allowed the urine to pass was used; but all his medications were of no avail. For this reason, he introduced a grooved staff into the bladder, on which he incised the whole canal, even to the glans, and then destroyed with caustic all of the *callosities*. The lips of the extensive wound were then brought together and retained by means of the hare-lip suture. The operation succeeded so well, that the patient was able to pass his urine, at first through a small flexible catheter, but afterwards a *plein* canal." It is stated that Solingen had performed a similar operation with success, at the Livourne.

The above extract is quoted by Planque from the *Biblioth. de Med.*, tom viii, page 61, ed. in 8, and he remarks that it is evident that external urethrobomy was performed during the latter part of the seventeenth century in several countries of Europe.

Dr. Verneuil refers to an operation reported by Van Hoorne, and which was performed to relieve a patient affected with hypospadias, the abnormal orifice of the urethra being just in front of the scrotum. The penis was laid open from this point to the end of the glans, a leaden canula introduced, and the whole wound closed with suture. The operation was successful.

One word in conclusion. Although the operation just quoted, like that reported by Dr. Burke, terminated so fortunately, it is probable that the majority of practitioners would, in similar cases of stricture, feel disposed to try, first, the effect of opening the membranous portion of the urethra, relieving the retention of urine, and diverting the channel for a time, in order to give the indurated portion of the urethra an opportunity of becoming softened and more dilatable. Mr. Cock, of Guy's Hospital, Mr. Simon, of St. Thomas', and Mr. Wormald, of St. Bartholomew's, London, and others, have furnished us with much evi-

dence of the softening influence thus produced over strictures, when once relieved of the irritation passing over them, or to use the language of Mr. Wormald, by giving "the diseased urethra a holiday," (*Medical Times and Gazette*, December, 1856.) We confess, that had Dr. Burke's patient returned to the city, as contemplated, that was the course we intended to pursue, and failing in this, quoting from Wiseman, "*to slit it the whole length to the incision in perineo.*" Certain, it is, however, that in the hands of no surgeon could a more brilliant result have been obtained than has been achieved by Dr. Burke.

Youre truly,

CINCINNATI, APRIL 14, 1869. GEO. C. BLACKMAN.

"Wm. S. Mc——, age thirty-six, traveling agent for wholesale boot and shoe house, Toledo, Ohio, was thrown from a wild horse, at age of nineteen years, falling on his back; horse striking him on the privates; he was carried home in a fainting condition; parts swelled enormously, and were very painful; was confined to house for five weeks; during the time suffered severe pain in urinating; two years after was riding a colt, and was thrown on to the horn of the saddle, causing a severe and sickening pain; parts swelled up again and it was difficult and painful to pass his urine; was confined to the house for three weeks, under treatment; size of stream passing from penis was diminished greatly; it became smaller after first accident than it was in good health before the accident; shortly after my recovery from second accident, was compelled to use a bougie to keep urethra dilated, and have continued to make use of an instrument of that kind for fifteen years, up to present time, and lately have suffered severe pain in introducing one into urethra; on December 16th, 1868, I rode horse-back twenty-nine miles; suffered an unusual amount of pain during the trip, and continued suffering pain in urethra and parts adjoining, until December 22d, 1858; tried ten times to dilate the urethra as usual, but failed in every attempt; being fourteen hours without passing my urine, bladder was distended and very painful, and in that condition called on a surgeon in Anderson, Indiana; he called in two other doctors to assist him; I was then put under the influence of chloroform three times, and they as often failed in introducing the smallest instrument into the bladder; but in their efforts, they did not fail in making a passage from urethra into the scrotum, to which place my urine escaped, causing me to suffer

extreme pain; it became enlarged by the urine, and was then punctured, and urine escaped with considerable blood; on morning of 23d December, was sent to Cincinnati, requiring twelve hours to make the trip by railroad; urine escaping by scrotum, by being squeezed out by my hands."

I was called to the case, January 11th, 1869, half-past eleven, P. M., two days after his return from Cincinnati; I found him suffering extreme pain from retention of urine, caused by stricture of urethra; he was, in fact, mad with pain; bladder enormously distended; tongue coated; bowels constipated; fever; unimpaired appetite; I was informed that chloroform had no effect upon the parts to facilitate the introduction of a catheter into the bladder; I applied extract belladona to penis and perineum, and placed him in tub of hot water, patient and all covered by a quilt, excepting his head; kept him in that condition until profuse perspiration ensued; patient suffering extreme pain all the while; administered four grains of powdered opium; before taking him from the bath, I introduced a small catheter down to stricture, and made gentle pressure upon it for about five minutes, and had him taken from bath; and on withdrawing the catheter, it was followed by urine in a small stream about the size of a small knitting needle; with great straining by the patient, his bladder was partly emptied. He offered up a fervent prayer for his safe delivery from death, got into bed and went to sleep from effect of anodynes.

January 12th, 8 A. M.—Resting easy; ordered extract belladonna to parts; saline cathartic and opium to quiet him; stated his condition; the only manner of relief; the danger attending the operation and the result, and to consult his friends concerning it and his condition.

January 13th, 8 P. M.—Called and found him in same condition as before; same means resorted to for his relief as on former occasion.

January 14th, 9 P. M.—Called again, and found him in same condion as on two previous occasions; same means were instituted for his relief; he made up his mind to be operated on, and consent of his relatives and friends.

January 16th, 9 A. M.—patient very restless during the night, and awoke unrefreshed; he was in any condition but favorable for the smallest operation in surgery on him; pulse weak and frequent; tongue heavily coated and inclined to dryness; great thirst; no appetite; nervous system very much impaired; scrotum enormously swollen, indu-

rated and painful; bladder distended and pain in left spermatic cord; testicle drawn up on pubic bone.

He was prepared as for lithotomy, on the operating table; after drinking four ounces of strong egg-nog with grain of morphine, he was put under influence of chloroform and brought down to edge of the table; I seated myself on a low stool, and commenced my incision immediately over the end of the staff, which had been previously introduced into the urethra until it came in contact with the stricture, (and intrusted to an assistant), which was an inch and one-fourth from meatus urinarius; the mesian line as my guide, laid the urethra open an inch and a half, and failed in passing instrument beyond my incision; another incision of two inches, down to urethra, opening two urethral abscesses, one on each side of urethra, urethra being laid open for three and a half inches, renewed our efforts to advance the instrument, and failed; another incision, splitting the septum scroti to depth of three inches, laying open urethra, and failed to advance the staff; next incision was made from the urethra downwards, backwards and outwards, until the sound and sensation to operator changed from that of cutting a green pear or soleleather, which did not cease until the urethra was laid open through its membranous portion; the change in the cutting and appearance of urethra, gave evidence of the stricture being divided, and with some difficulty, a No. eight catheter was introduced into the bladder, and urine escaped by the catheter and around it, to the amount of a quart.

Patient recovered from influence of chloroform, without any untoward symptoms; he was placed in bed on his right side; catheter secured by a T bandage; a large dose of morphine was administered; sides of wound brought in apposition, with cold mucilage of elm bark applied; urine escaping by catheter into a receptacle, as it accumulated in the bladder; he lost but little blood during the operation.

January 16th, 7 P. M.—Resting very well; urine escaping by catheter, drop by drop.

January 17th, 8 A. M.—Wound looks very well after being thoroughly washed with castile soap suds; tongue coated; pulse weak and frequent; wound was dressed with elm bark mucilage; nourishing diet ordered; drink rain water and elm water.

January 17th, 4 P. M.—Tongue dry and coated; appears weak and prostrated; grave c. c. pills; milk punch occasionally.

January 18th, 8 A. M.—Tongue dry; pulse weak and irregular;

pain in bowels; wound looks well; continued dressing; gave sulph. mag. ℥ss., which vomited.

January 18th, 2 P. M.—Pulse weak and frequent; left spermatic cord and testicle swollen and painful; applied tincture iodine, and gave Seidlitz's powder; wound suppurating.

January 19th, 8 A. M.—Very restless during night; tongue moist; pain in bowels and swollen; pulse regular and weak; some appetite; testicle and cord not so painful; some pain over region of bladder.

January 19th, 4 P. M.—Bowels moved freely; considerable griping; erysipelas over pubes and left testicle; continued treatment, with addition of ℞ chlorate potass. gr. iii, sulph. quinine gr. ii, powd. opii gr. ½, M.; one powder every four hours. ℞ tinct. ferri, chlorid. gtt. x, every six hours.

January 20th, 9 A. M.—Pulse ninety; wound looks well; tongue moist and coated; appetite not good; erysipelas extending up left side and over abdomen; urine escaping from catheter freely; abscess formed in left side of scrotum; opened, and a discharge of a dark bloody matter ensued.

January 21st, 8 A. M.—Pulse eighty-four; tongue dry and coated; wound discharging healthy looking matter; discharge from left side of scrotum continuous; erysipelas extending over abdomen and up right side; continued treatment.

January 22d, 8 A. M.—Pulse ninety; tongue moist and brown coated posteriorly; bowels moved freely; wound doing well; discharge from left side of scrotum continuous; erysipelas extending up right side; continued treatment.

January 23d, 8 A. M.—Pulse seventy; tongue moist posteriorly and dry tip; erysipelas extended up right side as far as floating ribs, and is now arrested; wound looks well; continued treatment.

January 24th, 8 A. M.—Pulse seventy; tongue moist; rested tolerably well during night; appetite pretty good; some pain about neck of bladder and spasm; appears as if the catheter is rough: urine not running freely from catheter; pain in region of bladder, and swollen; catheter removed, cleansed and returned without any difficulty or pain: small holes filled with alkaline deposits; first time the instrument has been removed since it was introduced day of operation, it being eight days.

January 25th, 8 A. M.—Pulse sixty-five: tongue inclined to dryness; urine passing by catheter free; rested well during the night;

appetite good; wound looks well; swelling over region of bladder subsiding; continued treatment.

January 26th, 8 A. M.—Bowels moved freely during night; considerable griping and pain during operation; pulse sixty-four; appetite good; discharge from left side of scrotum continues; continued treatment.

January 27th, 8 A. M.—Rested well during night; continued treatment.

January 28th, 8 A. M.—Bowels moved freely; tongue red, moist and clean; discharge from abscess in scrotum free; continued treatment.

January 29th, 8 A. M.—Rested finely during night; continued treatment.

January 29th, 3 P. M.—Dressed wound; complained of pain about neck of bladder; removed catheter, cleansed it and returned it without any difficulty or pain; appetite good; tongue red and moist; continued treatment.

January 30th, 8 A. M.—Rested well during night; feels strong; appetite good; pulse sixty-nine; tongue clean and moist; removed catheter nine A. M.; replaced at twelve M., without pain or difficulty; continued treatment.

January 31st, 8 A. M.—Rested well during night; tongue moist and clean; appetite good; wound discharging but little; abdomen swollen; catheter removed for two and one-half hours; returned with ease; continued treatment.

February 1st, 8 A. M.—Tongue red, moist and clean; pulse sixty-nine; abdomen swollen; some tympanitis; wound looks well; urine passing freely by catheter. ℞ turpentine emulsion every four hours.

February 2d, 8 A. M.—Rested well during night; tongue moist, redness disappeared; bowels not so distended; no pain; appetite good; continued treatment.

February 3d, 8 A. M.—Rested well during night; urine passes by urethra, without aid of catheter; tongue moist; appetite good; able to sit up; can walk across room by assistance; wound about healed.

February 4th, 8 A. M.—Sitting up; gaining strength; rests well; walks about his room; passes urine by urethra, and draws it occasionally with catheter.

He was discharged from constant attention on February 5th, with instructions to introduce instrument every day, allowing it to remain for two or three hours, with other injunctions to be strictly observed for his ultimate recovery.

He is now walking about, able for business, and can pass his urine without pain or difficulty, in a stream near the size of No. 8 catheter; no indications of the size of urethra diminishing; suffering no pain or uneasiness of the parts, or along course of urethra; continues use of No. 8 instrument every day; he is enjoying good health and a fair prospect to live to a good old age.

ON FISSURES OF THE ANUS, AND ULCERS AT THE LOWER EXTREMITY OF THE RECTUM.

BY HOLMES COOTE, F. R. C. S.,

Surgeon to St. Bartholomew's Hospital.

The amount of pain which the presence of fissures of the anus or small ulcers at the lower extremity of the rectum may cause to the patient, is often so great as to excite the surprise even of the surgeon. I may mention in illustration, the case of a lady lately under my care, who, without knowing exactly the cause, assured me that she had been for the last eighteen months, worn out by suffering, and was unfit for the performance of any domestic duty. The pain was not confined to the bowels, but extended to the loins, hips, and thighs. During the day she often felt as if "her legs would give under her," and at night time, the rest was disturbed with cramps. More than all, she complained of sudden irritability of the bladder and urethra, rendering the desire at once to expel the urine almost uncontrollable, and this was followed by a feeling of tenesmus, perhaps, by a slight escape of fæcal matter, and by an access of pain in the region of the fissure.

These pains are not fanciful or exaggerated. I have had under my care strong and otherwise healthy men, and delicate women in all stations of life, and sooner or later, with them all, the suffering caused by this apparently slight affection, is such as to render them prostrate and willing to undergo any operation for relief.

When the surgeon examines the patient, he may at first see but little to attract his attention; one of the folds of integument about the anus seems a little fuller than the other; upon closer inspection, the skin will be found red, excoriated, and superficially ulcerated, the parts, however, packed together so as to constitute a "fissure." It has none of the appearance of a "tuberculous" ulcer, and possibly, the explanation usually given by the patient is the correct one, namely, that it came on by the act of straining in defæcation. Such patients are, for the most part, inclined to constipation of the bowels, and many, as is well known, show great neglect in matters of this sort, which are all-important to health.

It is fortunate for the patient, that in these cases, relief may be

afforded promptly and completely, All that is needed, is to throw the parts into a state of rest, when the pain disappears and cicatrisation is soon completed. The mere stretching of the ulcerated structure by introduction of the finger, or of the small speculum into the anus, is often followed by immediate alleviation of all the symptoms. Indeed, Recamier recommends this method of treatment; he stretches the fissure until he lacerates it, and thus, perhaps, a state of the most perfect rest—muscular as well as otherwise—is temporarily produced. It has found favor with some of our own surgeons (vide Duigan, *Dublin Hospital Gazette*, September 15th, page 227, 1860.)

I prefer the division of the fissure by means of a straight knife introduced along the finger. The loss of blood is trifling, the pain momentary, and the relief at once complete. Indeed, the very aspect of the patient is changed when the surgeon re-visits him.

The bowels had better be kept quiet by opium for a few days, and then relieved by mild aperients, such as sulphur and senna.

Nélaton and Trousseau recommend for the treatment of fissures of the anus, enemata of ext. krameriæ, gr. 75, to water, ʒiij., used morning and evening, and retained fifteen to twenty minutes, as long there is pain on returning the injection. When the pain has ceased, they may be used once a day or once every two days. It is also useful to apply locally a magma of bismuth, one part to three of glycerine.

In cases where patients have declined the usual operations, I have obtained benefit from the use of carbolic acid.

Some extremely interesting cases, illustrative of this affection, have been described by Mr. Hilton, surgeon to Guy's Hospital "On Rest and Pain." In one case, an anal ulcer produced retention of urine and symptoms of pregnancy. The patient, a young lady, aged twenty-two, withdrew from society, and passed her days lying on the sofa. In former times this would have been called "hysteria." By careful examination, however, the seat and nature of the disease were discovered, and complete relief given by the usual operation (page, 291 op. cit.) In another case, an anal ulcer was accompanied by pain along the sciatic nerve, over the left hip and loin, with pain in the right leg, (op. cit., page 932.) Arterial hæmorrhage has been cured by division of the ulcer. In a case under my care, the state of morbid irritability of the vagina, now called vaginismus, was kept up by a similar morbid condition, and was also relieved by the division of the ulcer.

These remarks do not apply to cases of extensive ulceration of the mucous membrane of the rectum, but to those conditions which have been well arranged under three heads. *First*—The crack or fissure of the anus. *Second*—A superficial ulcer, almost invariably co-existent with varicosity of the veins of the rectum. *Third*—An excavated ulcer situated between the external aud internal sphincters.—*British Medical Journal.*

PROCEEDINGS OF MEDICAL SOCIETIES.

PROCEEDINGS OF THE UNION MEDICAL SOCIETY OF KNIGHTSTOWN.

The Society met according to adjournment, at the office of Dr. Sparks, in Knightstown, on the 4th of March, 1869, at one P. M.

The minutes of last meeting were read and approved.

Dr. Wilson Hobbs, of Carthage, was chosen a member of the Society.

Dr. Rawlings asked and obtained permission to introduce a patient before the Society: The patient, a male, æt. nine, American, with a history and appearance something as follows: He had a sore hand about harvest time of the past year, which he thought had been poisoned. The doctor was called to see him during the autumn, and found him laboring under what he supposed to be an attack of erysipelas of the lower extremities. About the time he recovered from this, there appeared a swelling on the right side of the neck, which soon resulted in an abscess, which is at this time discharging a thin, whitish, purulent liquid. The aspect of the patient is of a dusky paleness, and the whole scalp has been and is yet considerably œdematous. Much of the hair has fallen off, and the patient has a bloated look.

The treatment has consisted of Fougera's cod liver oil, two tablespoonfuls a day, quinine, iodide of iron, iodide of potass. and stillingia, whisky, and a generous diet.

Dr. Hobbs said there was yet a quantity of fluid contained at certain points near the old abscess, and he would make openings for its exit, and keep the openings patulous. He approves of the Doctor's treatment.

Dr. Sparks thought the case scrofulous in its character. There are three articles of materia medica that he would rely on, to-wit: Peruvian bark, iron, arsenic, (Fow. sol.) He thinks the tincture of the bark much better than the salts. He would wash the abscesses with carbolic acid.

Regular business being in order, Dr. Stuart was called on and read an essay on "What will the coming doctor give his patients?" He spoke of the great latitude there is now in the choice and modes of administration of remedies, and asked what, from this, are we to expect

of the coming doctor? He traced cursorily the history of the science of medicine from its inchoative state to the present; how it grew under the developing care of such fathers in medicine as Hippocrates, Celsul, Areteus, Galen, Paracelsus, and others; and how it has suffered in the intervals in the hands of charlatans, quacks, empirics and bigots—men superstitious as well as ignorant.

He spoke of the extravagant use and abuse of certain remedies, such as opium, sulphur, mercury, and tartar emetic, when they were first introduced, or when their use was as at certain times revived. He noted the horrors of the history of surgery, such as cording a limb and allowing it to rot off, and smearing bleeding surfaces with hot pitch and searing them with hot irons. Even in the sunniest days of medicines, there are extreme vascilations, or as we significantly term them, "fashions" or "runs," first in one direction and then in the opposite. We hope we shall have a knowledge of remedies more exact than anything we possess to-day.

Bennett says, "we have only seven drugs of positive known therapeutic value." "That there are eight other articles of great and often signal help in correcting diseased action, but they are often fallible." "All others than these fifteen are only palliative." Perhaps our estimate of the therapeutic value of all articles of our materia medica is to be materially changed. Of wine, ale and liquors, Parton says, having read much on the subject and talked with eminent physicians, he thinks the "truth of the matter is, that sometimes when the patient is at a low tide of vitality, he may turn the tide and borrow at four o'clock enough of five o'clock's strength to enable him to reach five o'clock." "That the coming doctor will give his patients alcoholic mixtures about as often as he will give them laudanum, and in doses of about the same magnitude, reckoned by drops."

The indications are strong, that the coming doctor, if he give mercury at all, will give it in very moderate doses. That the coming doctor will be much better acquainted with the foundations of the science, anatomy, physiology and pathological conditions, as well as the therapeutic value of remedial agents. That he will labor to keep the people in health and to teach them to "occupy themselves with the physical welfare of the race, without which no other welfare is possible."

Dr. Sparks endorses the essay in the main. Through ignorance, we misapply our remedies. We administer them too indiscriminately, and can't tell which does the good to the patient. We combine too many in our prescriptions. We should give fewer and watch their

effects more closely. He thinks the catalogue of remedies will be much reduced—that about twenty are all we need. He has found no one who says mercury is not a great eliminator, and that is all he claims for it.

Dr. McGavran has but little confidence in medicine, and thinks that swallowing so many drugs is a mistake.

Dr. Hobbs thinks medicine needs an advocate in the Society. He has much confidence in medicine. We should understand it is not an exact science. A science is a collection of truths methodically arranged so they may be learned. An exact science is a collection of positive truths or facts. The science of medicine is made up of collected truths. Physiology is made up of much more positive knowledge. The action of drugs is not exact, and is not attained by exact processes or figures. This is because we know not all the forces at work in ourselves; but we know much and we have a right to use our knowledge. Medicine has its age and honors—it was bought with more brains and claims men of more labor and honor than Sir Isaac Newton. It is of no less value, though it be not a positive knowledge. The coming doctor will use his best judgment—this we do not use correctly.

Dr. Lewis says the practice is unsatisfactory because we don't understand the disease or the drugs we administer. Medicine will be more exact. The coming doctor will be so well acquainted with drugs and disease, that he will not put in a whole handful of shot, but simply one for the bird. He has used bromide of potassium, and so studied its effects, that he knows when to apply it and what to expect. If the nervous disturbance is central, he expects good effects, but if peripheral, he expects little from its use.

Dr. Sparks being called on, reported as follows:

On the 15th of September, 1866, he was called to see Miss B——, a good looking young lady, who was insane and had been for two months, and was kept tied to the floor. She would have a few hours of comparative quiet, but no lucid moments. She was well cared for and of a family well to do in the world. She had been careless of her health—exposed herself a good deal—was something of a "tom-boy." She had been under the care of three physicians, who thought the insanity was caused by the death of her father, which occurred at Andersonville. There was no family predisposition to insanity. Found the patient sitting on the bed, quiet, untied, with wild look. She had not menstruated for four months, pain in hypochondriac region. Could

learn nothing from the girl; she gave only nonsensical answers to his questions. Tongue clear, bowels regular and circulation natural.

DIAGNOSIS—Hysteria connected with genital organs. At first thought she might be pregnant, without a hint—asked an examination—made it *per vagnam*. Found the uterus unimpregnated, but little above the natural size, os patulous, organ too low in the pelvis; introduced a small bi-valve speculum; all around the os and cervix was granulated; cervix a dark purple and congested; a thick, tough mucus pathognomonic of disease of the cavity. Scarified the os and cervix with a probe coated with nitrate of silver; cauterized the os, cervix and cavity; (prepared the cauterising probe by pulverizing the argent. nit. and rolling the heated probe in it); *sluiced* (?) well the parts with warm water; put her to bed; gave no medicine; repeated the operation once a week for two months. Patient recovered her mind and continued in health for two years or more, and perhaps till now.

Dr. Hobbs thinks the treatment rather remarkable; that so much cautery is very heroic. Don't know whether it has been done by others or not.

Dr. Stuart said he had used in one case repeatedly, injections of saturated solution of nitrate of silver into the cavity of the uterus for menorrhagia, and it having failed to check the hemorrhage, he had used Monsel's sol. per. sulph. iron, full strength; but he took the precaution to dilate well the os and cervix with sponge tents. The injections must be recurrent.

Dr. Lewis thought the result justified the means. That the revulsion did good, (if the term revulsion might be applied here.) The womb will stand almost anything.

Dr. Sparks—No author hesitates to cauterize the cavity when he thinks it necessary. If we can't cure the cavity of the cervix without injections, so we can't the cavity of the uterus. The cervix should be well dilated to prevent the fluid passing through the Fallopian tubes. Agent nit. is applicable to all inflamed surfaces—of the womb as well as the conjunctiva.

Dr. McGavran has no report. States he has attended five or six *post-mortems* since he came to the place, in all of which the pathological condition has been opposite the diagnosis. Reports a *post-mortem* of an epileptic patient at the Soldiers' Home. Patient had been afflicted five or six years—mind and voice had failed. The examination showed that the left parietal bone was thickened; calvarium roughened; space half the size of his hand without diploe; dura mater thick-

ened and attached to the arachnoid; brain natural; about three ounces of fluid in the ventricles. Patient had used medicine six years, which did him no good.

Dr. Hobbs thinks the case only shows the uncertainty of our science. There is much that is conjectural—not always confirmed in the cadaver. Special pathology has thrown much light on diseased conditions. We should be diligent in the application of what knowledge we possess, and we will be armed as never men were before. Truth still invites us to be diligent and not to become discouraged. We must not treat disease wholly by the books, but use common sense. The most important means against disease, is *good, hard common sense.*

Dr. Lewis being called on, reported as follows:

On the 12th of December, 1865, half-past eight P. M., he visited a patient—a female—and found her quiet in bed. Pulse, skin, and general condition, normal. A child, newly born apparently, was lying in the lap of the patient's mother, who was sitting by the fire. She stated that the child had been born about one-half hour. On examination, he found a placenta in the vagina of the patient, which he removed. The general condition of the generative organs of the patient, was that of a newly delivered woman. The babe was a male. Left the patient comfortable. Question: How should a physician testify before court under such circumstances?

CASE II—On December 30th, 1867, Mrs. —— was found by the Doctor lying on the bed dead. The appearance of the body was natural; a leather strap was around her neck, some two feet long, with the remote end cut smooth; her age was thirty-six; she was married and had given birth to her fifth child; she was of melancholic temperament; several of her ancestors had taken themselves off; she lived unhappily with her husband, and her hair was prematurely grey; she had probably reasoned coolly and well on the matter of taking herself off, but reached wrong conclusions. The Doctor read Hamlet's soliloquy—the inimitable expression of a great mind contemplating self-destruction.

Dr. Hobbs, concerning Dr. Lewis' first case, would testify that the woman had been delivered of a child, but could not testify that the child in the woman's lap was that child. He could also testify from the placenta and its position, whether the child was viable.

Dr. Sparks—Might a placenta be placed in the vagina for imposition, as where the question of property is involved?

Dr. Hobbs thinks it is not possible to have the vagina, the os, and external parts, in the condition in which they were, without a real birth.

Dr. Rawlins reported two cases of primiparous patients, in both of which the head of the child was well engaged in the superior strait, but all progress seem stayed. To one he gave ergot, and the child was quickly expelled. The other he treated similarly, and the patient went to sleep. The Doctor asks an explanation of the discrepancy.

Dr. McGavran reported two cases of retarded labor, which were speedily brought to a termination by warm bath.

Dr. Lewis had quit the use of ergot, but gave quinine freely, and if there be irritabilility, he added morphine. He has unbounded confidence in quinine, and thinks it acts on the spinal nervous centers.

Dr. Hobbs has had a remarkable experience in obstetric practice. During nineteen years, with a reasonable share of obstetric practice, he has never lost a single case in child bed or any of its accidents. He uses the powder or a decoction of ergot, and always prepares it in every case, through fear of post partum hemorrhage, but does not always use it.

Dr. Sparks fears hemorrhage, and gives ergot a little before the birth of the child.

Dr. Hobbs asks if it be the uniform experience of those present, if the labor is more tedious when the cord is around the child's neck; and whether labor is more tedious when the child is "gummy." All who replied, answered in the affirmative.

Dr. Lewis—When the liquor amnii is abundant, the child is not "gummy," and *vice versa*.

Dr. Hobbs moved that an abstract of the proceedings of this meeting be offered to the *Western Journal* for publication.

Dr. Rawlins seconded the motion, and it was carried.

On motion, the Society adjourned to meet at the same place, on the first Thursday in April, at one o'clock P. M.

J. H. STUART, *Secretary*. JOHN LEWIS, *President*.

BRAINARD MEDICAL SOCIETY.

Pursuant to adjournment, the Society met in the office of Dr. Kittinger, in Winamac, Indiana, April 7th, 1869.

Minutes of last meeting read and accepted.

Doctors William Perry, of North Judson, A. R. Thompson, Kewana, and P. H. Leavitt, Winamac, were admitted to membership.

The third annual election of officers was held, which resulted as follows:

President—J. W. C. Eaton, Pulaski.
Secretary—I. B. Washburn, Star City.
Treasurer—J. H. Smith, Kewana.
Censors—F. B. Thomas, Winamac, P. H. Leavitt, Winamac, R. W. Jackson, Kewana.

The following were selected as delegates to the State Medical Association: J. H. Smith, L. D. Glazebrook, Wm. Kelsey, J. B. Hoag, and W. S. Cleland.

Dr. Hoag reported a case of abscess of the lung, supposed to have been caused by swallowing a pin.

Doctors F. B. Thomas and A. R. Thompson, reported cases of continued fever, which assumed a typhoid condition and resulting very fatally, five of seven patients having died of hemorrhage of the bowels.

The etiology, semeiology, pathology and treatment, were discussed at length by Doctors Thomas, Hoag, Smith, Eaton, Washburn, Thompson and Reddick.

Brainard Medical Society was organized two years ago. It now numbers *twenty-seven* members, who are located in Pulaski, Starke, Fulton and Cass counties. I. B. Washburn, M. D., *Secretary.*

ALLEN COUNTY MEDICAL SOCIETY.

Fort Wayne, April 6, 1869.

Meeting was called to order by President, Dr. H. P. Ayers. Members present, Doctors Ayers, Sen., S. C. Ayers, Thacker, Smith, Gregg, McCullough, Rosenthal and Fitzsimmons.

Minutes of the previous meeting were read by the secretary, approved by the Society and ordered to be placed on record.

A case of carcinoma was then presented to the Society for examination, by Dr. Richart, of Roanoke, the history of which, as given by the Doctor, was as follows:

Mr. L—— is forty-five years of age. Eight or ten years ago a small brown spot was noticed in the skin on the left cheek, which attracted but little attention, however, until about two years since, when it was observed that something like a wart was growing out of the brown spot, and was attended by sharp, darting pains. Acting

upon the suggestion of friends, the patient had this wart "plucked out by the roots at the dark of every moon," thinking thus to destroy it. The results, however, were always to the contrary, each successive plucking being followed by an increase in the size of the wart. The patient then sought the aid of several noted cancer doctors, who lavished their skill upon the persistent little wart in vain, for instead of yielding to their treatment, it flourished luxuriously under the stimulus of their caustics and other irritants, which converted it, however, into an extensive ulcerating sore, presenting at present, rather a formidable appearance. The surface of the ulcer is irregularly elevated above the surrounding surface of the cheek; is oval in shape, and measures about two by two and a half inches; the upper margin of the ulcer approaches to within about three-quarters of an inch of the external angle of the eye, in which direction it is rapidly extending; the parotid, thyroid, and other glands in the vicinity, are enlarged, which has been the case, however, only since the application of caustics, and hence it is thought to be sympathetic only.

Upon examination, the members present were agreed as to the malignancy of the disease, and advised excision as the only admissable treatment.

Dr. Thacker expressed the opinion that attachment to the periosteum would be found, but thought excision the only means of saving the eye, for a time, and at least retarding the advance of the disease.

Doctors Ayers, Sen., Gregg, Rosenthal, and others, thought that no attachment had yet been formed.

The patient's father died of cancer located in the epigastric region.

Dr. Thacker presented an interesting pathological specimen, being a case of ectropium of the liver, in a male fœtus of about seven months, found by workmen on the railroad bridge over the St. Mary's river, near the city. The liver was considerably enlarged, and protruded through an opening in the abdominal walls of about two and a half by three inches, which corresponded to the size of the liver. This organ occupied the umbilical region and was covered by the peritoneum and cuticle only, which had been ruptured, presenting an appearance as though the umbilicus had been forcibly torn away, the umbilical vein and hypogastric arteries being traceable from the center of the tumor.

Upon motion by Dr. Rosenthal, Dr. C. S. Ayers was instructed to procure copies of photograph of Sommers, showing the large tumor

on the occiput, (a case heretofore before the Society,) in numbers sufficient to supply the members.

Proposed amendments to the constitution were then called for, and being read, were adopted. The amendments are as follows:

Section first of article fifth, amended to read—

"Any person becoming an active member of this Society, shall be required to sign the constitution and by-laws thereof, pay an annual fee of one dollar, and shall attend not *less* than four regular meetings during the year.

Section second amended to read—

"A member may be suspended or expelled by a two-third vote of all active members, charges and specifications having been preferred one month previous to the time of trial.

After the adoption of the amendments, the members present paid the annual fee of one dollar to the secretary.

The following delegates to the State and American Medical Associations were appointed: State—Doctors H. P. Ayers, S. C. Ayers, Gregg, Thacker and Rosenthal. American—Dr. H. P. Ayers.

Dr. Rosenthal moved that the proceedings of this Society be published in the *Western Journal of Medicine.* Motion was carried, and the Society adjourned to meet the first Thursday in May.

P. G. KELSEY, *Secretary.*

CORRESPONDENCE.

DERMATOLOGY IN VIENNA.

VIENNA, MARCH 15, 1869.

However true it may be in the world of politics, as the present Napoleon would assure us, when he introduces his uncle in Cæsar's guise, in his biography of the latter; or, however true, in the realm of poesy and the fine arts, as we are all almost forced to acknowledge, that there does occasionally appear on the stage of life, a genius which, by superior endowments from birth, is able to disregard or neglect the weary labor of preparation, moulding or creating circumstances to its will, by one grand stride to reach success, in the sphere of medicine there is, there can be no such power. The master minds of Europe, as far as we have been able to observe them, have in no

instance presented the brilliant scintillations of unearthly fires as in our fancy we painted them; without hitherto a single exception, they have been none other than simple plodding laborers in the great harvest field; and although in many instances, a quickness of conception and skill in diagnosis, might seem to the uninformed a qualification of almost omniscient character, yet it is always evident to the student, that this knowledge is only the result and the reward yielded to the rich experience in positions attained by unceasing toil. Prof. Hebra offers no exception, either in appearance or address. In person, of short, solid build, hair and heavy mustache already frosted by some fifty odd, face full, round, rather prominent cold gray eye, square, determined chin, duplicated by a fold beneath, character in full accord, sharp, decisive, and perhaps occasionally a little stubborn, certainly a little too severe in his criticisms on his fellow specialists. His clinic is always rendered interesting, aside from its real value, by occasional sallies of wit, with which he spices his lectures and which are always terse and relishable. Were it not for these, when he chuckles all over with a jest which only adds to the general effect, and which forever precludes the idea, he might be regarded, and we mean no irreverence whatever, as a typical personification of a little fat country judge in the dispensation of the law, duly impressed with the responsibilities of his position. Hebra is a man, too, who has not plunged so profoundly into the recesses of science as to have become Newton-like utterly oblivious to corporeal wants; his rotundity alone is evidence enough to the contrary; his jocundity, too, in a measure, and if there should still linger a doubt, it will be dissipated by the purchase of his ticket of admission, which is nearly triple the price of other chairs, still it is cheap enough at that, about twelve dollars currency for a three months course.

The lectures are all delivered in the ward, a half-dozen benches arranged around a small enclosed arena, accommodating the thirty or forty students in attendance. Male patients are stripped perfectly nude and required to stand on a chair or table in the center, while the female are permitted to preserve a portion of their attire. On the wall, at the side, hangs a full length portrait of the professor, painted by subscription from his students. The material is partly out-door, the ambulatorium, partly patients in the house, and as you may well imagine, every variety and form of cutaneous disease are presented. By far, the great majority are scabies, eczema, prurigo and syphilis, though, of course, the varieties are duly exhibited. As you are aware, his classi-

fication depends neither on the appearance of the disease nor the physiology, nor the effect of therapy, but on the anatomy. This is the favorite mode of classification now-a-days, not only of skin diseases, but of other forms. Virchow's division of tumors after this rule, is now everywhere adopted, and Hebra's of cutaneous diseases is rapidly gaining ground. It certainly simplifies the matter wonderfully, for skin diseases have long ago been removed from the opprobria they once were. Why should we call a disease which is to-day papular, to-morrow vesicular, and the day after pustular, each time by a different name, observes Hebra time and again, when all the time it is the same disease? A scabies is now one or the other, according as the surface is scratched. In almost all cases, pustules are only the effects of scratching, and consequently, nearly the whole file of pustular disease is swept away. Scabies presents at the clinic in every variety of appearance, among the fearfully degraded poor which this land produces. In all cases, the treatment is the so-called "cure salve." We were led into the room a few days ago, to witness its application; a half-dozen men and boys, perfectly naked, were drawn up in line, and the old nurse, a regular major domo, took his position before them, with a large pot of the semi-solid salve at his feet. A small quantity was presented to each for the hands, then the forearms, arms, abdomen, lower extremities, &c., and finally, for the back, the company then faced to the right, standing in company file, when each officiated for the man before. It was a singular sight and ludicrous in the extreme, each man of a dark mahogany color, toiling with might and main, for the discipline is strict, on the back of his neighbor, who in turn labored upon the one before. After the friction, each individual is laid in bed and rolled in a blanket from head to foot, and there he lies for two days. He is then inspected; should he not require another application, he is now rubbed off with fine clay. Prof. Hebra insists strongly that he shall not bathe for four or five days, as the concomitant eczema is always aggravated thereby. After this latter friction, he is dismissed —cured of his scabies. Should the eczema require treatment, he is furnished with ol. cadini, a preparation of tar, which he is instructed to use. The Professor has tried all the various plans of treatment, but always returns to the all-healing salve. Its composition is the following: Sulphur, tar, each six ounces; soap, fat, each one pound; chalk, four ounces. Of course, in private practice, other finer preparations are employed. Eczema is treated according to its form. In a most exquisite case in the acute form, which occurred a few days

ago, wherein the entire trunk was covered with vesicles on an inflamed base, pulverized starch was applied, and in four or five days the cure was complete. Incrustations are softened and removed by the application of cloths saturated in cod liver oil; when either the oil is continued, or preparations of tar united with it, or alone maintained, or in obstinate forms, caoutchouc glove or stocking is worn.

Prurigo, he pronounces an incurable disease. The intense itching may always be mitigated, and the papules may even disappear for a time, but they always inevitably and unexceptionally return. The best treatment of obstinate cases is, maceration by fourteen day baths, application of the so-called smear soap and futty inunctions. Sometimes tar is of decided efficacy. Prurigo is a disease of the horny tissue, like ichthyosis and lichen pilaris. In children, it is best treated by warm baths of an hour's duration, and subsequently, application of spiritus alkalinus. Syphilis in all its forms and ravages, is a daily visitor. The treatment is the mercurial inunction generally, commencing with the forearms for one day, the arms for another, and so on over the body, to avoid eczema, until its effects are obtained. As to whether a soft chancre may produce general contagion, the question is, still, after manifold experiment, *sub judice*. The mercurial treatment is only employed for existent symptoms.

To attempt even a synopsis of therapeutics, would be a task as useless as endless, for Hebra's work, the first volume, has been already *translated into English, is within your possession. Had we time and permission, we would gladly translate the condensed work of Dr. Neumann, Docent of this department, which contains everything that the general practitioner requires.

The baths of the Hospital are conducted on a scale which merits notice. A long row of chambers on the ground floor are divided into small apartments, containing the requisites of baths, simple, medicated, steam, douche, &c., with every facility for use, the great peculiar feature is the treatment by continual baths. In cases of extreme burns, and in cases of many forms of disease which have obstinately resisted all treatment, resort is had to the continual bath. A rope bed is stretched along the center of a long tub, and arranged by pulleys so that it can be elevated or lowered at pleasure, and the patient, naked, of course, with the head on a pillow above the surface, passes a portion of his life under water. Day and night he remains in his watery couch, eats there, amuses himself there, sleeps there, and is only elevated for the

*Both volumes have been translated and published by the Sydenham Society—the second was issued last year. T. P.

insertion of a vessel under him to receive discharges. It has proved of the most decided efficacy in burns, relieving the intense pain, sparing the agony of the change of dressings, and materially abbreviating the cure. It has been found, however, that in very extensive burns, the mortality is undiminished. A few weeks ago a case of universal psoriasis was exhibited, whose history was nine months of aquatic life. The surface, before the bath, was so stiff that the slightest motion was attended with extreme pain. At one time, during the long treatment, at the solicitation of the patient, who was weary of the monotony, he was removed and the body was enveloped in cod liver oil, but the disease returning in all its former violence, soon induced him to petition a return to the bath, which was granted. He is now nearly well.

Our old friend, carbolic acid, plays quite an important part in dermatology. It is used in many cases where the disease depends on parasitic formation, *e. g.*, herpes tonsurans, pityriasis versicolor, favus, &c., and has been found of peculiar efficacy in hastening the absorption of the indurated bases of ulcers, chancres, &c. It is generally applied in solution with glycerine or alcohol, to indurations; pure petroleum is the application to pediculi capitis, vestimentorum, or pubis, equally efficacious and far less dangerous than mercury. Even these foul cases of plica polonica, where the hair is matted into a mass from the product of seborrhea, pediculi, eczema and dirt, from extraneous sources, until a cap of nearly an inch thickness is formed, and which is regarded by some of the credulous as a charm against disease, yield readily to the continued application of coal oil, and frequent ablutions, without even cutting the hair of women, which is, in general, for no disease, seldom or ever removed.

The rapidity and accuracy of diagnoses, seem at first but little less than miraculous; patient's histories, to their profound amazement, are revealed to them from the commencement of their disease to their appearance here. 1. There are no diseases in which their subjective symptoms are so little needed. 2. Very seldom is a question necessary, or when desired, it seems only in corroboration of a previous statement. 3. The type of the affection is written upon the body in characters which utterly set at nought any equivocations or direct falsehoods from the patients themselves. 4. Characters, too, which, like the hieroglyphics of archœologic love, have been and are being deciphered by the priests in the temple of science, and their discoveries likewise, but in a far higher and nobler manner appropriated to the benefit of their fellow man.

WHITTAKER.

NEW YORK CITY, APRIL 10, 1869.

DEAR JOURNAL: After the bustle and excitement of the past winter at the various schools, male and female, of our city, we are once more enjoying a period of comparative rest. The numerous lectures, clinics and operations of the winter course, are over, and the dissecting rooms closed for six months. The college halls present a deserted appearance indeed, after having been so crowded for the past half year with the several hundred students who have recently been among us. To each and to every one who is this spring commencing the real struggle of life, we would wish a hearty God-speed, and extend the right hand of fellowship. May bright success and happiness be theirs. And yet, we never attend a medical commencement, and see the enthusiastic young student, with beaming eye and high hope upon his brow, receiving his coveted diploma, without a feeling of sadness creeping over us. And this, because we can not help looking forward into the mysterious future, and picturing to ourselves how many of these, now so bright and buoyant, will, ere many years have flown, fall by the wayside, overcome by the turmoil and strife, and be trampled and forgotten, long ere the goal of their ambition is attained. Many a noble man has closed his weary eyes in death, no longer able to keep up the struggle, and sunk into an unknown grave, no hero on the pages of the world's history, but none the less a martyr to the glorious science that he loved so well. And yet, notwithstanding the hardships, and the difficulties, and the disappointments, that so often await those of our profession, we would never offer a single word of discouragement to any who have entered into it or who contemplate its adoption from proper motives; but would the rather say to them, if you would succeed, be *enthusiasts* in the profession of your choice. None is nobler, none more God-like. *Enthusiasm*, as in all other things, so in our calling, to a certain degree, is the soul of success. Not sentimental fanaticism, which is the dream of success, but a living, an energetic enthusiasm, which is the realization of success. Words, like men, often lose their reputation, from evil connection; so, by associating the word enthusiast with the teaching of the false and sickly doctrines of the day, it has lost caste. Yet, what is enthusiasm, but the earnest life-devotion to an end, the absorption of a man's being in some idea and purpose? Until the mind and the heart have become interwoven with the purpose, and thus separated from all ulterior objects and influences, no great end has ever yet been truly accomplished. Listen! And as you tread the memory vaults of the illustrious dead, every

reverberation speaks of the deathless energy and passionate devotion —a life-long enthusiasm. What could be more grand than our life-work—to relieve human suffering and to prolong human life? It is ours to soothe the brow of anguish; ours to drive the demon pain away; ours to raise the prostrate sufferer; ours, relying upon a Higher Power!

But pardon us, dear Mr. Editor, we meant not thus to wander, but such was the current of our thoughts.

The spring courses of lectures are now quietly progressing, and the younger men of the profession have once more an opportunity of ventilating their views upon the various branches of our art. The lectures, for the most part, are not delivered by the regular professors, but by their assistants, or by those who have been fortunate enough to secure positions as summer lecturers. Many of the regular professors, however, still appear at the clinics, which are again in full and active operation; and the course this season is particularly fine. We never lack for material in this city. Tho following is the programme for each day, (the clinics being held at the three medical colleges, New York, Bellevue and Charity Hospitals, and at the New York Eye, and Cosmopolitan Eye and Ear Infirmary:)

Monday—Two surgical, three eye and ear, one venereal, one skin diseases, one obstetrical, and one medical. *Tuesday*—Three surgical, three medical, two eye and ear. *Wednesday*—Two medical, and one eye and ear. *Thursday*—Two surgical, one eye and ear, one medical, and one obstetrical. *Friday*—Two surgical, one eye and ear, one medical, one skin diseases, one obstetrical. *Saturday*—Two medical, one eye and ear, one children's diseases, and one surgical.

Amidst such a variety, it would seem that the student ought to acquire much practical information, and so do those who make a proper use of their eyes and ears. In its facilities for the practical study of disease, New York city is rapidly distancing all competitors.

Week before last, the mortality of this city amounted to four hundred and eighty-three, of this number, two hundred and fifty-five died in tenement houses, one hundred and two in public institutions, and one hundred and twenty-six in private houses and hotels. The health of the city, on the whole, is good. The excitement in relation to small-pox is abating. Great vigilance, however, is exercised at the quarantine and emigrant landing, on account of the prevalence of this fearful disease in several of the European cities. It is spreading widely in Montreal, and is still on the increase in California The *Medical*

Gazette says: "The *California Medical Gazette* suggests that *carbolic acid* should have a thorough trial as a protective against small-pox. 'Let the air of the room in which the small-pox patient is lying, be saturated with it; let a solution of it be sprinkled on the floors, from which the carpets should be taken up; let large woolen cloths, saturated with it, be hung about; let some of it be put in every close stool and chamber utensil, so that all the excreta, as soon as passed from the patient, may be modified and disinfected by it; let the sewers and cesspools belonging to the premises, be flooded with even a weak solution, for one one-thousandth or even one fifteen-hundreth part of carbolic acid, will prevent the decomposition, fermentation, and putrefaction of urine, blood and fæces for months, while one ten-thousandth has been found sufficient by Dr. Letheby to keep sewarage sweet or nearly deodorized. Let every piece of clothing, and all bedding that has been in contact with the disease, be washed in it; let the body of the sick person be sponged off with it; let all attendants wash in it, or sprinkle their clothes with it; and let it be sprinkled about, both in and outside the house.'"

The anniversary exercises of the Women's Medical College of the New York Infirmary, were held on April 1st, and were of a very interesting nature. A large and fashionable audience was present, and evinced much interest in the proceedings. The report of the institution was read by Emily Blackwell. "That the infirmary met a want, was shown by the readiness with which both patients and students resorted to it. Its value as a charity, is proved by its growth from two hundred and fifty, the record of its first year's practice, to seven thousand, two hundred, the number of its last year's patients. Its value to students is proved by looking over its record, and seeing how many of our most successful and women physicians have been connected with it as physicians and students. During the last twelve years, a succession of young women, three or four at a time, have come to the infirmary, and for varying periods of from one to four years, have devoted themselves to medical work, taking care of the patients in its wards, prescribing for them in the dispensary and visiting them in their own houses. More than seventy thousand patients have been attended by them, hundreds of poor families look to them for aid, and hundreds of children are growing up who know no other medical care. The liberal sentiment of the city has given our students advantages which they can not obtain elsewhere. New York has the credit of first admitting women as students to the different city charities, and

the medical profession of New York has been the first to give sufficient support to their efforts to carry out entirely their new undertaking. Those engaged in this matter, will long remember the lead New York has taken."

At the annual meeting of the Nursery and Child's Hospital, the report showed that there were admitted during the year, from March 1st, 1868, to March 1st, 1869, three hundred and ninety-nine children; born in the institution, sixty-seven; remaining at the present time, two hundred and thirteen children and one hundred and two adults. During the past year, there have been under treatment one thousand and thirty patients, exclusive of many cases of slight ailments common to infancy; of these, seven hundred and ninety-eight have recovered, fifty-four remain under treatment, and one hundred and seventy-eight have died. The most prevalent diseases have been those of the respiratory organs and of the alimentary canal. There have been twelve cases of scarlet fever, and eleven of diphtheria, two of each proving fatal, and considerable whooping cough, but no measles.

Just as we are ending this letter, there has been handed to us a pamphlet on "The Treatment of Paralysis by Electrization, with an explanation of a New Galvanic Apparatus," by Dr. A. D. Rockwell, well known in medical circles in our city, but neither time nor space, nor ability, as we have not yet had an opportunity of looking over it, allow us to speak of its merits in this communication. In our next, we may have something to say of it. Yours, very truly,

JAMES B. BURNET.

OUR POLL-TAX.

SPRINGFIELD, OHIO, MARCH 29, 1869.

MY DEAR EDITOR: Supposing that when fourteen years of age, I quit the common school, having education enough to begin "life for myself," as the saying goes. Those who quit with me go to learn a trade, or stand in a grocery, or "onto" the farm, but I determine to finish my education and be a doctor.

In the first place, I attend a high school or academy for three years, at an expense of, say two thousand dollars. I then go to college for four years, at an expense of four thousand dollars. Then I study medicine during the three requisite years, costing with lectures, about thirty-five hundred dollars. Leaving me at the ten year's end,

with a diploma and a cash deficit of nine thousand, five hundred dollars.

Had I used this capital and the labor and care of my ten years, in any trade or business, I could have been by this time a rich man; but here I am at last, ready for practice.

I buy books, instruments, drugs, a horse, harness and buggy, build an office, and have my shirts washed, at an expense of fifteen hundred dollars. If I buy the practice of some "old man," I pay more (than it is worth.) I pay ten dollars for a physician's license. I have private means which bring me an income of one thousand dollars. I sit in my office, wear out my clothes, my patience, and the first year of my new life I collect two hundred dollars. The United States taxes are five per cent. on that. Five per cent. on two hundred dollars is ten dollars. Ten dollars tax and ten dollars for license, twenty dollars. Twenty dollars tax on two hundred dollars is steep.

That is the government tax on brains. Does it pay to cultivate them? *Does it pay a free government to discourage the cultivation of them?* Yours, very truly, H. S. F.

P. S.—I wore the blue, and am probably as patriotic as is the Chairman of the Committee of Ways and Means at Washington, but I feel at liberty to grumble at this imposition.

BIBLIOGRAPHY.

PROCEEDINGS OF THE AMERICAN PHARMACEUTICAL ASSOCIATION AT THE SIXTEENTH ANNNAL MEETING, HELD AT PHILADELPHIA, PENNSYLVANIA, SEPTEMBER, 1868; ALSO, THE CONSTITUTION AND ROLL OF MEMBERS.

Philadelphia: Merrihew & Son, Printers, 243 Arch Street, 1869. Pages 506; paper.

This is a handsome volume, and much larger than that of last year, and presents ample evidence of the fact that the Association is composed of earnest, hard-working and learned men, who care more for the discussion of scientific and professional questions than of trivial and unimportant ethical ones. We repeat what we said when noticing

the proceedings last year, that some of our medical societies would be benefitted, did they take a hint from the manner of doing business adopted by the American Pharmaceutical Association.

"The renewal of prescriptions without authority previously obtained from the prescriber—a subject that has vexed some of our eastern brethren during the last two years—was fully discussed, and certain resolutions in relation thereto unanimously adopted. The substance of these resolutions is, "that the Association regards the pharmacist as the proper custodian and owner of the physician's prescription once dispensed," and that "the restriction of the pharmacist to a single dispensing of a prescription without the written authority of the prescribing physician for its renewal, is neither practicable nor within the province of the Association." The *indiscriminate* renewal of prescriptions, especially when intended for the use of others than those for whom they were prescribed, is regarded as neither just to the physician nor to the patient, "and that such abuses should be discouraged by all proper means."

Many other interesting matters are contained in the phonographic report of the proceedings, that we have not space to notice.

The report of the committee on the progress of pharmacy is quite lengthy, occupying one hundred and fifty-eight pages, and seems to be full and complete.

In that portion of the report on the "Drug Market" devoted to secret remedies, it is maintained that some kind of legislation is required for public protection against patent and proprietary medicines. The following quotation is made from this portion of the report, for the purpose of showing that the better class of apothecaries hold correct views on this subject, and will coöperate with the medical profession in devising means for the suppression of these evils:

"The market list of secret proprietary medicines in use in our country, far exceeds in number of articles, that of the list of officinals in all our materia medica. It is generally conceded by our apothecaries, that about one-half of all their sales, in amount, to customers, is derived from this source, and if it were possible to obtain reliable statistics of the per capita or total consumption of these compounds within the Union, the American people would awake, and put in chains a traffic that panders to many vices, that seldom hesitates at any imposture, and as a rule, considers the deception of the public to be a legitimate business. Hair washes, called dyes or restoratives, are sold in immense quantities as purely vegetable preparations, when lead and other deleterious minerals make the substance of these. Quieting and soothing syrups are recommended and largely sold as harmless cordials or sedatives for infants, which are composed in good part of morphine, opiates or

other powerful sedatives, which should never be administered without the knowledge of the parent or some competent person. The child, whose only defense consists in the power to cry, for whom resistance is a necessity for protection and for development, is drugged to sleep, growth is retarded, and the brain and nervous system permanently injured, because of the ignorance of the parent, alike of the laws of health and of the deleterious remedy which is misrepresented in all its component parts. No restriction of any kind is imposed upon ignorant quackery, while the physician, before he can prescribe or practice medicine, must be educated and pass one examination, as also the regular apothecary, in most of the States, is obliged to label carefully, under stringent laws, all similar preparations. Our newspaper press, which in a country like ours, is the source of almost all the political and religious education of the country, for which reason it should know and feel the vast responsibility of its power for good or for evil, to a considerable extent, is filled with advertisements of compounds for the basest purposes, under pretense of removing periodical irregularities, as they are called; and, as the fashion of the day, bitters and tonics of all sorts are persistently advertised as restoratives for all classes, when any pharmacist knows they are made to fill the place of the dram shop, which is no longer respectable; and there is no effectual remedy for this but proper legislative enactments forbidding the sale of secret remedies of all kinds."

And, as should have been added, all proprietary medicines. Other remarks equally as pertinent are contained in this report, as well as in the "Report on legislation regulating Pharmacy."

A number of interesting and valuable "special reports and essays" are presented, as well as volunteer reports. Among the latter is a valuable one on carbolic acid, by Dr. Squibb.

The next meeting of the Association will be held in Chicago, on the first Tuesday of September, 1869.

The address of the Permanent Secretary is, John M. Maisch, 1607 Ridge Avenue, Philadelphia. J. R. W.

SECOND ANNUAL REPORT OF THE BOARD OF STATE CHARITIES TO THE GOVERNOR OF THE STATE OF OHIO, FOR THE YEAR 1868.

Columbus: Columbus Printing Company, State Printers, 1869.

The Board of State Charities of the State of Ohio, consists of five persons, who are required by the act providing for their appointment, to "investigate the whole system of the public charitable and correctional institutions of the State, and they shall recommend such changes and additional provisions as they may deem necessary for their eco-

nomical and efficient administration." In this report, the various State institutions are noticed, and generally in terms of commendation. The Secretary's report on the condition of county jails and infirmaries, is of much interest and demonstrates the necessity existing for a board of this kind. It has been said that an abuse exposed is half corrected. That there is much to expose and correct in these institutions, is shown by this report which makes clear the fact, that, "in the midst of communities noted for intelligence, virtue and wealth, cruelties have been practiced which would have disgraced the dark ages, and human beings who have been simply unfortunate, have, for weary months and years, been confined in pens so filthy and wretched as to be almost beyond belief." Let us hope that these abuses will soon cease, now that they are exposed.

AN ADDRESS ON EDUCATION PREPARATORY TO THE STUDY OF MEDICINE, READ BEFORE THE GEORGIA MEDICAL ASSOCIATION, AT ITS NINETEENTH ANNIVERSARY MEETING, IN AUGUSTA, APRIL 8, 1868.

BY W. M. CHARTERS, M. D., RETIRING PRESIDENT.

Savannah: Republican Book and Job Office, 1869.

Dr. Charters, in speaking of education generally, after attempting to show that the present systems of education are inadequate to the demands of a civilization in all other respects so greatly advanced, proceeds to consider the subject, "chiefly in its relation to our own profession." Dr. C. believes that the most important deficiency in the preparatory education of young men desiring to enter the medical profession, lies in the direction of natural science. To remedy this, the prominent place should be given to science which has so long been occupied by classical literature. "Mathematics being taught along with, and as an adjunct to, the natural sciences; the classics being, by no means, denied the full amount of attention in the course of study to which they have a legitimate claim."

No one will doubt the correctness of the position held in this address, that a preliminary examination should be instituted in every case, in order to determine whether the *would-be doctor* possesses the amount of knowledge necessary in order to begin the study of medicine intelligently.

CONSTITUTION AND BY-LAWS OF THE MEDICAL SOCIETY OF THE CITY OF WHEELING AND COUNTY OF OHIO, INSTITUTED OCTOBER 17, 1869.

Wheeling: W. J. Johnson, Book and Job Printer, No. 32 Monroe Street, 1869.

The constitution prescribes that the Society shall hold monthly meetings, and these, we are sure, will be interesting and valuable to the members, if the provisions of the constitution and by-laws are carried out. The fee-bill adopted by the Society is also presented.

The Society makes a distinction between ministers, and very properly, we think, decides not to dead-head them all alike. The members will attend gratuitously, "such ministers as have a stated charge and are dependent on their salary for support, but in no case will they do so where ministers have means of living ontside of their profession, or in any way countenance quackery." J. R. W.

THE STRUCTURAL LESIONS OF THE SKIN—THEIR PATHOLOGY AND TREATMENT—ILLUSTRATED.

BY HOWARD F. DAMON, A. M. M. D.,

Fellow of the Massachusetts Medical Society, etc., etc. Philadelphia: J. B. Lippincott & Co., 1869.

This is a beautiful volume of two hundred and fifty-five pages, printed in large, clear type, on tinted paper, and is intended as a brief exposition of a large and important class of cutaneous diseases, and as such, it will undoubtedly be of practical advantage to the student and physician.

According to Dr. Damon, "the structural lesions of the skin consist in hypertrophy, atrophy, and pathological new formations," and the usual form in which these alterations are produced is, first the nutrition of the part is affected, then the functions, and finally, the structure. In the first class are placed the diseases that are the result of "a slight excess in the nutrition of the skin," among which are callositas, or callus, cutaneous horns, ichthyosis, warts, condylomata, wens, nævi, etc. In the second, those depending on "a deficiency in the growth or a part or the whole of the tissues of this membrane," as linear atrophy, alopecia, albinism, leucopathia, etc.; and in the third,

the pathological new-formations observed in the skin, as lupus, sclerema, elephantiasis, lipoma, epithelioma, etc.

While the classification may be "in accordance with the prevailing ideas in cellular pathology," we are not sure that it is either the best or the most natural.

The individual diseases are, usually, briefly and clearly described, and the treatment recommended, such as is approved by the best authorities.

Thirty-two pages at the end of the book are devoted to "brief histories of human horns," from 1599 to 1869. Many interesting cases are reported.

The bibliography of skin diseases, with which the volume closes, is valuable and complete. J. R. W.

ADDRESS BEFORE THE BOYLE COUNTY MEDICAL SOCIETY OF THE STATE OF KENTUCKY, AT ITS THIRD ANNIVERSARY MEETING, HELD AT DANVILLE, KENTUCKY, JANUARY 5, 1869.

BY JOHN D. JACKSON, M. D.

Published by order of the Society. Louisville: Bell & Co., Printers, 1869. From the author.

We think the Boyle County Medical Society acted wisely in ordering this address to be printed, as it is creditable alike to its author and the Society. Dr. Jackson, addressing the members of the Society, endeavors to answer the questions: "Have we by our organization, advantaged ourselves beyond what would have been were we unorganized? What is our present status compared with our past, and what are our prospects for the future?" A lively picture is painted of the condition of the profession in a locality where no organised medical society is in existence, which seems to show in strong contrast the benefits flowing from such an organization. The necessity of continued labor, and the direction in which this labor is most needed, in order to attain the highest excellence in our profession, is shown in forcible and well chosen words.

If the Society is imbued by the spirit that animates the author of this address, it will certainly attain to the highest usefulness possible to such an association.

MISCELLANY.

TREACLE.—(The subjoined is an extract from a long article with the above title, found in *Good Words*, December, 1868.)

Much of late years has been done in what may be called the geology of language. Philologists have been diligently at work with their hammers, splitting open dull and unpromising-looking blocks of words, and finding many curious fossils within them, that tell a tale of themselves as wonderful as any Oozoon or Oldhamia of the Laurentian or Devonian formations. In some of the most familiar terms they have found a mine of historical interest, bringing down to us the memory of some obsolete custom or long forgotten incident. Among the most remarkable of the words derived from ancient languages, and now naturalized in our English tongue, which have brought with them some historical association or memorial, is the subject of my paper. The word treacle is derived from the Greek word *therion*, which meant, primarily, a wild beast of any kind, but was afterwards more especially applied to animals which had a venomous bite. By many Greek writers, the term was used to denote a serpent or viper specifically. In this sense, it is employed in the last chapter of the Acts of the Apostles, where we are told that "when Paul had gathered a bundle of sticks and laid them on the fire, there came a viper out of the heat and fastened on his hand. And when the barbarians saw the venomous beast hang on his hand, they said among themselves, No doubt this man is a murderer, whom, though he hath escaped the sea, yet vengeance suffereth not to live. And he shook off the beast into the fire and felt no harm." The Greek word translated "beast" in the fourth and fifth verses, is *therion;* and though the word rendered "viper" in the preceding verse is different, being *echidna*, it nevertheless specialises the meaning of *therion*, and proves that it refers to this species of serpent. But what connection, it may well be asked, can there be between a viper and treacle? How came such a sweet substance to have such a poisonous origin? Here comes in by way of explanation, one of those strange superstitions that were exceedingly common in ancient times, when little else but foolish marvels filled the pages of natural history. It was a popular belief in those days, that the bite of the viper could only he cured by the application to the wound of a piece of the viper's flesh, or a decoction called *viper's wine*, or *Venice treacle*, made by boiling the flesh in some fluid or other. Galen, the celebrated physician of Pergamos, who lived in the second century, describes the custom as very prevalent in his time. At Aquileia, under the patronage of the Emperor Marcus Aurelius, he prepared a system of pharmacy, which he published under the name

of *Theriaca*, in allusion to this superstition. The name given to the extraordinary electuary of viper's-flesh, was *theriakē*, from *therion*, a viper. By the usual process of alteration which takes place in the course of a few generations in words that are commonly used, *theriakē* became *theriac*. Then it was transformed into a diminutive *theriacle*, afterwards *triacle*, in which form it was used by Chaucer; and finally it assumed its present mode of spelling as early as the time of Milton and Waller. It changed its meaning and application with its various changes of form, signifying first the confection of the viper's flesh applied to the wound inflicted by the viper's sting; then any antidote, whatever might be its nature, or whatever might be the origin of the evil it was intended to cure. Dr. Johnson, in the edition of his dictionary published in 1805, defines treacle as "a medicine made up of many ingredients," and quotes, in illustration of this definition, a sentence from Boyle: "The physician that has observed the medicinal virtues of treacle, without knowing the nature of the sixty odd ingredients, may cure many patients with it;" and another from Fleger: "Treacle-water has much of an acid in it." Afterwards, medical prescriptions came to be prepared in some vehicle intended to cover their nauseous taste or disagreeable look; and this vehicle was generally some kind of sweet syrup or sugary confection, to which the name of *treacle* was applied. When the viscous stuff known as "molasses" was imported from the West Indies, it formed a welcome addition to the old limited list of vehicles for medicine. The tea-spoonful of honey or jelly used to take the taste out of the mouth, could not always be procured; but here was a cheap and efficient substitute that could be had in every shop in the country. The tears and groans under which many a household formerly suffered, were now quieted; and the refractory, unreasoning child, who dreaded the remedy more than the disease, was made to look kindly on those formidable medicines, castor oil, salts and senna, or rhubarb pills, and even to swallow them hurriedly, when disguised in the syren sweetness of the syrup, or accompanied with a liberal dose by way of counteraction to the *goût*. Hence, the molasses which came so opportunely to the aid of afflicted humanity, was in gratitude designated by the time-honored name of *treacle;* and so completely did it usurp the title, that very few are aware that it had ever any other meaning or application.

Throughout our English literature, we find frequent allusions to treacle in this symbolical sense of an antidote against evil; allusions which, without the foregoing explanation of the origin of the word, would be utterly unintelligible to the great majority of readers. In one of the early editions of the English Bible, the familiar text in Jeremiah, "Is there no balm in Gilead?" is rendered, "Is there no treacle in Gilead?" Sir Thomas Moore has this expression, "A most strong treacle against those venomous heresies." Chaucer says of our Lord, "Christ, which that is to every harm *triacle;*" and Lydgate, the "monk of Ebury," a poet whose writings are now all but forgotten, has a kindred idea, which is expressed in these lines:

"There is no sorrow so perilous in sharpness,
As when it hath of *treacle* a likeness."

Waller wrote a poem on the occasion of the restoration of Charles II, in which he speaks of the marvelous change that would be caused by the event upon the views and conduct of the former enemies of his royal master. He thus addresses the king:

> "Offenders now, the chiefest, do begin
> To strive for grace and expiate their sin;
> All winds blow fair that did the world embroil,
> Your vipers *treacle* yield, and scorpions oil."

As if he had said in plain prose, that even those who had slain the king's father, had now repented of their sin and become loyal to the son, like vipers which had inflicted a painful wound, but now yielded by their flesh a medicine to heal it. Milton, too, who made everything subservient to his purpose, employed this curious old legend to point his language, for he speaks of "the sovran *treacle* of sound doctrine." Many other instances might be quoted; but these are sufficient to show how familiar the early English writers were with the symbolical use of treacle, and how admirably they extracted the moral from the once popular superstition contained in it.

The fundamental principle that gave origin to treacle, was one that was extensively adopted and acted upon in ancient times. *Simila similibus curantur*—"Like cures like"—was the motto of nearly all the medical practitioners from Galen downwards. What were called *sympathetic ointments*, supposed to cure wounds if the weapon that inflicted them were smeared with them, without any application to the wounds themselves—were everywhere greatly in request. Prescriptions, as a rule, were founded upon some real or fancied resemblance between the remedy prescribed and the organ diseased—almost never upon its own inherent curative property. Lichens, which lead a mysterious mesmerized or suspended existence, and growing in curious situations where enchantors might weave their unhallowed spells, were favorite remedies for mysterious complaints. The lung-wort, a kind of lichen which grows in immense shaggy masses on trees and rocks in subalpine woods, was highly recommended as an infallible cure for all diseases of the lungs, owing to the resemblance between its reticulated and lobed upper surface, of a greyish brown color, and these delicate human organs. Hundreds of similar instances might be given, in which the color and shape of a remedy was everything, and its medicinal virtue nothing. The object, whether animal, vegetable, or mineral, that caused the disorder, contributed the proper medicament for its cure. In the writings of Paracelsus and Aldrovandus, who combined the study of alchemy and other occult sciences with that of medicine, we find constant reference to such nostrums; and numerous recipes are given for ointments, draughts, and applications made up according to this rule of the most extraordinary substances, which were sold for very large sums, and were said to have effected remarkable cures. In short, almost all the drugs of the mediæval pharmacopœia, were selected and administered entirely upon this principle of mutual similarity and disease. A perusal of the medical treatises of our ancestors, leaves upon our minds a very decided impression of the power of the human imagination, and the strength of the human constitution.

as well as quickens our gratitude that we live in times when treacle is given as treacle, and not as viper's flesh, or some abomination more disgusting still. The only relic of the old superstition that survives now, may be recognized in the well known advice frequently given by the seasoned topers to those who are suffering from the effects of their first drunken excess, "Take a hair of the dog that bit you."

THE O. Æ. SOCIETY OF BELLEVUE HOSPITAL COLLEGE.—The numerous members of this society throughout the country will be pleased to learn that the last annual reunion, held on the 26th of February, was more than usually brilliant and successful. The addresses were peculiarly appropriate to the occasion, and were received with marked satisfaction by the audience. We give below Professor Elliott's reply to the toast of "Woman," which strikes us as a peculiarly happy handling of so delicate a subject:

A sincere friend said to me to-day: "My dear fellow, I hear that you are to respond for the ladies this evening. You have my sympathy." I thanked him, and acknowledged that I needed it; and so do I confess, confidentially, to you all, that I have need of yours, and especially now when my friend Sayre has included my toast with his own in his comprehensive grasp.

It is a serious thing to speak for woman just when she is about to break that long silence which has distinguished her through the lapse of ages, and to speak for herself. Let us hope that, if she bring to future discussions the terrible earnestness and directness of purpose which she displayed in the apple question, at least she will select topics less fraught with woe to man.

Perhaps this may be one of the last toasts to woman to which a man may respond. The time may be at hand when this is to be superseded by one which will even now, we trust, cause their veins to tingle, and when we may hear, in soft, melodious cadence, from the lips of beauty—"The gentlemen, God bless them!"

With woman arguing metaphysics in the pulpit, managing political majorities, directing the press, and wielding the scalpel in sick-rooms there is but a step to the remaining fields of labor, and there may be some girlish face here present, covered only with mantling blushes, which may groove its furrows amid the responsibilities of the senate chamber, or in expounding the majesty of the law.

Who shall paint the dawn of this era, so full of the fruition of woman's joys and privileges? The palette of another Guido must furnish the brilliant colors. Still Aurora, with rosy-tipped fingers, will marshal the procession; still the feminine encircling hours will keep their accustomed places, but the male Apollo will be hurled from the central place of honor, and some bright eyed goddess, typical of woman's future, will seize the reins with no reluctant hand. Love will reign supreme. A new millenium will shed its benignant rays upon the land. Man, shorn of his supremacy, and abnegating even claims to military distinction, will still, we trust, bask in the sunshine of woman's favor, and wish that all the Venuses shall enjoy the rights and privileges of *Mars*.

With such a future, well may a man shrink from responding to-night to such a toast. But I am here with a herald's privileges, though not in a herald's garb.

I am in a representative capacity; I speak for my constituents. Four hundred manly hearts, not satisfied with hearing me lecture on woman for five or six months, demand a final word before we part. Ladies, I present these four hundred hearts for your most distinguished consideration. Four hundred, did I say? Just as in that suffrage, soon to be abolished by woman, the male voter deposits a ballot that represents the united wishes and convictions of himself and wife, and daughters, so do these four hundred hearts have each four separate pulsating chambers, throbbing so harmoniously now that methinks you must all be able to hear them. And so, instead of four hundred, do I present sixteen hundred palpitating candidates for favor.

What aspirations does my feeble advocacy present! What longings for homes and firesides are interlinked with these emotions! What delicious courtships, what rapt elysium of engagements, what calm enduring matrimonial joys do these longings prefigure! Let us hope that four hundred girlish hearts awaken in hastening rhythm to respond to the tumultuous beatings of my constituents.

What matters the language in which these longings are conveyed? What matters the man who presents them? Doremus brings from the mystic arcana of his labratory a long black wire to meet another long black wire. Who can foretell the wondrous result? At once, on meeting, an intense flame starts into being, in which solid bars of iron melt in fervent heat and illumine the hall with lurid glare and iridescent sparkles. Why may I not do as well as a long piece of black wire—I, who bring into this arena the concentrated heat of four hundred manly hearts? The result will not astonish the world, but will sparkle in separate matrimonial paragraphs in the daily papers, and light up many a happy home. For the enduring comfort of these happy homes, I must say that, although my four hundred have no Tennyson to hymn their praises in stately stanzas, yet, in the simplest and sternest prose do I declare that the immortal six hundred at Balaklava never charged as my four hundred will.—*New York Medical Journal*, April, 1869.

EDITORIAL AND MEDICAL NEWS.

*One of the ablest contributors to the *Western Journal of Medicine*, appears in a new *role*. He is to be congratulated upon having won an honorable prize; but still more, upon having written an essay well deserving such recognition.

Within a few days, we have been reading a review in a French journal of *Theses Presentées et Soutennes au Concours d'Agreation pour la Médecine, en 1868–9*, in which the writer, referring to their authors

*The part taken by Nature and Time in the Cure of Diseases. A dissertation for which a prize was awarded to James F. Hibberd, M. D., by the Massachusetts Medical Society. Boston: David Clapp & Son, 344 Washington Street, 1868.

in general terms, says: Youthful in years, youthful in scientific ardor, the candidates à *l'agrégation* represent, in a degree almost extreme, the tendencies of their times. And thus it seems to us in reference to Dr. Hibberd's essay—it represents the tendencies of our epoch; nay, it is more than a sign of the course toward which the advance guard of Medicine is moving, more than a piece of drift-wood upon the current of medical progress—it moves with that guard, it contributes to that current. Greater praise we could not bestow; less would fall below desert.

And now, while admitting, as all must, the inevitable tendencies of this age of Medicine—whether we lament or rejoice, whether we endeavor to promote or to retard such tendencies—we give ourselves briefly to some particular observations upon this essay. On many points, we shall be fully in accord with its esteemed author; in regard to others, we shall entirely dissent from his views.

In the first place, we object to the introduction of *Time* as one of the factors in the cure of disease. He seems to make of it an entity, a positive force quite as much as any of those that have thus considered disease. What is time? Simply measured duration. During its flow certain events can transpire, certain processes be completed; but *per se* it has nothing to do with such events or processes—no more to do in itself with the recovery of a man from rheumatism in six weeks, than with the hatching of a hen's egg in three weeks, no more to do with either than with the Declaration of Independence on the 4th of July, 1776. The Cunard Steamer which takes our friend to Europe, will require a certain number of days in which to cross the Atlantic; but those days simply constitute a period during which the mighty power of steam, guided by the genius of man, can do a certain work. A boy learns a lesson in an hour, but the hour has no influence upon his mental processes. We would not esteem it a judicious title for a thesis upon the action of aloes—*Aloes and Time as a Cathartic.* We would rather have written the title of Dr. K.'s Essay, Nature *in* the Cure, Time *for* the Cure of Disease.

One thought in reference to the etymology of the word *cure*—a word so often upon our lips that we sometimes forget its true meaning. One who *cures*, simply takes care of his patient. Cure is from *curo*, to take care of, to see to, to look after, *etc.*

On page eight of the essay, we read, "when a surgeon has distorted members of the body to restore, nature and time must be his chief

reliance, and his appliances, whatever they may be, only serve to guide and encourage the physiological forces." As Tennyson sings—

> "What drug can make
> The withered palsy cease to shake?"

So we ask, what amount of physiological forces will restore a limb flexed from anchylosis? Here we beg leave to claim that a Stromeyer's screw or gum elastic bands are worth more than nature. So too, the cicatrices from burns, causing deformity and hindering the usefulness of a member, frequently may be removed, and healthy integuments placed upon the denuded surface. Here the surgeon's art is of primary importance—nature and time but secondary, only capable of accomplishing what he gives them the opportunity of doing.

It does seem to us, and we say this with becoming hesitation, for we freely concede Dr. Hibberd's superior ability, he pushes his views too far, makes too wide, too universal a generalisation as to the respective parts taken by nature and art in the cure of disease. When he lays it down as a universal law, that a pathological stimulant being withdrawn pathological activity ceases, does he not go too far? Has every case of conjunctivitis subsided upon the removal of the foreign body, for example, which excited it? Nay, may not some such cases go on to incurable blindness, without intelligent intervention?

Our author asserts that "generally the cause of disease is unknown." True, undoubtedly, that we do not know the causes of very many diseases; but on the other hand, the physician daily sees cases of disease of which he does know the cause. For example, he meets with a case of convulsions in a child, which he traces to indigestible food in the stomach or intestines; or again, a case of epilepsy dependent upon chlorosis; or a case of cirrhosis resulting from the use of alcoholic liquors; or a case of menorrhagia from sexual excess, &c., &c. Now, will the good dame Nature with her faithful attendant, Time, see to the removal of the offending matter from the child's gastro-intestinal canal? She probably will in five cases, but in the sixth the sufferer may die before the process is completed; and the physician does wisely who administers what our friend would call a *perturbating medicine*, an emetic or a cathartic, under such circumstances. In the second case, we remove the epilepsy by restoring the blood to its normal condition. In the third, we interdict the use of the agent which has produced the trouble, and endeavor to supplement at least a part of the hepatic function by ox-gall, *et cet.*, and we at least prolong the patient's days. In addition to the removal of the cause in the fourth

illustration, we endeavor, both by hygienic and therapeutic means, to change the excessive determination of blood toward the uterus and ovaries.

Dr. Hibberd's remarks as to the treatment of fevers, especially of typhus and of typhoid, will meet the hearty endorsement of every intelligent physician.

The same may be said, in the main, as to those in reference to inflammation. When, however, he states *that when a part is inflamed, we have no power to jugulate the disease; all we can do with medicaments is to conduct it to a safe termination, through assisting a material process by the aid of time*, (Essay, page 25), we beg leave to ask whether he has no faith in the occasional success of the abortive treatment of gonorrhœa, and whether cases of dysentery have not been cured by ipecacuanha in two or three days, which, so far as opinion founded upon the history of other cases presenting similar symptoms, would otherwise have continued for one or two weeks? We confess that we are not so deeply in the eclipse of medical faith that we could give other than affirmative answers to either of these questions, were they addressed us. So too, in reference to *pertussis*—by some considered an inflammation—but whether regarded as a neurosis, or an inflammation, the power of belladonna to diminish its ordinary duration is maintained by eminent authority.

Dr. H. gives a London surgeon as the author of the "six weeks" prescription as the cure for rheumatism; but we believe the credit of this is due the elder Warren.

In that portion of the *Essay* relating to *Materia Medica*, we find much with which our own opinions are quite in accord. Especially do we desire to commend all that the author says in reference to the influence of the mind in promoting the recovery of the sick.

We are not sure that Dr. Hibberd is right in denying to Medicine any credit for the increased duration of human life; nor in founding an argument for the power of "Nature and Time" to cure, upon *the large consumption of quack nostrums, and proprietary medicines, the consumers not only getting well but honestly believing their cure to be due to the use of the nostrums*, for many of these consumers are not really sick—only imagine they are—while many others actually die uncured; and, finally, we are quite willing to believe in some cases some of these nostrums may have a positive therapeutic value.

Did space permit, we should be glad to refer to other portions of this Essay. In general, we can speak of it as written with great abil-

ity; its author knows right well the uses of the English language, and presents his thoughts clearly and forcibly. We wish his production could be placed in the hands of every physician who would carefully read and ponder it; for to such an one, it would be a light to guide, a power to quicken and strengthen his thought and investigation; but in the hands of the lazy and the stupid, men who have not consecrated their whole soul, with all its intelligent grasp, its deep sympathy, its vivid conscience to Medicine, who are mere tradesmen and money changers in its sacred temple, we can easily conceive that the Essay may be wrested from its high purpose into an excuse for neglecting scientific study, and for trusting with a blind confidence in Nature and Time, while their patients are deceived with sham therapeutics.

It is but justice to Dr. Hibberd, justice, too, to our readers, to give his "Conclusion" and "Summary:"

CONCLUSION—Let no one for a moment imagine that the views herein promulgated have a tendency to undervalue the importance of Medicine in the management of disease, or detract one iota from the responsibility, the dignity, or the usefulness of the accomplished physician.

Medicines have a positive power that can be, and should be, made available to assist nature in the removal of pathological stimulants, and in the arrest of pathological activity. No one doubts the power of anæsthetics to abolish sensibility; of opiates to allay pain; of aloes to evacuate the bowels; of veratrum to lessen the heart's action; or of quinia to arrest malarial periodic disease. All these, and many more, are in constant demand for proper and prudent therapeutic purposes; and that all of them, not nutrients, and forcible enough to make an impression, are pathological stimulants and of themselves an evil, militates nothing against their legitimate use, or their positive value. It only signalizes that a wise judgment, a sound discretion, and a just discrimination should dictate and control their prescription, to the end that one evil should be brought into requisition voluntarily, only when it will, with certainty, assist to abate a greater evil. It is the training, the skill, the acumen, that is necessary to the exercise of a sound discretion and a wise judgment in the selection and administration of medicines, that distinguishes the good physician from the presumptuous pretender. One can not attain to this accomplishment without a clear and intelligent insight into biology, both normal and abnormal.

While the faith is that medicine is paramount, and the rule under it is to give active remedies continually, and the perturbations which accompany their operation, are deemed an essential and desirable service preliminary to improvement, almost any numbskull can claim to be a physician and have the claim allowed by the populace; because they can not discriminate between the means and the result in his practice, and in that of the educated man of science. But when an appreciative conception of what nature is doing and can accomplish, must precede the

determination of what aid can and should be rendered her, and how and when, the pretender must stand back abashed, while the man properly trained and with real knowledge, will step forth in all the glory of a high priest of nature, offering acceptable service at her shrine; and all who witness his labor shall know that it is good, and say, well done.

SUMMARY.—The prominent points presented in the foregoing dissertation, may be enumerated as follows:

1. All vitalized matter is the subject of a law of development peculiar to its class.

2. Vital organizations are not active *per se*, but are endowed with a capability of activity under stimulation.

3. Normal stimulants produce physiological activity or health; abnormal stimulants produce pathological activity or disease.

4. Human maladies are always the result of abnormal stimulants acting on the histological elements of the body.

5. Disease in any part continues as long as the pathological stimulant is operative; when this ceases, the part returns to its physiological state.

6. To cure disease, it is only necessary to remove the stimulant exciting it.

7. This stimulant is rarely known, and still more rarely can it be removed.

8. In most diseases, we only recognize the grosser symptoms, after the initial processes have completed their course.

9. After the stage of recognition, most diseases must pursue their course through a series of phenomena under an inexorable biological law.

10. The duty of the physician is to watch nature and assist her as opportunity may offer,

11. All perturbating medicines are themselves pathological stimulants, and should not be administered except under a certainty of abating a great evil.

12. The present popular professional estimate of the medical virtues of drugs, rests mainly on the vicious logic of *post hoc ergo propter hoc.*

13. That this estimate is erroneous, is proven by:

a. Curable diseases are recovered from in the absence of all kinds of drugs.

b. Curable diseases are recovered from under the most diverse treatment.

c. The adulteration of drugs makes their strength uncertain.

d. The state of the patient's mind makes the operation of even pure drugs uncertain.

14. A recognition of the doctrine of the *vis medicatrix naturæ*, must underlie all rational therapeutics.

15. The principle involved in this phrase has been recognized and deferred to, since the earliest historical era of medicine, and is likely to be immortal.

16. It derogates nothing from the physician, or the agents he uses, that nature is predominant, and art opiferous.

BOSTON HAS A GYNÆCOLOGICAL SOCIETY, Dr. Winslow Lewis being President, and Dr. Horatio R. Storer, Secretary. One of our cotemporaries, who will not publish the laudations that may be written him of

himself or of his excellent journal, does not hesitate to state in his paper that he, the aforesaid editor, has been elected a corresponding member of this Society, and return his thanks for the honor; but we confess we shrink from such public acknowledgment on our part. We are glad to chronicle the organization of this Society, and we honestly wish it useful success. Our Boston friends have done one good thing —settled the orthography of gynæcology—for the word flowing through a Gallic channel had lost its diphthong with many of our authors, and these wrote *e* instead of *æ*. Now will Boston have the goodness to give us a pronunciation as it has an orthography of the word more in accordance with its etymology? Even the poorest Grecian would be astonished to find, after declining γυνη, γυναικος *etc.*, that when an English word was formed from it, it became *jinny*, thus *jinnycology*, he would be apt to *decline* again. If any of our readers point to the analogy between this word and *gymnastic*, we acknowledge the force of the reasoning, but suggest that the two consonants immediately following the *y* may change its quantity, and furthermore inquire what is to be done with *gyrations*—must the *y* be short there too? At any rate, we don't see why, with a christian tongue, when we take *woman* out of a heathen language we should make a *jinny* of her:

DR. BISHOP, of Sheridan, New York, writes to the *Medical and Surgical Reporter*, April 10th, the following in reference to the use of *arsenic in hemorrhoids*. Some of our readers will remember our first calling attention to this therapeutic value of arsenic, (*Cincinnati Journal of Medicine*), March, 1866:

"I will say for the benefit of the *Reporter*, that I have tried the above remedy in twenty cases of piles, and in not a single case have I been disappointed in removing the difficulty. The dose, of course, is to be varied to suit the age and constitution of the patient. I hope physicians will try it."

DR. T. W. BELCHER, of Dublin, well known to the profession as a dermatologist, is about entering the Episcopal ministry.

MR. JAMES, of Exeter, England, died on the 17th of March last. He had been a most able and industrious contributor to surgical literature, and was quite advanced in years.

ROBLEY DUNGLISON, emeritus professor in Jefferson College, died on the 1st of April. Professor Dunglison was in his seventy-second year.

THE FOLLOWING changes have recently taken place in the Medical College of Ohio. Prof. M. B. Wright, who thirty years ago was first called to a chair in the College, and whose name is a household word in obstetrics, with the profession of the West, has resigned the professorship of obstetrics, and has been appointed "Emeritus Professor, and Clinical Lecturer on Obstetrics and Diseases of Women." Prof. Comegys retires from the chair of "Institutes," and accepts that of "Clinical Medicine." A professorship of "Physiology" is substituted for "Institutes," and Dr. Edward Rives is appointed to it. Dr. R. is the son of one whose name is familiar to many of the older graduates of the School, to whose instruction they had the pleasure of listening long years ago, Prof. L. Rives, and has himself lectured with great acceptance during the past winter, in the Dental College, Cincinnati. We anticipate for him in his new field of labor, eminent success and usefulness. The chairs of "Obstetrics," and of the "Medical and Surgical Diseases of Women," have been consolidated, and the recent incumbent of the latter been selected to fill this new position. Dr. James T. Whittaker, whose letters from Europe our subscribers read with so much interest, and whom we regard as one of the ablest young men it has ever been our good fortune to meet in the profession, will be his assistant. Dr. Whittaker, we wish to say in addition, has talent, learning, industry and sterling principle, and will one day, if his life is spared, be known wherever Medicine is known.

DR. LIONEL S. BEALE has resigned his chair—Physiology and Pathology—in King's College. It is almost as remarkable that he should retire from this position when still in the vigor and prime of his days—for if we are not greatly mistaken, he is but about forty years of age—as that he was called to it when but twenty-four years of age. Few men, at even three-score years and ten, have done more for medical science than has Dr. Beale, and we trust that his work as a teacher, by no means terminates with the termination of his connection with King's College.

M. VOISIN has observed several forms of eruption to follow the administration of bromide of potassium. They have been, acne; large, indolent, and painful pustules; an eruption resembling that of urticaria or erythema nodosum; punctes; and eczema. He describes the first two with great care, as having characteristic symptoms and appearances—*British Medical Journal.*

M. MATTEI, *Académie de Médecine*, read a paper upon the *causes of urinary retention after confinement*. To the two causes generally recognized, viz: The swelling of the urethra, consequent upon contusion, and vesical atony, the author added a third, the abrupt shortening of the urethra; and he thus explains the occurrence of this cause of retention: During the last months of pregnancy, the bladder being drawn up with the uterus, the urethra is elongated, while after accouchement, the uterus at once descending, the urethral canal must become shorter by tortuous and irregular folding upon itself—thence the retention of urine. It is difficult to always prevent this accident; however, from fifteen to thirty grains of ergot, given after accouchement, will augment the vesical as well as the uterine retraction. When catheterism is necessary, always permit the instrument to follow the temporary tortuosities of the canal.—*Arch. Gén.*, April, 1869.

M. PERSONNE, before the same body, as we learn from the *Archives*, proposes oil of turpentine as an antidote for phosphorous. From experiments upon animals, he was convinced of the efficacy of this remedy when taken immediately or very soon after the ingestion of the poison. He says phosphorous does not exert its toxic power until absorbed; then by depriving the blood of its oxygen, it prevents hæmatosis. The oil of turpentine prevents phosphorus from burning in the economy in the same manner as it prevents its combustion in the air at the ordinary temperature.

Now, this may be a valuable discovery; but we almost think it a pity that the poor woman, whose case is recounted below, as we find it one of our English exchanges, and who met with a punishment in kind, though not in degree, similar to that of the eagle which stole meat from the altar of the gods, did not know it—she might have taken a bottle of turpentine, and thus kept her phosphorous and her body intact:

"An elderly widow, while waiting in the surgery of Mr. Leslie, at Nine Elms, stole a piece of phosphorous from a bottle and placed it in her pocket. It ignited and burnt her so badly in the side that, by the advice of a surgeon, she was conveyed to the nearest hospital."

MAURICE H. COLLIS, Surgeon to the Meath Hospital, Dublin, the author of a valuable work upon Cancer and Tumors, died a few weeks since from pysemic poisoning consequent upon a slight scratch received by him whilst removing an upper jaw in the operating theater of his hospital. Mr. Collis was in his forty-fifth year.

PROF. BOWLING, of the *Nashville Journal*, whose intelligent devotion to Medicine no one can question, expresses himself thus as to the "*Ohio Doctor Law:*"

"What medicine can not do for itself will go undone. Every now and then an unfortunate doctor finds himself out of practice and in a Legislature; and feeling out of place, and that his former brethren will think so, concludes to 'bring in a bill' to 'elevate' the profession he has abandoned, so that his old friends may see that he is 'still working for them,' and who ought to continue to think well of him. Our Legislature here in Tennessee has done many queer things, but it has let the learned professions alone to take care of themselves. When did law ever benefit religion? It has been hammering on it many centuries—for about eighteen hundred years—and the more it hammered the worse it made the job. Finally, the Government of the United States was made by a people wise enough to see this, and they said in *their* government religion shouldn't be hammered at all by politicians, but that as the people were civilly free they should be religiously free, and so this Government started, to the astonishment of all christendom.

"This Ohio law that so tickles many of the Ohio doctors, Georgia enacted a long time ago—every practitioner should be a graduate. Immediately all sorts of Trustees to all sorts of Institutions were chartered, who made all sorts of faculties, and diplomas were as plenty as old clothes in slop-shops, and about as good and as cheap. Regular medicine received a blow by that law that it will never recover from in that State. The law made all sorts of quackery not only legal but respectable—respectable like liquor shops—because sanctioned and protected by law!

"One fellow opened a college there, and filled all the professorships himself; held commencements opened by prayer, and closed by benediction in the most fashionably approved style. The graduated were 'charged' to the brim 'upon that occasion,' and bore away their diplomas in triumph. It is devoutly to be wished that hereafter, should any legislative M. D. essay to tinker with the profession of medicine, that he would take a fit—to the dismay and utter consternation of his 'fellow-servants' of the 'people.'"

DR. A. C. WHITE, of Springfield, Tennessee, (*Richmond and Louisville Medical Journal*, April), mentions the case of a negress, thirty-four years of age, who has given birth to twenty-four children.

THE LEGISLATURE of Minnesota passed a law, March 4th, determining the qualifications of those who are permitted to engage in medical or surgical practice in that State. The law is, in some respects, an improvement upon, while in the main, similar to the Ohio law. This whole question of medical legislation has not, as yet, been so thoroughly canvassed in our State societies and in our journals, that the profession have arrived at any community of opinion as to what sort, if any, legislation would be both just and practicable. Only the other day, we read in one of our foreign exchanges of a fellow in New

Zealand, calling himself a homœopathic doctor in virtue of a diploma conferred upon him *in absentiâ*, by a Philadelphia homœopathic school, through a London agent of the diploma-pedlars, for the trifling consideration of fifty pounds, who was arrested and fined ten pounds and costs, for practicing without "being duly qualified and registered." Now, a *general* medical law for the United States, which would be as stringent as this which prevails in a British colony, would be a great blessing to the people and to the profession.

An Ohio correspondent makes the following suggestion: Allow me to suggest to your subscribers that they can bind, and thereby preserve their medical journals, with no expense and but little trouble, by procuring from a tinner strips of thin brass or copper, (tin is too brittle), about six inches long by one-fourth of an inch wide, then bending it double so as to make a shoulder in the middle, the two ends meeting; then with the pointed blade of your knife punch two holes through the journal, one near the upper and one near the lower margin, pass a strip through each hole; then on the receipt of every journal, attach it to those already accumulated, turning down the ends of the strips each time, until the end of the year, when the ends of the strips can easily be fastened. A volume will thus have been preserved —not neat, but in a form handy for reference and as replete with good practical suggestions as any of the standard octavos. For fifteen years past, I have thus preserved all my medical periodicals, and I find this part of my library quite as useful and more interesting than any other.

James Wardrop, Esq., F. R. S., who died in London last February, in his eighty-seventh year, won his first professional fame as an oculist; but will be especially remembered as having, in a work on aneurism, proposed trying the artery on the distal side of the aneurismal tumor, and having successfully carried this into practice: Prof. Valentine Mott, so states the *British Medical Journal*, said that this improvement had conferred on Wardrop the highest honor and the most lasting fame.

Dr. Alexander H. Stevens, one of the most eminent of American physicians, who died in New York on the 30th of last March, was eighty years of age.

A Medical Journal, we learn from the *Michigan University Magazine*, will probably be established by the Faculty of the Medical Department of the University.

PROLONGED ANURIA.—Cases of suppression of the urinary secretion, as in cholera, persisting for weeks and months, are not frequent, and their rarity equals their gravity.

A woman of twenty-seven years of age, married, but childless, after five months' suffering from amenorrhœa and leucorrhœa, consulted Dr. Gallina, because she had not passed urine for twenty-four hours. Catheterism only yielded a few drops of coffee-colored liquid, and for the succeeding eight days no more of it appeared. Applications of leeches to the perineum, nitrate of urea internally, and warm baths were administered up to the twenty-fifth day. No effect having been produced, the patient consulted Dr. Albertini, at the Milan Hospital, who, after two hours' minute examination, found absolutely no lesion to explain this failure of secretion, nor any alteration resulting from it. Her general health had suffered in no respect. Prof. Rodolph being called into consultation, considered that the suppression was due to amenorrhœa. Emmenagogues were administered, and the menses appeared. At the same time, six hundred grammes of urine were extracted by catheterism on the forty-third day, and the normal secretion became established without the least injury to health.—*Gazette Médicale de Lombardia.*

VIVISECTION.—The subject of vivisection has again been brought on the *tapis*, owing to some remarks made by Prof. Bernard, in the fourth of his present course of lectures at the Collége de France. In this, after pointing out the requirements of a properly conducted school of physiology, and after showing how well those requirements are fulfilled in Kühne's laboratory at Amsterdam, and Ludwig's in Leipsic, in each of which, admirable arrangements are made for vivisection, physiological chemistry, and histology, he goes on to remark that, as we can not adopt the plan of the physicians of the time of Henry II—who when the King had received his death-blow in the eye from the lance of Montmorency, coolly performed the same experiment on four convicts who had committed capital crimes, and were thus enabled to study the effects at their leisure—we must impress animals into our service, amongst which dogs, rabbits and frogs, are the most available. He admits on one occasion having operated on an ape, but never repeated the experiment, the cries and gestures of the animal too closely resembling those of man. As the *Pall Mall Gazette* remarks, M. C. Bernard expatiates on this subject with a complacency which reminds us of Peter the Great, who wishing, while at Stockholm, to see the wheel in action, quietly offered one of his suite as the patient to be broken on it. Our own opinion has long been made up on the point. We consider vivisection constitutes a legitimate mode of inquiry, when it is adopted to obtain a satisfactory solution of a question that has been fairly discussed, and can be solved by no other means; but even then it should be conducted with as little pain to the animal as it is possible to inflict, and the cases are rare where chloroform can not be employed, at least for the first incisions.

We hold, that for the mere purpose of curiosity, or to exhibit to a class what may be rendered equally, if not far more, intelligible by

diagrams, or may be ascertained by astronomical investigation or induction, vivisection is wholly indefensible, and is alike alien to the feelings and humanity of the christian, the gentleman, and the physician.—*Lancet*, April 10th, 1869.

CREASOTE IN TYPHOID FEVER.—M. Pécholier, of Montpellier, has been conducting a series of interesting researches on the action of creasote in typhoid fever. Conceiving the disease to be one, *totius substantiæ*, depending on certain changes in the blood caused by the action of an organized ferment which draws from the blood the materials necessary for its nutrition, and exhales those thrown off by its decomposition, M. Pécholier has been led to employ creasote as an antifermentive agent. Sixty patients, at the Hôpital St. Eloi, were chosen as the subjects of the experiment. Every day, a draught, containing three drops of creasote, two of essence of lime, ninety grammes of water, and thirty grammes of orange-flower water, was administered to the patients. At the same time enemata were given, containing from three to five drops of creasote. M. Pécholier states, as the result of his experiments, that creasote employed in weak doses, either in draughts, injections, or in the form of vapor, at the outset of typhoid fever, acts powerfully in diminishing the intensity of the disease, and shortening its duration. M. Pécholier adds, that the employment of the remedy as a prophylactic agent in schools, garrisons, hospitals, &c., during epidemics, would be of extreme efficacy.—*Lancet*, April, 1869.

OUR INDIANA readers will please remember the annual meeting of the State Medical Society, on Tuesday, the 18th of May. We hope to see a larger gathering than ever of the men who love truth, and science, and humanity. Let the profession of the State make it their Society, and worthy of them.

FOR SALE.—An order for an artificial limb.

THE WESTERN JOURNAL OF MEDICINE,

(*Formerly*, "CINCINNATI JOURNAL OF MEDICINE.")

Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

VOL. IV. INDIANAPOLIS, JUNE, 1869. No. VI.

ON OBSTINATE HICCOUGH.

BY J. W. MOORMAN, M. D., HARDINSBURG, KY.

Hiccough, though always viewed as a mere symptom, would seem to have as much right to a separate consideration as many other affections of a symptomatic nature.

Stillé, in his justly celebrated work on Materia Medica, says:

"*Hiccup*, it is well known, is sometimes exceeding obstinate, and cases of its fatal termination have been recorded."

Within the past few years, several cases of severe hiccough, independent of any other affection, save the disordered state of the nervous system, which is part and parcel of the affection, have come under my notice.

By some mishap, the full notes of the cases have been mislaid or lost, and I will be compelled to draw on my memory for the facts in the single case which I shall report.

Miss E——, aged about twenty years, of weakly habit and of nervous temperament, rather anemic, had been suffering with menstrual derangement, from which, however, she had been free for about six weeks. Her appetite had been poor for some time, and the bowels were habitually constipated.

Some time in July, of 1866, I was called to see her, and found her

hiccoughing continually at the rate of fifty-six to the minute. The continuous diaphragmatic action interfered materially with respiration; the catamenial discharge had been natural in quantity and quality two weeks before; the pulse was irregular, weak and soft—eighty to ninety to the minute; tongue moist and flabby, indicative of anemia; no appetite; thirst continued; the quantity of any liquid swallowed was small, owing to the violent regurgitant action of the hiccough; skin moist and cool; extremities below natural temperature; slight nausea; bowels constipated for several days past. Ordered

℞. Rhei Pulv.
Ext. Colocynth Comp. aa grs. v.

To be given every fourth hour until bowels were moved freely. Eighteen hours afterward, her bowels not being moved, she was ordered an enema, which brought away a copious stool of hardened fecal matter; no abatement of the hiccough; has had no sleep for forty-eight hours past.

Ordered one-fifth grain morphia every two hours until rest was obtained. For twelve hours she took the morphia as directed, and not inducing sleep, the dose was increased to one-third of a grain. On inquiry, I learned that heretofere she had been extremely susceptible to the influence of opiates. The third dose after increasing produced a kind of stupor, from which she was aroused by the slightest noise. The hiccough continued without abatement during the stupor. Almost the whole list of antispasmodics was tried, but availed nothing.

On the fifth day, she complained of soreness over the epigastrium, and the hiccough caused intense pain. The tongue became dry and cracked in the centre and of a fiery red at tip and edges; stomach extremely irritable and would retain nothing; thirst was insatiable, but liquids were retained no longer than it took to drink them; they were not vomited, as there was no retching, but simply regurgitated in small quantities at each act of hiccough. Pressure over epigastrium caused much pain. Ordered blister to epigastrium, four by six inches, to be dressed with morphia and kept open for several days. Ice to be swallowed in small lumps *ad libitum*, and a simple enema every third day, to remove any accumulation of fecal matter.

On the seventh day, the hiccough was reduced thirty-seven to forty per minute; and from the ninth to the eleventh, there was an intermission of twenty-four hours, during which time she rested well, sleep being sound and refreshing. The tongue again became moist;

soreness disappeared from the epigastrium to some extent, and the thirst was much more tolerable.

After an intermission of twenty-four hours, the hiccough returned fifty-six to the minute, and continued for four days without intermission. During this time, she took the following prescription:

℞. Asafœtidæ, grs. xxx.
Creasote, gtts. vi.
M. ft. pil. No. vi.
Sig. One to be given every fourth hour.

At same time, she took three grains sulphate quinine, three times daily.

On the fifth day after commencing this treatment, and fifteenth from date of attack, the hiccough ceased, and did not recur again with sufficient severity to attract attention.

She convalesced slowly, and is still very nervous.

Subsequently, (summer of 1868), she had another attack of a nervous character. Being absent, I was not called to treat the case, and am not aware of its exact nature.

She is now, (March, 1869), suffering with exophthalmic goitre, or Basedow's disease.

The causes of idiopathic hiccough are very obscure, having their origin, undoubtedly, in the nervous system.

Jones, (*Functional Nervous Disorders*, page 246), refers it to obscure nervous disorder, "such as is loosely called *hysterical*," and to malarial infection. Of the latter class, he cites a case recorded by Widal:

"The patient was admitted at first, suffering under the consequence of cerebral congestion. Five or six days after having committed excess in drinking, he was seized with violent hiccough, the incessant spasms of which compelled him to remain in bed, and resisted all treatment by antispasmodics. The hiccough was so intense and noisy, that it was heard outside the hospital. The number of diaphragmatic contractions reached fifty-five to the minute, and their energy was so great that all the muscles of the trunk participated in them. There was considerable dyspnœa, short inspirations, red face, white tongue, loathing of all kinds of food, pulse small—eighty.

"Opii gr. one-sixth, was given every two hours, and a blister to the epigastrium was dressed with morphia, but no improvement ensued. The patient had no sleep and his strength was failing. At last, quinine in pretty full doses was given, which speedily put an end to the disorder, after it had lasted nineteen days."

Jones (*op. cit.*) thinks the seat of the disorder central, but thinks it difficult to say precisely what nervous centre is affected; thinks it is about the origin of the fourth cervical nerve. Copland ascribes

it to irritation of phrenic nerve. Williams (*Principles of Medicine*, page 126), ascribes it to irritation of the medulla oblongata. Romberg denies that the phrenic nerve has any agency in producing it. He thinks it is caused by reflex irritation originating in the alimentary canal, liver or uterus, but admits that it is sometimes caused by disorder of nervous centres. From my own observations, I am inclined to think it originates in disorder of the nervous centres constituting a true *neurosis*, while I can not doubt that many cases can be traced to the causes enumerated by Romberg.

As to the treatment of non-malarious cases, the various antispasmodics are of use; and of these, asafœtida and valerian have been of more service to me than any others. In mild cases, mental influence, as sudden fright or withdrawing the attention by interesting conversation, may prove effectual. In the case reported as coming under my observation, swallowing pounded ice formed no unimportant part of the treatment. Every one is familiar with the domestic remedy so often prescribed—drink as much cold water as possible between inspirations. Cruveilhier mentions two cases treated successfully in this way. A more pleasant domestic remedy is a drachm of refined sugar in powder, to be swallowed at once. This is especially useful in hiccough, which infants are subject to from over-feeding, (*Stillé Mat. Med.*, volume I, page 352.) An ounce of sherry wine, taken without dilution, will sometimes put a stop to a troublesome hiccough. I have found this useful in hiccough occurring in inebriates while passing from under the influence of alcoholic liquor. It may not be amiss to state that stimulants were used in the case reported; principally, however, ethereal, and although partially under the anesthetic influence of chloroform, the hiccough was not abated. Jones cites a case cured by taking three ounces of blood from the foot. He thinks we should mingle with our treatment as much of the "medicina mentis" as possible. Williams mentions hydrocyanic acid as a very efficacious remedy. Stillé speaks of cajuput as a remedy of marked utility in some cases.

In malarious cases the treatment is obvious. Stillé speaks of such a case after resisting all ordinary methods of treatment, yielded to a single dose of twelve grains of quinine.

Throughout the treatment, the mind of the patient should be diverted as much as possible from the contemplation of its ills. Even in bodily disorder, it is well known that the mind exercises much influence for good or ill, and in cases where the whole nervous system is, as it were, unstrung, the influence is much more noticeable.

The idea is prevalent among the uneducated, that hiccough is always a sign of approaching dissolution, and being communicated to the patient, will do much toward lengthening the case, which might eventually end in death from pure exhaustion. Such tattling busybodies should always be excluded from the sick chamber if possible.

RARE CASE OF MIDWIFERY, IN WHICH THERE WAS PROTRUSION OF THE OS UTERI EXTERIOR TO THE VULVA, DURING LABOR, AND PREVIOUS TO PARTURITION.

BY C. S. MUSCROFT, M. D., CINCINNATI, OHIO.

Was called this morning, January 2d, 1867, at seven o'clock, to see Mrs. S——, aged thirty-five years, of nervous-sanguine temperament, of active habits and general good health, in labor with her fourth child.

The membranes had been spontaneously ruptured four days previous, from which time until ten o'clock last night, she had no pain of a serious character; but from then until I saw her, thought she was in active labor, and more decidedly so for the last three hours, having strong "bearing down pains." She had been waited on during the night previous by a German midwife, who told me "the labor did not advance as it should on account of there being a good deal of swelling of the privates." Upon making an examination by the touch, the statement of the midwife *appeared* to be correct, but on meeting an obstacle which seemed to be great swelling of the external and internal labia, had much difficulty in bringing my finger in contact with the head of the child. The head was low down in the pelvis and pressing firmly against the perineum, and I thought at this time was extruded entirely beyond the os uteri, as no part of it could be reached by the touch in any direction that I could detect. There was also present that puffy condition of the scalp of the child, forming a tumor, presenting itself at what appeared to be the orifice of the vagina. The swelling of the scalp was such as is frequently met with when the head of the child has been detained for a considerable time by rigidity of the external parts.

Having at first fallen into the same error as the midwife in respect to the swelling externally, waited a sufficient length of time before

making another examination, with the expectation that strong expulsive efforts would soon relieve the patient. On making the second examination, no perceptible change could be noticed, although the pains were strong and frequent. This absence of change induced me to make a more thorough examination of the external organs, which I had at first thought to be an unusually swollen condition of the nymphæ, so much so that the anterior portion protruded at least an inch or inch and a half through and beyond the external labia at the superior commissure, the protrusion becoming less on each side toward the posterior commissure, until it was quite natural at this part. The protruded portion had a puckered feel so as to resemble a frill around the anterior part of the vulva, and was œdematous. Introducing the finger between what I had regarded the mucous fold of the internal and external labia, to my great astonishment the connecting tissue was wanting, and the finger passed readily between the puckered fold and external labia without resistance, far under the pubes, and was easily carried round to the posterior commissure on either side, revealing the true condition present, and that which I had at first supposed to be a swollen and œdematous state of the internal labia, was a protruded, puckered and œdematous os and cervix uteri, wedged firmly between the pubes and presenting head of the child, thus pressing, accommodating and retaining it so as to give it the exact feel of the internal labia much swelled, protruded and œdematous.

Having ascertained the real condition, the following method was adopted to remedy it:

While the patient lay upon her back, the right hand was introduced through the protruding os and cervix uteri, during the absence of pain, and the head of the child gently pressed up above the pubes, by the end of the separated finger and thumb, where it remained long enough for me to grasp the mouth and neck of the womb and return them through the labia and vagina to their proper position. After this much was accomplished, in the absence of pain, pressure in an upward direction was constantly applied to the os and cervix uteri by rotating the hand with the fingers and thumb separated, as if pushing the os and neck over the child's head. During pain, the child's head was constantly held above the pubes with the fingers and thumb outside of the uterine neck. About an hour's unremitting attention was required for the reduction of the mal-position described. From the commencement of the manipulation until the parts were brought into

their natural relation, the patient found herself very much benefited, and often exclaimed, "Doctor, you are relieving me so much."

After the parts were returned to their proper place and retained, the labor progressed naturally. The os uteri, after reduction and having its normal situation to the child's head, was dilated to about an inch and a half or two inches in diameter. The child was born dead, as it evidently had been for some days previous to birth, as it was in an advanced state of decomposition. I attended this patient in her confinement previous to this one, when there was no complication of any kind, nor had there been, she said, during any other of her confinements.

Not having seen any case of this description reported in the journals or elsewhere, and not leaving the case to its own destiny, so as to ascertain how it would terminate, the following question presented itself to my mind: If it had not been recognized and relieved, what might have been the result to the patient? I think one or any of the three following results would have occurred, namely: *First*—Inversion of the uterus. *Second*—Rupture of the organ; or, *Third*—A cutting off the cervix immediately behind the os. I will venture one more question: Has not this condition occurred in other cases where it has not been recognized, and been the cause of the three complications above named?

The above very interesting report from Dr. Muscroft, absence in New Orleans prevented our seeing until just before it was placed in the printer's hands; and hence, we have not had the opportunity of consulting the literature of the subject to any great extent. Nevertheless, the few references to accidents similar to that which the Doctor recounts, we have met in a hurried and partial search, we proceed to give:

Boivin and Duges, (tome I, page 93), state that in some cases of prolapsus uteri in pregnancy, "the womb has remained partly within and partly without the basin, even to the termination of gestation; such was the case of Wagner and that of Chopart. The suffering and inconvenience in such cases would be great; nevertheless, in both these cases, the termination was, by the aids of art, conjoined with the natural efforts, favorable, even without obtaining reduction of the displaced organ, for that had become impossible."

Jacquemier, *Manuel des Accouchements*, tome II, page 191, says: "Harvey reports the case of a woman whose uterus was completely pro-

lapsed, delivered at full term without assistance; but she died subsequently. In a similar case, Portal dilated the os uteri with his fingers, and removed a living child, the mother recovering. Fabricius succeeded similarly in a case of complete prolapse. There are several recent observations similar to these. Deventer has seen the head and neck of the fœtus enveloped by the uterus, escape completely from the pelvic cavity. In the cases of Duchemin and Pietsch, the expulsion of fœtus did not take place until rents occurred in the uterine neck after several days' labor."

Courty, *Traité Pratique des Maladies de l' Uterus et de ses Annexes*, page 739, uses the following language in speaking of the importance of attempting reduction in a case of prolapsed uterus: "The swelling consequent upon congestion supervening in the tumor, or resulting from inflammation, or from constriction at the vulval ring, is not the only reason why the practitioner should be prompt in attempting reduction. A still stronger reason is the complication of pregnancy. Although, in this case, the irreducible uterus may be supported by a suitable bandage so that it shall complete its development, and expel a living fœtus from its cavity," &c., &c.

The *Lancet*, April 18th, 1846, quotes the following case from the *British American Journal:*

"In April, 1829, a negro woman was taken in labor. She was about forty years of age, of good constitution, the mother of several children, and, so far as is known, not subject to any previous prolapsus or other disease of the womb. Something unusual and anomalous having occurred during the progress of the labor, Dr. Harris was sent for. He found her, on his arrival, in the following condition: She was lying on her back, with the whole gravid uterus between her thighs, retained only by the ligaments, which were much stretched, but not ruptured, and discharging from its external surface a serous or sanious fluid. The woman had been in this condition for about twenty-four hours. She had had no pain since the descent of the uterus, and was complaining of none at this time The liquor amnii had been discharged. After a careful examination, no motion or other sign of life in the fœtus could be perceived. The uterus appeared to be in a perfectly quiescent state, without any disposition to contract. The os tincæ was barely dilated sufficiently to allow the introduction of two fingers. Finding it absolutely necessary to relieve her as soon as possible, the Doctor proceeded to deliver her by artificial means. He opened the head of the child with a suitable instrument, and then, having an assistant to hold and support the uterus, he introduced his hand, and by careful traction succeed in removing its contents. There was very little pain during his manipulations. He now returned the womb, which had scarcely contracted at all, and advising the recumbent position, left her. She had a very good 'getting up;' and two years ago, as the Doctor learned, was in good health."

In the *Lancet*, March 22d, 1851, under the heading *On a Case of Labor with Procidentia Uteri*, we read as follows:

"The wife of a laborer, who had been subject to a prolapsed state of the uterus, and on one occasion to a profuse uterine hæmorrhage, during her pregnancy, was attended in her labor, in November last, by Dr. Hynes, who found, on examination a large substance, of the size of a fœtal head, projecting from the vulva, which, from its elastic feel, he at first thought to be the placenta. Upon closer examination, he discovered an oblong aperture capable of admitting three fingers, through which he was able to feel the membranes protruding. The projecting tumor he discovered to be a large portion of the uterus, dragging with it the inferior part of the bladder. As the expulsive pains were violent, Dr. Hynes even feared the inversion of the whole pelvic contents; he, therefore, without delay, ruptured the membranes, and while maintaining steady support to the projecting substance, extracted a fœtus of about six months, which survived a few hours. Little or no hæmorrhage ensued, and the patient progressed satisfactorily at first, but having imprudently got up within thirty-six hours from the labor, in contravention of the directions of her medical attendant, she became delirious and feverish, and sank eight days afterward, the pulse, that '*res fallacissima*,' having maintained regularity throughout her fever."

Mr. Houghton, *Dublin Quarterly Journal of Medical Science*, May, 1853, reports a case of *Prolapse of the Uterus and Vagina during Pregnancy and Labor:*

"Mrs. S——, aged about twenty-six, was taken in labor with her second child, on the 13th November, 1851, 4 P. M. The pains continued feeble and infrequent till 2 P. M. on the following day, and I saw her about four. 'The head presented naturally; the os uteri was dilated to the size of a crown-piece; the passages were moist; and the membranes had been ruptured about twenty-four hours previously. However, on examining more carefully, I found that the os uteri was close to the outlet; that the walls of the uterus, from the margin of the os uteri to that part of the uterus against which the head of the child pressed, formed a cone about three inches long, the apex downwards, as though the neck of the uterus had dilated simultaneously instead of becoming obliterated before the dilatation of the os commenced. The lips of the os were exceedingly thick, rigid, and unyielding, and indeed, the whole of the cone above described, presented the same unyielding character. The pains were regular and tolerably strong. As the labor proceeded, the whole mass, uterus and head, came down together, dragging with it the anterior wall of the vagina, and at length obliterating the anterior *cul de sac* of the vagina; and the considerable tumor thus formed, dilated the vulva. The descent continuing, and the dilatation of the os uteri hardly progressing at all, the uterus came so low down that the anterior lip of the os uteri was pushed outside the vulva, and the anterior half of the os uteri, and the posterior half of the vaginal orifice together, formed an elliptical opening, through which the head of the child could be readily felt, and if necessary, could have been seen. Still the os uteri continued firm, hard, and unyielding, and eventually the whole of the os, with an extraordi-

nary caput succedaneum, protruded from the vagina. Still the rigidity continued, and I began to lose all hope of the dilatation being effected by natural means.

"The above is a pretty fair account of what took place until about eight o'clock P. M., and then things were much in the state described. The patient being a pale, delicate, little woman, venesection was not performed, but tartar emetic in nauseating doses, was given, and nausea was kept up for about three hours. After this, two scruples of laudanum were administered.

"At this time the condition of the patient was much as follows: Os uteri rather larger than a five shilling piece; caput succedaneum protruding through the os; bones of the head pressing on the margin of the os, which was thick, hard, and very unyielding; pains strong; anterior *cul de sac* of vagina obliterated with each pain, and a disposition for the whole os uteri to pass externally at every pain. For some time after the laudanum was given the pains became more moderate, but they never ceased, and at about ten o'clock they returned sharply, the os, if anything, showing more disposition to dilate, though all very firm, hard, and rigid; and I had serious fears that incision of the os uteri would become necessary.

"All things considered, I determined to see if the faint hope of dilatation which seemed to present itself, would be realized, and, whilst waiting to continue the same course of treatment which I had hitherto adopted, and which consisted in preventing the total inversion of the vagina, and entire protrusion of the head of the child and uterus *en masse* during each pain, this accident threatening with each contraction of the uterus, indeed once happening to a considerable extent when I had been late in watching a pain. To effect my purpose, I proceeded in the following manner: Having replaced the uterus and vagina as well as I could, I watched carefully for each pain, and when it was about to commence I passed the fingers of my right hand into the anterior of the *cul de sac* of the vagina, and the thumb of the same hand into the posterior *cul de sac;* my fingers and thumb thus embraced the os uteri and child's head, and whilst it allowed the latter to press against and dilate the former, I supported the whole mass in its proper position, or nearly so; and thus, as I conceived, imitated nature to the best of my ability by keeping the uterus artificially suspended in the cavity of the pelvis, and maintaining a point of support to the uterus, to allow of the pressure of the child's head upon the os, and hence its further dilatation. For some time the dilatation continued very slowly, and I could feel, from time to time, that some abrasion of the anterior and posterior lips of the os had taken place. The os now very tightly embraced the head, the posterior lip being softish, the anterior very hard and thick. At about half-past eleven o'clock, during a very strong pain, and whilst I was pursuing the same plan, I felt something suddenly give way, and the child was almost immediately born alive; in fact, laceration of the posterior lip of the os uteri had taken place to, I suppose, an inch in extent. No flooding followed, and the placenta came away without any difficulty, except that with it down came the uterus and vagina. The laceration was then distinctly seen, and the whole of the os uteri swollen and tumid; this was easily returned; the patient was, as might be expected, much exhausted; a stimulant and dose of opium were given, and she was allowed to rest.

"November 16th; a good deal exhausted and very sore; countenance good;

tongue moist; pulse eighty—soft; no fever; passed her water twice, and had two motions; no swelling or tenderness in the abdomen; she is in good spirits; she sat up when her bowels were relieved; the uterus then came down, and remains down now; the laceration and the abrasions on the anterior lip can be seen. I returned the uterus, and desired that it might be returned as often as it came down, and supported by a perineal bandage, first, however, fomenting it well.

"17th. Some diarrhœa and pain in the uterus, but no distention or general hardness of the abdomen; for this, a poultice and some grey powder, with Dover's powder, was given; and under this treatment these symptoms gradually subsided.

"On the 27th, 'the pain and tenderness in the abdomen have quite subsided, and her health is much improved.' To-day, she told me that she was much neglected in her first confinement, and has had prolapsus ever since. About a year since she had retroversion of the uterus, followed by a miscarriage at the fourth month; since this time her uterus has descended daily, and has *prolapsed every day during her pregnancy, even to the day of her delivery, when it had been down to a considerable extent, forming a large tumor externally.* At times, she had considerable discharge from it, and was aware that ulceration existed round the os. It has frequently been down as large as her two fists; and although she has been a great sufferer during pregnancy, she has not consulted any medical man about it, but allowed it to progress without interference."

With these references, increasing, as we hope, the interest and instructiveness of Dr. M.'s case, we leave the subject for the present, merely adding that his manipulations were, in some particulars, similar to those of Mr. Houghton, and that his inquiry as to the possibility of rupture of the uterus, occurring in such a complication of labor, finds its answer, at least so far as such rupture involves the neck of the organ, in some of the cases quoted. T. P.

"AT WHAT TIMES IS VARIOLA CONTAGIOUS?"—(A REPLY TO AN ARGUMENT.)

BY DR. D'HUY, OWENSBORO, KENTUCKY.

There are various opinions held by medical men, in regard to the above question. Oftentimes we have been questioned, and seldom found that our precise opinion on the subject was entertained. Therefore, as it is, we feel inclined to explain before the forum of your many readers, confident that our appeal will be sustained.

We presume that contagion in the sick room exists, prima facie, at the same time when the disease exists, and we would say more

plainly, contagion is co-existing with the disease. Contagion developes progressively from the time of generation to its ultimate proximity. Hence, it can not be inferred or admitted, that contagion exists not in any degree dangerous at the beginning, and commences only with the eruptive stage, when desquamation developes and continues. Nor does our reasoning pause here. The danger of contagion, *per se*, exists in *all* contagious diseases as soon as the disease is readily diagnosed, and even prior to that time.

To explain our views in a practical manner, let us suppose a case of variola, or of varioloid.

The very moment we have diagnosed a case, and as such, pronounced to be contagious, we proceed to prescribe such medicines, disinfectants, etc., as are indicated, and give careful instructions to the family, or nurse, applying to a disease of a contagious nature.

Why we should be so very careful, circumspect and guarding against a dreadful disease, is simply because we apprehend the situation, the danger impending, and appreciate the measures instituted, and to enable ourselves to be of good service to all, the sick and the healthy. If we would omit all these "little items" properly belonging to the mode of treatment, we would'nt be doing our duty, and at least, would lay ourselves liable to censure within our own mind, although we might escape professional criticism, or be unnoticed by those around us, and ignorantly be supposed to be all right.

While time rolls on, and our case is developing, we still continue our watchfulness and cares in a prudent manner, and do so until the time of dismissal. Our watchfulness is certainly not misplaced, because we are aware that the one afflicted with a disease of the contagious class, is liable to the incidents attending such disease. And thus, there exists the same reason for continuance of precaution, and of a peculiar treatment of a peculiar disease, as at the beginning. This would show, conclusively, that, wherever contagion exists, it should be treated considerate, until it is existing—no more! And any deviation from this rule may be the cause of a great deal of trouble and mischief, and involving difficulties which we might not be able to overcome, or to answer for.

Indeed, we are surprised to observe how some medical men become so professionally destitute as to advance teachings which are foreign to common observation, foreign to all practical experience, and unknown to the established doctrine of the wide world! Men, who by

word and action do the wrong thing, and who are trifling with themselves, our sacred calling, and the public at large.

How is it, for instance, if a professional man, who lays claim to the title of a city physician, would dismiss "a case of variola," without ordering for his patient "a last cleaning," neither having ordered his "infected clothes" cleaned and changed, though they had been worn *for four weeks, day and night?* How is it, if in our days of light and progress, variola is simply treated by whisky until whisky has killed the patient? How is it, we ask? Facts, as the above, almost seem to be incredible, and still they occur in our midst, little talked of, but not amended. I think we need "*a little reconstruction on the basis of sound doctrines.*"

CIRCUMCISION.

BY JAMES THOMPSON, HARRISON, OHIO,
Late Surgeon 4th U. S. Light Artillery.

A large number of venereal cases came under my notice while connected with the army. And as many of the patients had chancres in the prepuce, it seemed to me, that by removing the local lesion, a cure could be more speedily effected, more especially if this could be done early in the disease.

The first patient operated on had an indurated chancre almost entirely encircling the prepuce; his prepuce entirely covered the glans, giving his organ the appearance of a pig's snout; he also had gonorrhœa.

OPERATION—He was placed on the edge of a low seat; his knees were widely abducted and firmly held by assistants; the prepuce was firmly grasped behind the chancre in front of the glans, with a gullet forceps, and given to an assistant; a long amputating knife was placed against the forceps, with the heel applied to prepuce, which was amputated by one sweep from heel to point of knife; one blade of a pair of scissors was then inserted beneath the mucous membrane, which was slit up and afterwards cut off in an anular direction parallel to the corona glandis; the dorsalis penis artery was ligated; two small branches twisted, and five sutures introduced for the purpose of holding the dermoid and mucous membrane together; cold water dressings were used until after suppuration was fairly established, then dis-

continued, and no medication whatever used. As soon as suppuration commenced, the discharge from the urethra ceased; and in six weeks from date of operation, the patient was returned to duty cured, with a very elegant serviceable organ.

In a period of less than one year from the above date, upwards of two hundred others were operated on in the same manner—some for chancres in the prepuce, others for chancres on the glans, some for gonorrhœa, gleet, &c. They all recovered in a period averaging about four weeks, excepting one, who was attacked on the sixth day after operation with erysipelas of an adynamic type, and died on the twelfth day from date of operation.

The question arises, why excise one's prepuce in cases of gonorrhœa and gleet? Permit me to state that most of the operations spoken of were performed upon colored men, seventy per cent. of whom have remarkably long foreskins, which almost invariably cover their glans. Several of the cases, however, occurred amongst the white men, one of whom presented himself to me with a gleet of nine months duration, which was rebellious to all medical treatment, local or constitutional. He was circumcised, and his gleet was arrested as if by magic.

Next came a captain of volunteers of the quarter-master's department, a *church member*, who was looked upon as a "Paragon." He represented himself as having been poisoned with "some abominable poison vine while picking blackberries." I told him that he was poisoned, but that it was from the *animal* instead of from the *vegetable* kingdom. He had a villainous looking penis, the foreskin of which projected in front of the glans at least three-fourths of an inch, causing the organ to resemble the nozzle of a bellows, from which a nasty, muco-purulent matter was discharged. He consented to circumcision, after which he was no longer troubled from the effects of the "*abominable poison vine.*" He was quite elated with the altered shape and improved appearance of his member.

Several cases could I add, which I have had to treat during the last two years, in private practice, wherein circumcision has been successfully practiced in cases of gleet, after having failed to benefit said cases, with either local or constitutional medication, blistering, cauterisation, injections, and so forth.

Two cases of spermatorrhœa have also been successfully treated within the last year, one of which was of ten years standing, and had been treated by a "homœopathist" for one year prior to his falling under my notice, without the least benefit whatever. He was treated

by me for four months, with tonics of every description, quinine, iron, strychnine, electricity, &c.; with bromide potass., belladonna, camphor, opium, canabis indicus, &c., but in spite of all, he reported two or three nocturnal and four or five diurnal emissions every twenty-four hours. He had a long prepuce, but would not be persuaded to part with it until I informed him that every remedy short of circumcision had been tried, and as he was well convinced, with no benefit, and strongly urged upon him the security of the operation. After much persuasion, I procured his consent, and operated about the 2d of January, 1869. The first week after the operation, he had three nocturnal emissions, but had perfect control of his member during the day. At this date, May 5th, he tells me he has not had over five emissions since the operation, and considers himself cured.

In accordance with the above facts, I am convinced that gleet and spermatorrhœa can be cured by circumcision alone; and that many cases of gonorrhœa and syphilis will yield to the same treatment. These facts have, I think, been tested in a sufficient number of instances.

It is further my opinion, that every person whose foreskin covers the glans, ought by all means to be circumcised; then would there be less liability of his contracting the various venereal diseases, or herpes preputialis.

Again: We should consider the effect which a nozzle ended penis has on the minds of some persons; some are ashamed to be seen bathing by their fellow man, or to be examined for the army or for life assurance, and no doubt, in many instances, to contract matrimonial alliances. In such cases, circumcision is one of the greatest boons that can be practiced on suffering humanity, and should be urged upon the people.

It is further my opinion, that in the diseases above mentioned, circumcision is beneficial in cases even where the patients have not a redundancy of tissue forming the prepuce.

Most practitioners have had to do with some very obstinate cases of gleet of very long standing, which have been rebellious to all medical treatment, local and constitutional. In my opinion, all such cases yield to circumcision. But, one may ask, how can a patient afford to lose a portion of his foreskin, when it is already well retracted and the glans entirely uncovered? My answer is, that I never have seen one who could not spare a small anular slice, in order to the cure of such a troublesome and rebellious disease.

Again: When we circumcise our patients, we secure for them that *rest* which all the advice in the world without the knife would fail to accomplish, and it is well known, that so long as a patient afflicted with the gleet, keeps walking or riding about, a cure may be looked upon as out of the question.

In the performance of the operation, I would eschew "*knives of stone*," but would recommend a long knife, in order that the prepuce be taken off at one sweep, thereby avoiding a notched and uneven cicatrix. A firm, sharp scissors, in order to make a clear incision through the mucous membrane, the pinching of which, with a slender or dull instrument, is very unpleasant and painful.

DR. COHNHEIM'S RESEARCHES ON CONGESTION.

Translated from an article by Dr. Wrany, in volume CI of the *Prager Vierteljahrsschrift*,

BY SAMEL NICKLES, M. D.,

Demonstrator of Anatomy in the Medical College of Ohio.

Cohnheim publishes, (*Virch. Arch.*, XLI, page 227), an investigation on venous congestion, which is closely related with his researches on inflammation and suppuration. The object of the inquiry was to ascertain why, in passive hyperemia, a plasmatic fluid (œdema), transudes very copiously, while, on the contrary, lymphatic elements (phlegmon), find egress in but limited amount.

C. selected for his observations, the web of frogs which had been treated with curare poison, and in which, by means of a simple and suitable contrivance for regulating the firmness of a ligature, he could absolutely control the circulation of the femoral vein. He found that soon after the ligation of the crural vein, the movement of the blood in all the vessels of the web became *pulsative* and *rythmical*, while, at the same time, the *rapidity* of the *current gradually diminished*, so that, finally, one gets the impression of a resting mass pressed onward only at intervals, by the pulse-move. The cause of this phenomenon is, that the resistance in the veins and capillaries has become so great from the sudden closure of the crural vein, that it can be overcome only by the systole. *Œdematous infiltration* of the web begins very early, while the *axial character of the current disappears* in the arteries and veins, and soon, with but *moderate dilatation*, all the vessels be-

come *densely filled with blood corpuscles*, of which, the red ones are so placed in the capillaries that not the edge but the surface is struck by the current. The accumulation of the red corpuscles increases gradually to such a degree that their outlines seem to blend with one another, and a few minutes later the capillary vessel presents a homogeneous, red, immovable cylinder, which soon changes its color from a light yellowish or greenish red to a bluish red, the color of venous blood. Without any marked alteration in the interior of the capillaries, one may now observe on their outer periphery the protrusion of *small red, rounded elevations*, which form lateral offshoots, not unlike little mulberries, and their collapse and change into ordinary red blood corpuscles. If the ligature of the femoral vein is now removed, the normal conditions are soon reëstablished, the red corpuscles, one by one, becoming separated in the direction of the veins from the apparently homogeneous cylinders. Of course the red masses already exuded into the tissues are not effected by this restorative process, whereas, the intracapillary part of cells about passing through the walls, is lashed by the current of blood until it is torn off and carried away.

In case of prolonged closure of the principal vein, a marked dilatation of the veins and capillaries supervenes. During the first hours after the ligation, the dilatation is, however, as stated above, at its minimum, and C. believes that he has found the cause of this phenomenon in the activity of the contractile elements of the walls of the vessels, which are stimulated to contraction by the immensely augmented pressure. As a result of the violent pressure must be regarded the apparently complete blending of the blood corpuscles which prevents the emigration of the colorless blood cells, as it takes place in inflammatory processes. For while the colorless blood corpuscles are compressed between the red ones, it is impossible for them to perform amœboid movements, which must form the necessary commencement of their emigration. In the veins, there is this additional circumstance, that in congestion a resting peripheral layer of colorless corpuscles can not be formed, without the previous development of which emigration likewise does not occur. That, on the contrary, the red corpuscles do indeed pass through the *unbroken wall of the vessel*, that, in other words, really a *hæmorrhage per diapedesin* and not per *rhexin* presents itself, is shown by the circumstance that as soon as the circulation again becomes free and the pressure upon the capillaries remits, not a single corpuscle follows those already exuded. According to

C.'s views, it is again the natural pre-formed openings in the wall of the capillary, the stomato existing between the epithelial scales through which the corpuscles make their escape. But the power forcing out the corpuscles is the greatly increased pressure which prevails in the disturbed vascular district. The whole process is promoted partly by the however slight dilatation of the capillaries which increases the size of the stomach; partly, also, by the changed posture of the blood corpuscles which turn their borders toward the wall of the capillary, and therefore, need but stray into one of the stomata with one of their poles. The spherical form of the colorless blood corpuscles, which they must always maintain under these circumstances, is adverse, being illy adapted to be pressed through the still diminutive openings. Finally, it must be pointed out that the increased pressure of the blood in the capillaries produced by dilatation of the small arteries, as obtains in all inflammatory processes, can never even distantly reach that height to which it advances from impediment to the venous flow.

From the experience gained in this inquiry, C. cautions against the conclusion that there is a rupture of the vessels when blood corpuscles are found external to them, and in cases of ecchymosis and hæmorrhagic points, advises that the conditions of pressure of the blood be considered as those factors which, as has been shown with certainty, exert an essential influence in the production of the *diapedesis*. In this light, the congestions caused by impediments to the venous circulation are to be considered, unquestionably those which are developed with more or less rapidity, and in some respect, also, such as are produced by chronic processes.

In conclusion, C. alludes to a paper of Dr. Prussack's read before the Academy of Vienna, according to which, the Doctor observed the imigration of red blood corpuscles through the unbroken wall of the capillary in frogs, the lymphatic vessels of which he had injected with large doses of a solution of culinary salt. This would also show a form of *diapedesis* which is independent of the pressure of the blood, and which is to be placed in the same category with these hæmorrhages which have from ancient times been attributed to alterations in the composition of the blood, as for instance, in scurvy.

CARBOLIC ACID IN GONORRHŒAL CONJUCTIVITIS.

BY JOS. G. ROGERS, M. D., MADISON, INDIANA.

I. B——, aged twenty-five; healthy, generally; presented himself with gonorrhœal conjunctivitis in severe form, with chemosis, great swelling of lids, profuse purulent discharge, photophobia, &c.—of several days' standing—gave this prescription:

℞. Acid, carbolic, (Calverts), gr. i.
Atropiæ sulphatis, gr. ss.
Zinci sulphatis, gr. ii.
Aquæ destil, ℥i.

M. Signa. Drop in eye every two hours, and apply constantly with moist compresses externally.

The patient was directed to return the next day, but not appearing, on the third, I went in search of him. Found him in a dirty, dark room, in a poverty-stricken neighborhood, with every circumstance around him of a sort to prevent success in treatment. Among the most potent for ill was a female circumstance, with the same disease, affecting other organs as well as the eyes—she was his nurse. It was with much misgivings that I removed the compresses, and was agreeably surprised to see a marked improvement. His eyes presented the appearance of a mild form of simple conjunctivitis; there was no purulent discharge, no photophobia, no swelling; the conjunctiva simply appeared slightly congested. I remarked, also, that there was scarcely any dilatation of the pupils, and but little effect on the accommodation. This fact well illustrates the law that congestion greatly diminishes the absorbing powers of mucous membranes. The treatment was continued, and a week sufficed for a complete cure.

This treatment was adopted on theoretical considerations. Its results as compared with that by powerful astringents, considering, also, that it is almost painless, are certainly sufficiently satisfactory to recommend it. This case was treated in 1867. Since that time I have proved its uniform efficacy in numerous cases, and have adopted it as preferable to all others in this affection. Within the last year, the excellent effect of carbolic acid, even in the simple non-specific forms of conjunctivitis, has been publicly noted in certain foreign journals.

Dr. E. L. Holmes, of Chicago, in the *American Journal of Medical Sciences*, for October, 1868, also gives his *dictum* in favor of this agent in all forms of conjunctivitis, both specific and simple, and especially refers to its influence in checking the purulent discharge.

"COMPETITION DOWNWARD."

The recent graduation of so many medical students from our various colleges, gives a point to the following remarks by the *Medical Mirror* of London:

The profession of medicine in the United States is suffering most acutely from a perfect deluge of licensing medical bodies, which are manufacturing to the utmost of their bent, full-blown medical men.

The American Medical Association intends to take this matter into its serious consideration.

It is, doubtless, difficult to steer clear between the Scylla of infringing the liberty of the subject, of licensing bodies, on the one hand, and the Charybdis of a profession swamped by men possessed of the extreme minimum of medical knowledge, on the other.

The remedy is easy, and it is one that before long must be applied to our English licensing institutions.

The American Medical Council, supposing such a council to exist, must reëxamine all the candidates possessed of the degrees of the various licensing bodies, and then ratify or annul the diplomas of the candidates.

The English Medical Council must, to protect the profession from the "competition downward" of our various licensing bodies, also institute a Central Board of Examiners, to inquire into the diploma and the actual knowledge, general and medical, of the individuals presenting themselves for registration.

In America, the competition between licensing bodies is on a gigantic scale. When two or three doctors happen to be gathered together, it is perfectly competent for them, not merely to found a teaching institution, but it is permitted to them to grant licenses to practice, as the various State local governments permit the freest exercise of any and every medical doctrine, whether eclectic, hydropathic or homœopathic.

The United States' medical profession stands a chance of having as many licensing medical and surgical bodies as we have hospitals and dispensaries. The multiplication of teaching bodies can not be considered an evil, for every general practitioner ought to be competent to educate his successor; but the indiscriminate multiplication of diploma-giving bodies is quite another question. The innumerable teachers spread knowledge broadcast, but there should be one central portal of every high standard established, not permitted to teach

all, but simply formed to examine any and all candidates of a proper age who might present themselves before it.

In England, we have fewer licensing bodies, and, therefore, the competition downward, although severe, is not nearly so ruinous to the scientific *status* of the profession as in the newer country.

In England, we have long sought the one portal system as regards the granting of professional diplomas, and although, as regards medical practice, the United States' doctors may be considered to be more advanced than the jog-trot practitioners of Britain, yet, in the matter of reforming the tendency to a lowering of the diploma examinations, the shrewd business talent of the English profession will not be found wanting.—*New York Medical Journal*, May, 1869.

PHTHISIS AB HÆMOPTYSI.

BY J. BURDON-SANDERSON, M. D.,

Physician to the Consumption Hospital, Brompton.

"Ex sanguinis sputo, puris sputum et fluor."—HIPPOCRATES, Aphor. vii., 81.

The doctrine embodied in this aphorism, formerly believed in and received with the unquestioning submission once accorded to the sayings of the Father of Medicine, is now universally denied. Some thirty or forty years ago, Laennec, guided by what seems to us now-a-days a rough kind of pathological anatomy, taught that, in those numerous cases in which cough, expectoration, and all the other symptoms of consumption are preceded and ushered in by spitting of blood, the hæmorrhage had, in reality, nothing to do with its apparent consequences; in short, that hæmoptysis, although it might appear to be antecedent to the phenomena of phthisis, could never be its cause. Now we seem to be in the way of returning to the divine Hippocrates; not, certainly, from renewed faith in his teaching, for there never was a time when men were less disposed to retrace their old courses in this respect; but because the progress of pathological knowledge leads us to apply to Laennec's ideas as to the origin and nature of phthisis the same kind of scepticism that he applied to the notions of his predecessors. Laennec's disbelief of the possibility of consumption originating from hæmoptysis, although founded on observation, was essentially theoretical, and formed part of his general doctrine of tubercle. It was not the immediate offspring of facts, but of the notion entertained by him, and accepted by his successors up to the present time, that phthisis consists in the infiltration of the lungs with a particular kind of substance, which infiltration can only take place in persons whose blood is impregnated with a special taint, or otherwise altered in composition. So long as the fact of constitutional ability to con-

sumption can be accounted for in no better way than that of referring it to a dyscrasia or to a morbid poison, visibly represented by the material with which the diseased organs are filled, all reasoning about the etiology of the disease must be restrained within a very narrow circle. But if, on the other hand, we can succeed in so entirely divesting our minds of this notion of dyscrasia as to forget it, and content ourselves with regarding the material with which the phthisical lung is consolidated, not as endowed with some specific malignity, but merely as unabsorbed residue of common inflammatory processes, most of the difficulties disappear. For if by phthisis we mean only consolidation followed by disintegration of the consolidated parts—if the consolidating material is, in most forms of the disease, nothing more than a product of catarrhal inflammation of the minute bronchioles, and of the air-cells into which they lead—and if such inflammation may be, and is, constantly produced by the introduction of foreign substances into these cavities, what reason is there for doubting that coagulated blood may act in the same way as other irritants?

This question is now being asked by various pathologists. In Germany, it has been brought into prominence by the lucid and practical lectures of Prof. Niemeyer on Consumption, who, on clinical grounds, maintains that hæmoptysis occurs more frequently than is generally admitted in persons who are neither consumptive nor ever become so; and, on the other hand, that, although in most cases the hæmoptysis of early phthisis is a consequence of organic change, the cases are far from being rare in which pulmonary hæmorrhage is not only the antecedent, but the cause of chronic inflammatory processes which result in softening and the formation of cavities. It will be remembered that at a recent meeting of the Clinical Society, a series of cases were communicated by Dr. Baümler, having the same bearing as those of Niemeyer. At the next meeting, (April 23d), another and more complete paper on the same subject is announced from Dr. H. Weber. The question is one of great difficulty as well as of great importance. Of course there is nothing easier than to say with Louis "it is infinitely probable" that in every case the lungs are tuberculous before the hæmoptysis occurs, but much more difficult to prove it, for there is no reason for assuming that hæmoptysis affords any stronger evidence of organic change in the bronchial or alveolar mucous membrane, than epistaxis does as regards the mucous membrane of the nares. On the other hand, there is nothing more difficult than to prove the absence of pre-existing disease in any given case. If, however, it can be shown in a sufficient number of instances, that an individual to all appearance healthy, may suddenly spit blood, and then, after an interval of a few days, become feverish, and that in such a patient the rise of bodily temperature is associated with the appearance of the physical signs of lobular consolidation, and that the consolidated parts eventually soften, we shall be inclined to believe that the doctrine taught at Cos, four centuries before the Christian era, is one which, at all events, requires at the hands of modern pathologists more critical and more impartial examination than it has yet received.—*The Lancet*, April 17th, 1869.

PROCEEDINGS OF MEDICAL SOCIETIES.

PROCEEDINGS OF THE AMERICAN MEDICAL ASSOCIATION, MAY, 1869.

LIST OF OFFICERS OF THE ASSOCIATION.

The following is the list of officers of the Association for 1869:

President—Wm. O. Baldwin, M. D., Montgomery, Alabama.

Vice Presidents—George Mendenhall, M. D., Cincinnati, Ohio; Noble Young, M. D., Washington, D. C.; N. P. Moore, M. D., Portland, Maine; S. M. Bemiss, M. D., New Orleans, Louisiana.

Permanent Secretary—W. B. Atkinson, M. D., Philadelphia.

Assistant Secretary—A. J. Semmes, M. D., Savannah, Georgia.

Treasurer—Casper Wister, M. D., Philadelphia.

The officers of the Association are elected annually, on the recommendation of a nominating committee, composed of one from each State delegation represented, and one from the Medical Staff of the Army and Navy. The individuals so recommended are, on motion, elected by the Association before each annual adjournment. The officers of the present year were elected at the meeting of the Association held last May in Washington City.

PROCEEDINGS OF THE OPENING DAY.

The American Medical Association met in the Mechanics' Institute, at eleven A. M.

The President, Dr. W. O. Baldwin, of Alabama, occupied the chair, assisted by Vice-Presidents, Drs. George Mendenhall, of Ohio, and S. M. Bemiss, of Louisiana.

The Permanent Secretary, Dr. W. B. Atkinson, of Pennsylvania, and Assistant Secretary, Dr. A. J. Semmes, of Georgia, were present.

The President invited to seats on the platform, Drs. Warren Stone and Lopez, of New Orleans, and ex-Presidents, H. F. Askew, of Delaware, N. S. Davis, of Illinois, and Alden March, of New York.

The session was opened with prayer by Rev. Mr. Gallaher, of New Orleans.

Dr. T. G. Richardson, of Louisiana, chairman of the Committee

of Arrangements, welcomed the delegates to the city in an eloquent address.

The President then delivered the annual address.

Letters were read by the Permanent Secretary from Drs. S. D. Gross, of Pennsylvania, W. Byard and W. Canniff, of Canada, and R. A. Kinloch, chairman of the Medical Society of South Carolina, expressing regret at their inability to be present on this occasion.

On Motion of Dr. Mussey, it was resolved that each State Medical Society be requested to prepare an annual register of all the regular practitioners of medicine in their respective States, giving the name of the college in which they may have graduated, and date of diploma or license.

Special reports of committees were then made as follows:

On Devising a Plan for the Relief of Widows and Orphans of Medical Men, Dr. H. Griscom, New York, chairman, reported, which was referred to the Committee on Publication.

On Veterinary Colleges, Dr. Thomas Antisell, District of Columbia, chairman, reported progress, and was continued.

On Specialties in Medicine, and the Propriety of Specialists Advertising, Dr. E. Lloyd Howard, Maryland, chairman, reported and made the special order for Wednesday at twelve M.

On Library of American Medical Works, Dr. J. M. Toner, District of Columbia, chairman, reported, and was, on motion of Dr. Davis, made special order for Wednesday at one P. M.

On the Best Method of Treatment for the Different Forms of Cleft Palate, Dr. J. R. Whitehead, New York, chairman, reported and referred to section on surgery.

On Rank of Medical Men in the Navy, Dr. N. S. Davis, of Illinois, chairman, announced that their last year's report was final, and committee was discharged.

The report on Medical Ethics, by Dr. D. Francis Condie, Pennsylvania, chairman, was read by Dr. Davis, and adopted.

On American Medical Necrology, Dr. C. C. Cox, Maryland, chairman, reported progress, and was continued on motion of Dr. Davis. Dr. Cox was authorized to fill all vacancies on his committee.

Voluntary communications were presented by Dr. Jos. Jones, of Louisiana, on Mollities Ossium, and referred to section on surgery.

On Cases of Lead Palsy from use of Cosmetics, by Dr. L. A. Sayre, referred to section on Hygiene.

On the Philosophy and Chemistry of Longevity, by Dr. Cutler, of Mississippi, referred to section on Hygiene.

On the Protective and Preventive Uses of Quinine, by Dr. S. Rogers, of New York, referred to section on Practical Medicine.

On the Tongue in Malarious Disease, by Dr. Osborn of Alabama, referred to section on Practical Medicine.

On the Warm Cerebro-Spinal Bath in the Treatment of Congenital Apnœa, and on a New Method of Artificial Respiration, by E. D. McDaniel, of Alabama, referred to section on Practical Medicine.

Reports on climatology and epidemics were received from Drs. Thomas, of New York; T. J. Heard, of Texas; F. W. Hatch, of California; E. A. Hildreth, of West Virginia, which were referred to the section on Climatology and Epidemics.

On motion of Dr. Davis, the report on the revision of the plan of organization was made the special order for Wednesday at ten A. M.

Near the hour of adjournment to-day, Dr. Eve suggested that the many papers on education, ready to be offered, be laid before the Association on the next morning at nine o'clock.

Dr. Davis of Chicago, moved that all such papers be referred to a special committee of five.

Dr. Eve seconded this motion, which being carried, the President appointed Drs. Davis, of Illinois, P. F. Eve, of Tennessee, E. S. Gaillard, of Kentucky, E. Lee Jones, of New York, and J. K. Bartlett, of Wisconsin.

On Motion, adjourned until Wednesday at nine A. M.

The special feature of this day's proceedings was the delivery of the President's address, which was universally commended and admired.

SECOND DAY'S PROCEEDINGS.

The attendance yesterday was much larger than on the first day. A number of arrivals had increased the *personnel* of the Association to near three hundred. The hall was well filled, and the same dignified deportment which had marked the deliberations of the members on the opening day was displayed on the second day. Much of the facility with which the deliberations were conducted yesterday, and the promptness with which action was taken upon the various resolutions, was, undoubtedly, due to the tact and practical knowledge displayed by President Baldwin.

At nine A. M., Dr. W. O. Baldwin, the President, in the chair, called the meeting to order.

A paper on "Canula and a new mode of Applying Ligatures," was submitted by Dr. P. F. Eve, Tennessee, and was referred to the section on Surgery.

Dr. J. M. Bush, of Kentucky, offered the following resolution:

Resolved, That a committee of five members be appointed by the chair, to take into consideration the subjects alluded to in the President's address, and report at this meeting.

This resolution having been adopted, the President selected as members of the committee, Dr. Parvin, of Indiana, chairman, Dr. Toner, of the District of Columbia, Dr. Pollock, of Pennsylvania, Dr. Welch, of Texas, Dr. Seeley, of Alabama.

Dr. McPheeters, of Missouri, offered a communication from the Medical Association of that State, in reference to medical education.

On motion of Dr. Toner, District of Columbia, it was referred to the special committee on that subject.

Dr. Eve offered the minutes of the Medical Society of Tennessee, which was similarly referred.

Dr. Gaillard, of Kentucky, offered the following preamble and resolutions, which were referred to the same committee:

WHEREAS, The medical teachers of America have, after a trial of twenty-two years, failed to meet satisfactorily and efficiently, the requirements of the great body of the profession in regard to medical education; and

WHEREAS, The condition of the profession is yearly becoming more deplorable on account of the antagonistic and objectionable policy of medical schools, in making the amount of fees charged, rather than scientific teaching, the basis of competition; and

WHEREAS, To obtain professionally competent graduates, sound and efficient teachers are indispensably necessary; and

WHEREAS, Such teachers, to be found throughout the country, can not be induced to leave their homes without the assurance of competent remuneration; and

WHEREAS, Such remuneration can only be obtained by adequate fees charged, unless by a system of low fees the number of students be relied upon to make up the inevitable pecuniary deficiency; and

WHEREAS, Reliance upon numbers of students for this purpose deplorably crowds the already overcrowded professional field, diminishing thereby individual income, judgment, experience, and skill, thereby compelling practitioners to resort to other avocations as a source of supplemental income; and

WHEREAS, This devotion to other pursuits destroys opportunity for study and improvement, degrading thereby the status and standard of American physicians; and

WHEREAS, The schools of New England, New York and Pennsylvania, Maryland, Virginia, South Carolina, Georgia, Missouri, Tennessee, Louisiana, Alabama, and District of Columbia, now charge comparatively remunerative fees; and

WHEREAS, The *low system* of fees is charged only in a few of the middle States, and can, with advantage, be made to conform to the rate of fees charged elsewhere; and

WHEREAS, It is as unethical for colleges to underbid each other pecuniarily, as it is for practitioners to do so;

Resolved, That hereafter, no medical school in this country, other than those fully endowed, be entitled to representation in this Association, if the amount charged by such schools for a single course of regular lectures be less than one hundred and forty dollars.

Resolved, That all schools charging less than this sum are earnestly requested by this Association to advance their rate of fees to the amount mentioned.

The report of Dr. Lee, of New York, the delegate to the Association of Superintendents of Insane Asylums, was offered and referred to the section of Psychology.

The report of Dr. Gross, of Pennsylvania, delegate to British Medical Association, was presented, together with the letter to Dr. Ehrenberg, was read and referred to the Committee of Publication.

The time having arrived for the consideration of the revision of plan of organization, it was on motion, taken up.

A recess was taken to allow the selection of members of the Committee on Nominations.

On reassembling, the Permanent Secretary announced the following as the Committee on Nominations:

New York, J. C. Smith; Delaware, H. F. Askew; Pennsylvania, A. M. Pollock; Kentucky, H. M. Skillman; Tennessee, J. B. Lindsley; Mississippi, W. Y. Gadbury; Alabama, J. Cochran; Ohio, Jno. Townsend; Indiana, B. S. Woodworth; Illinois, T. D. Fitch; Wisconsin, H. Van Dusen; Missouri, J. S. Moore; Michigan, J. B. White; Georgia, R. D. Arnold; Louisiana, S. Logan; Texas, S. M. Welch; Minnesota, C. N. Hewitt; Arkansas, R. G. Jennings; West Virginia, W. J. Bates; Rhode Island, G. L. Collins; District of Columbia, L. W. Ritchie; United States Army, J. J. Woodward; United States Navy, F. E. Potter.

Dr. Chaille, of Louisiana, submitted a proposition for a common medical nomenclature in the United States, taking as a model an official publication on the subject by the Royal College of Physicians of London, and offered the following resolutions, which were adopted:

Resolved, That a committee of five be appointed by the President, to report as soon as practicable to the present session of this Association, upon the following:

1. The propriety of adopting and using its influence to have adopted by the entire medical profession in the United States, the provisional "Nomenclature of Diseases of the Royal College of Physicians."

2. On the practicability of having this nomenclature published in such manner as may render it easily and cheaply accessible to every member of the profession.

3. To recommend such other practical measures for the action of this Association as may be necessary to introduce this nomenclature into official (military, naval, etc.,) and general use.

The chair appointed the following gentlemen as the committee:

Drs. Woodward, U. S. A., Heustis, of Alahama, F. G. Smith, of Pennsylvania and Chaille, of Louisiana.

The reports of the Committee of Publication, and the Treasurer, were read, accepted and referred to the Committee of Publication.

On motion, the Committee on Nominations were permitted to retire for consultation.

The special order for twelve being the report on Specialists, it was read by the Secretary, and on motion of Dr. Sayre, the resolutions were adopted and the report referred to the Committee of Publication.

The large number of arrivals has increased the *personnel* of the Association to near four hundred.

Dr. L. P. Yandell, Jr., of Kentucky, introduced the following resolution:

Resolved, That private handbills addressed to the members of the medical profession, or advertisements in newspapers, calling the attention of professional brethren to themselves as specialists be declared in violation of article — of section — of the code of Ethics of the American Medical Association.

Dr. N. S. Davis, of Illinois, said it had been the practice to publish cards in medical journals for the purpose of informing the medical fraternity that the advertiser devotes himself to special diseases. These cards were not so much for the information of the public, as for the medical fraternity. He hoped that, now the question was up, it would be discussed fully.

Dr. L. P. Yandell, of Kentucky—We have allowed physicians to violate the code of ethics by advertising in our medical journals that they are specialists in the treatment of certain diseases. In Europe they are stricter in regard to specialists than here. There, where a physician wins a reputation in the treatment of certain diseases, his professional brethren send cases to him for treatment, but advertisement is prohibited. If we are allowed to resort to advertisements not as a question of merit, but of money, this Association should so declare. I am sure I am right in this principle, and I want to get an expression from this Association.

Dr. Sayre, of New York—Let those who understand the best mode of treatment in special diseases, instruct their professional brethren through the proper channels, as the honorable way of preferment, not by advertising as a matter of dollars and cents. Let us look the matter square in the face and sustain the resolution of Dr. Yandell. May my hand be paralyzed if I make any attempt to profit by advertising knowledge I have attained in my profession.

Dr. Mussey, of Ohio, moved to amend by inserting "or in medical journals."

This amendment was accepted.

Mr. Davis, of Illinois—The question before us is one to settle the interpretation of the existing statute. The question is whether that rule of ethics shall be enforced prohibiting publication of cards calling attention of individuals laboring under particular diseases.

Dr. Yandell stated that he had preferred charges against a practitioner of Louisville, for advertising himself as a specialist in the newspapers, and for sending hand-bills to physicians, but that the medical societies of that city not having sustained him, he brought this subject up for the action of this Association. The question is, shall we associate with professional prostitutes and medical out-laws?

Dr. Yandell's resolution was unanimously adopted.

The Committee on Prize Essays reported as follows, their report being adopted:

They have received but two essays—one upon "The Physiological Effects and Therapeutical Uses of Atropia and its Salts;" the other upon "Quinine as a Therapeutic Agent." They agree to present both of these essays to the Association, and to recommend the award of a prize of one hundred dollars to each of them.

S. M. Bemiss, *Chairman.*
C. Beard.
Joseph T. Scott.
S. A. Smith.

The Secretary broke the seals, and announced that Dr. S. S. Herrick, of New Orleans, was the author of the paper on quinine, and Dr. Roberts Bartholow, of Cincinnati, was the author of that on atropia.

Dr. Booth of Mississippi, offered the following preamble and resolution:

Resolved, That the proper construction of article four, section one, Code of Ethics, A. M. A., having been called for, relative to consultation with irregular practitioners who are graduates of regular schools,

Resolved, That said article four, section one, Code of Ethics, A. M. A., excludes all such practitioners from recognition by the regular profession.

This resolution was unanimously adopted.

On motion, the Association adjourned until Thursday, at nine A. M.

THIRD DAY, THURSDAY, MAY 6, 1869.

The proceedings of yesterday were, undoubtedly, the most important held since the opening of the session. The reports of special com-

mittees—some of them bearing upon questions vital to the interest of medical science—were read and appropriately acted upon. Among the ablest reports was that on President Baldwin's address, and one from the Committee on Medical Education. We give the former; but we regret that the great length of the latter prevents us from publishing, at this time, even a summary. We should judge that much was done yesterday toward defining clearly the position to be assumed during the coming year by the Association. Many of the technical reports are of a high order of ability.

Dr. Baldwin, President, in the chair. Dr. S. M. Bemiss and Dr. Mendenhall, Vice-Presidents.

Reading of the minutes was dispensed with.

Dr. Parvin presented the following report of Committee on President's Address:

We can not refrain, before entering upon the consideration of the plan recommended by the President for the improvement of medical education, gladly expressing our high appreciation of the general tone of this address, of the broad and catholic spirit which pervades it, finding expression in earnest and eloquent words—in brief, we believe the address worthy the perusal of every member of the profession, in that it was worthy the memorable occasion, and is worthy the annals of medicine.

On the other hand, we can not refrain, with sadness be it said, from acknowledging the truth of the terrible allegations made against the present condition of medical education, and the little success attending the efforts for improvements in such connection, made during a score of years.

The special recommendation made by the President is in these words:

"I would advise that we appoint a committee of our wisest and best men, to digest a plan for one or more National Medical Schools, and to memorialize Congress in behalf of the enterprise. Let the plan embrace, as a basis, the features presented by the Cincinnati Convention of Teachers; let these schools or universities confer such distinctions and privileges as will be proportionate to the superiority they demand, and such as will make the attainment of their diploma an object of the ambition of those who engage in the study of medicine; let the choice be open to all aspirants, and the appointment or election of professors so guarded as to secure the very highest talent, the most profound learning, with the most fully demonstrated capacity for teaching. Make the salaries of the professors large, and not depend upon the number of students; and let the Federal Government assume a proper share of the expenses incurred."

Your committee express their hearty approval of this general plan, but suggest that the effort at first should be for the establishment of a single school, as more feasible; and beside, one such institution would be a model which other medical colleges might, in time, be induced to imitate in extent, duration and thoroughness of teaching, and in rigidness of requirements for the degree of M. D.

We likewise desire to say that when the details of this general plan are thrown

into form, there should be the amplest security against the places and the power of such a medical college as designed, ever falling into the hands of politicians or the proteges of politicians. Medicine is higher than politics, broader than political creeds and party platforms.

In conclusion, your committee reiterate the recommendation of the President as to the appointment of a committee for the special purpose referred to.

The President appointed this committee as follows:

Dr. N. S. Davis, of Chicago, Dr. F. Gurney Smith, of Philadelphia, Dr. D. H. Storer, of Boston, Dr. E. S. Gaillard, of Louisville, Dr. Joseph Jones, of New Orleans.

On motion, Dr. W. O. Baldwin, of Montgomery, was added to the committee.

The President appointed as delegates to the British Medical Association:

Dr. N. Pinckney, U. S. N., R. R. McIlvain, Ohio, J. F. Hibberd, Indiana, B. Lindsey, District Columbia, G. C. Blackman, Ohio.

To the Canadian Association:

Dr. Alden March, Albany, New York.

Dr. Davis presented the following from the Association of American Medical Editors:

To the American Medical Association: I have been instructed to announce to your honorable body, that those members of your Association in attendance on this annual meeting, after proper consultation, have effected a permanent organization, with the title of "The Association of American Medical Editors." The objects of this organization are the cultivation of friendly relations, mutual assistance, community of effort and means, where possible, in a system of receiving foreign exchanges, and sending our own journals abroad, concert of action in support of improvement in the present system of medical education, and of a higher standard of preliminary attainments for those who propose to enter upon the study of medicine, in proposing laws for the proper registration of births, marriages and deaths, in collecting the names of all the regular practitioners in the several States, and in promoting generally the value and efficiency of our periodical medical literature. The Association thus formed is to hold its annual sessions on the day preceding the annual meetings of this body, and in the same localities. Dr. Mitchell, of New Orleans, is the Permanent Secretary, and Dr. J. B. Lindsley, of Nashville, Tennessee, the Assistant Secretary. Congratulating your honorable body on the establishment of another organized power within the ranks of your noble profession,

I remain yours, most truly, N. S. DAVIS, *Editor*,
President of Association of American Medical Editors.

Referred to Committee on Publication.

Dr. Parvin read the very able report of Dr. J. C. Reeve, of Ohio,

upon Medical Education. The report was referred to the Publication Committee.

In the case of a special violation of the code in Louisville, Kentucky, Dr. Gaillard desired to remove an unfortunate and incorrect impression created in the minds of the members of the Association by one of the delegates from Louisville (Dr. Yandell), in regard to a failure on the part of two medical societies in that city to meet promptly and fully an alleged breach of the code of ethics on the part of the members of these societies.

Dr. Gaillard stated that he was satisfied Dr. Yandell had no intention of creating a false impression in this connection. The gentleman against whom charges had been preferred, was a German of professional proficiency, who recently arrived, and ignorant of the code of ethics, had advertised himself as a specialist in the daily papers, and sent private hand-bills to professional men. As soon as this gentleman was apprised of his fault, he had promptly withdrawn his advertisement from the daily papers, and had ceased sending the hand-bills mentioned. The medical societies of Louisville decided that though there had been a breach in the letter of the code of ethics, the gentleman arraigned had no intention of doing what was professionally wrong. These societies, therefore, declined to expel the member against whom these charges had been preferred. Dr. Gaillard thought it due to those societies and to the gentleman offending, that this explanation should go upon the records.

The Committee on Nominations, Dr. J. J. Woodward, U. S. A., President, reported the following names:

REPORT OF THE NOMINATING COMMITTEE.

NEW ORLEANS, LOUISIANA, MAY 6, 1869.

The Committte on Nominations unanimously report as follows:

For President—Geo. Mendenhall, Ohio.

For Vice-Presidents—Warren Stone, Louisiana, Lewis A. Sayre, New York, F. Gurney Smith, Pennsylvania, John S. Moore, Missouri.

For Assistant Secretary—Wm. Lee, District Columbia.

For Treasurer—Casper Wister, Pennsylvania.

For Librarian—Robert Reyburn, District Columbia.

Committee of Arrangements—Thomas Antisell, chairman, Robert Reyburn, C. M. Ford, L. W. Ritchie, W. J. C. Duhamel, D. R. Hayner, C. F. Nally.

Committee on Publication—F. Gurney Smith, Pennsylvania, chairman, W. B. Atkinson, Pennsylvania, A. J. Semmes, Georgia, Robert Reyburn, District Colum-

bia, Casper Wistar, Pennsylvania, H. F. Askew, Delaware, Wm. Maybury, Pennsylvania.

Committee on Medical Literature—J. J. Woodward, U. S. A., chairman, W. H. Anderson, Alabama, Theophilus Parvin, Indiana, Hosmer A. Johnson, Illinois, C. W. Parsons, Rhode Island.

Committee of Prize Essays—Grafton Tyler, District Columbia, chairman, N. R. Lincoln, District Columbia, N. R. Smith, Maryland, G. W. Miltenberger, Maryland, W. R. Dunbar, Maryland.

Committee on Epidemics—Add the following to fill vacancies: J. K. Bartlett, Wisconsin, J. D. Jackson, Kentucky.

Committee on Education—T. G. Richardson, Louisiana, chairman, E. W. Jenks, Michigan, E. S. Gaillard, Kentucky, W. M. McPheeters, Missouri.

Time for meeting, in Washington, first Tuesday in May, 1870.

J. J. WOODWARD, U. S. A., *Chairman.*

The report was unanimously adopted.

Dr. Davis offered the following:

Resolved, That a special committee of three be appointed by the President to present copies of the resolutions adopted before the several State medical societies at as early a period as possible.

Adopted.

Dr. Chaille, of Louisiana, chairman of the committee, presented a report on medical nomenclature, which was received and adopted, and referred to Committee on Publication.

The Committee on the Nomenclature of Diseases have the honor to report that it has examined the "Provisional Nomenclature of the Royal College of Physicians" of London, and is of the opinion that it is desirable for this Association to recommend and adopt the same for general use in this country, with such modifications as, on deliberate consideration, may appear to be necessary. The following resolution are therefore submitted:

1. *Resolved*, That a special committee of fifteen be appointed by the President to take this subject into deliberate consideration, and to report at the next annual session what alterations, if any, are necessary to adapt the proposed nomenclature to general use in the United States.

2. That this committee be authorized to fill up any vacancies which may occur upon it.

3. That the Committee on Publication be authorized to publish for general distribution, one thousand copies of the English and Latin portions of this nomenclature, under the designation of the Proposed Nomenclature, prefacing the same with such remarks as may be deemed necessary to secure the criticism and co-operation of as large a number of American medical men as practicable.

4. That the committee hereby appointed be directed to draw the attention of the Surgeon General of the army, of the Chief of the Bureau of Medicine and Surgery of the navy, and of the Superintendent of the Census, to the question of their official adoption of the Proposed Nomenclature; to invite them to appoint whom

they see fit to represent them on this committee; and to solicit such co-operation as may be necessary to accomplish the purpose desired, viz: The final adoption of such nomenclature and classification as will receive the conjoint approval of the official medical bureaus of the government and of the general profession.

STANFORD E. CHAILLE, M. D., *Chairman.*

COMMITTEE.—S. E. Chaille, Louisiana, J. J. Woodward, U. S. A., A. B. Palmer, Michigan, F. G. Smith, Pennsylvania, J. F. Heustis, Alabama.

Tho following committee of fifteen was appointed:

Francis G. Smith, chairman, J. J. Woodward, U. S. A., B. F. Michel, Alabama, A. B. Palmer, Michigan, S. E. Chaille, Louisiana, L. P. Yandell, Jr., Kentucky, Austin Flint, New York, Alonzo Clark, New York, George B. Wood, Pennsylvania, S. H. Dickson, Pennsylvania, E. Jarvis, Massachusetts, Theo. Parvin, Indiana, W. M. McPheeters, Missouri, E. M. Snow, Rhode Island, N. Pinkney, U. S. N.

The Committee on Medical Education having referred matters at issue to State medical societies, Dr. E. S. Gaillard, of Louisville, offered the following motion:

Moved, That the adoption of a uniform rate of collegiate fees, one hundred and twenty dollars, being the minimum, be accepted as the sentiment and desire of this Association.

Dr. Gaillard stated that he would not trespass upon the time of the Association in speaking upon this motion; that all of the members present were fully informed upon this subject. He said the profession desired to learn the wish and decision of the Association upon this all important question, and he asked a full expression of opinion and a full vote in regard to it.

Dr. Sayre, of New York, opposed the resolution, but on understanding that it did not prohibit an increase of fees, withdrew his objections. He spoke against cheap medical colleges, which allured young men to an imperfect medical education, who were afterward turned back to the plow.

An amendment was proposed by Dr. Logan, of Louisiana, to make the minimum one hundred and forty dollars instead of one hundred and twenty dollars.

Dr. Mussey, of Ohio, opposed the amendment, and stated that the fees of Ohio had to be kept down to accord with the fees of the Michigan college. The location of the college and the cost of living made the difference. A hundred and forty dollar college is considered good, simply because one hundred and forty dollars is the fee, while other colleges were equally as good where the fees were only eighty dollars. It is impracticable to accomplish this change at once. A new college starts and comes up to the full standard of the old college in the

vicinity, and the latter comes down with its fees. The new college must come down, also, in order to maintain itself.

Dr. McPheeters, of Missouri, did not agree with Dr. Mussey that it was impracticable to fix the collegiate fees at a minimum of one hundred and twenty dollars. He favored the original resolution, without amendment.

Dr. Palmer, of Michigan, alluded to the remarks of Dr. Sayre, of New York, disparaging one-horse and cheap colleges. The University of Michigan was established and allowed a donation from the general government of two townships of land, and it has husbanded its resources and can maintain itself with moderate fees. Under the organic law of the State, citizens were entitled to the benefits of the University free of charge, and, as a liberal donation had been made by the general government, students had been admitted from other States on the same terms. Lately, however, a small fee had been charged for students from other States who received the benefits of the lectures. We come up in fees just as far as we think is for the advantage of the institution, and we do not go beyond that point, because it will diminish the numbers. We are willing to put up the fees for students from other States to one hundred and forty dollars, if neighboring States will make the same requirements from their students as we do.

Dr. Palmer then commenced describing the *great advantages of this school*, when Dr. Gaillard called him to order, stating that we were present to discuss principles involved and not to listen to eulogies upon special schools.

Dr. Davis, of Illinois—I do not object to discuss the fees, bnt I do claim that it is out of place to advertise the superior claims of State colleges here. We have had no more illiterate students in our Illinois college than have come to us after one course in the University of Michigan.

Dr. Parvin, of Indiana—I move to amend by striking out one hundred and forty dollars and inserting one hundred. If we make the fees of colleges uniform, the next step will be to make the fees of practitioners uniform—the same in the villages of the west as in the city of New York—and that is not equitable or practicable. It is not possible for the schools of Ohio to keep even their present classes, and charge one hundred and forty, or even one hundred and twenty, while they may at one hundred dollars, notwithstanding the competion of Ann Arbor, with its low fees. Why then grasp after unattainable

good, and reject the possible? Make the minimum one hundred dollars, and the two principal schools of Cincinnati may come up to it.

Dr. Logan of New Orleans, advocated the sum of one hundred and forty dollars, as the minimum of collegiate fees, and urged the adoption of his amendment. Lost.

The amendment of Dr. Parvin, to fix the minimum at one hundred dollars, was also lost.

The resolution was then, as originally presented, unanimously adopted.

Special Committee on the Relative Advantages of Syme's and Pirogoff's Mode of Amputating at the Ankle, Dr. G. A. Otis, U. S. A., chairman, Dr. G. M. Holloway, of Louisville, Kentucky.

Proposed by J. J. Woodward. Approved.

Dr. Bemiss presented from Dr. John Watters, of St. Louis, Missouri, a paper on the Doctrines of Force—Physical and Vital.

Dr. Toner, District Columbia, moved that a Committee on Variola be appointed—Dr. J. Jones, chairman. Adopted.

Dr. Pinckney, U. S. N., made statements concerning relative grades of rank. The paper was ordered to be spread upon the minutes.

Association adjourned to meet at nine o'clock A. M., Friday, May 7th.

FOURTH DAY, FRIDAY, MAY 7, 1869.

The Association met at nine o'clock, Dr. Baldwin in the chair.

Reading of the minutes omitted.

Dr. Joseph Jones, Louisiana, presented a number of specimens of pathology, anatomy, and natural history. The explanations were very interesting, and received with applause.

On motion of Dr. Garrish, New York, the thanks of the Association were tendered to Dr. Jones.

On motion of Dr. F. G. Smith, of Pennsylvania, the following resolutions were unanimously adopted by a vote of the members present, standing as a mark of respect:

Resolved, That the thanks of this Association are justly due and are hereby tendered to the President for the uniform kindness and courtesy with which he has presided over its deliberations, and to the Committee of Arrangements, the physicians and citizens of New Orleans, for the generous hospitality and fraternal kindness with which we have been received and treated since our sojourn in their city, with the assurance that the memories of this visit will always be among the brightest and most enduring of our lives.

Resolved, That we also present our thanks to the various railroad and steamboat companies who have so liberally extended to us facilities of transportation,

and to the daily press for their efficient aid in reporting the proceedings of this meeting.

On motion of Dr. Moore, of Mississippi, the following preamble and resolution were adopted:

WHEREAS, The contract system is contrary to medical ethics,

Resolved, That all contract physicians, as well as those guilty of bidding for practice at less rates than those established by a majority of regular graduates of the same locality, be classed as irregular practitioners.

The following reports of the sections followed:

Section on Meteorology, Medical Topography and Epidemics, reported. Paper accepted and referred to the Committee on Publication.

Sections on Practical Medicine and Obstetrics, reported and report accepted, and referred to Committee on Publication.

The report on Training of Nurses was accepted, and the accompanying resolutions adopted.

Section on Medical Jurisprudence, Hygiene and Physiology, reported. Committee continued for next year. Report accepted and referred to Committee on Publication.

Section on Surgery proposed that their report be received without formality and be referred to the Committee on Publication. Adopted.

After being read, the report was accepted and ordered to be published.

Section on Psychology, the same disposition.

The President appointed Dr. J. M. Toner a committee of one, at Washington, D. C., to assist the Librarian of Congress to keep the books of the Association.

On motion for adjournment, the President delivered this address, which was unanimously accepted and ordered to be published in the transactions of the Association:

GENTLEMEN: Before I submit the motion just made, and which, when adopted, will practically close my official relations to this body, allow me to return you my most cordial and grateful thanks for the universal kindness which I have received at your hands. Whatever my future lot in life may be, the world holds no honors which, to me, can equal those conferred by you. The fraternal good will which has so conspicuously marked your deliberations, has been to me a matter of infinite satisfaction and pride, and will not be the least among the grateful memories which will gladden my heart as I may hereafter review the incidents of my official connection with you.

TO win your judgment and approval, to hold up the dignity of fellowship, the usefulness of association, and the interest and prosperity of the profession at large, have certainly occupied my most anxious thoughts since my elevation to this position; yet, to cherish and promote the intimate and cordial relations of friendship between the individual members of this Association against all sectional distinctions or geographical lines, has also been among the chief objects of my ambition and

the earnest desire of my heart. Could I now believe that my efforts have contributed in the slightest degree to enlarging that harmony of sentiment and fraternal feeling which has been so apparent throughout this meeting, I should feel that I had commenced at least to make some return for the great honor and kindness received at your hands.

It now only remains for me, gentlemen, to again express to you my thanks, to wish you a safe return to your homes and labors, a happy reunion with your friends and families, and to pronounce the sad word, over which the heart of friendship would fain linger, as I bid you an affectionate farewell.

W. O. BALDWIN, *President A. M. A.*

The Convention adjourned to meet in Washington, D. C., the second Tuesday in May, 1870.

(This report of the Proceedings of the American Medical Association, is chiefly taken from the *Courier-Journal*, a copy of which was received from Dr. Gaillard. It evidently was condensed by some medical hand from the reports of the New Orleans papers, which were very full, especially those in the *Times*. We thank Dr. Gaillard for his kindness, for it saved us no little work.)

PROCEEDINGS OF THE DEARBORN COUNTY MEDICAL SOCIETY.

The Society met at the room of Lieut. Vaughan, in Lawrenceburgh, April 13th, 1869, and was called to order by the President, Dr. Sutton.

Present, Drs. Harding, Kyle, Haines, Lamb, Bond, Walter, Sale, Layton, Robbins, and Miller.

Minutes of previous meeting were read, amended and approved.

Dr. Lamb requested an expression of the members of the Society on the treatment of pseudo-membranous croup, upon which subject nearly all present gave their views.

On motion of Dr. Miller, Dr. D. H. Harding being present, was invited to participate in the discussion.

Dr. Sale reported a case to which he was called and diagnosed inflammation of the trachea. In a few days, in a fit of spasmodic coughing, a small chip of wood was expelled, and the symptoms subsided.

Dr. Sutton reported a similar case in which tracheotomy was performed, and a grain of corn extracted, with entire relief.

Dr. Sutton read some interesting facts relating to the meteorological condition of the atmosphere during the autumnal months of 1866, 1867 and 1868, with its influence on the health. The first, remarkable for its humidity; the second, for the small amount of rain fall; and

yet, both were extraordinarily healthful. The last year showing nearly a mean, was noted for the unusual amount of sickness, showing that conditions of the atmosphere exert less influence on the health than is generally supposed.

Dr. Miller moved that article sixth of the constitution be so amended that the Committee of Arrangements be appointed at each meeting, composed of members residing at the place where the next meeting is to be held. Also, article ninth, so that five members shall constitute a quorum, which were adopted.

Dr. Sutton submitted the following preamble and resolution, which was unanimously adopted:

WHEREAS, Dearborn county has no suitable building or accommodation for the medical treatment of our pauper population, neither have we a suitable building for the confinement and comfort of that class of insane who can not be admitted into the Hospital for the Insane at Indianapolis; and

WHEREAS, For want of such accommodation, we have recently seen one of our citizens, while laboring under partial insanity, confined in our county jail, placed in irons, and surrounded by criminals, treatment which was not only cruel, but well calculated to aggravate all the symptoms of his disease; and

WHEREAS, We believe that when a county becomes as wealthy and contains a population as large as Dearborn, with as may paupers as we now have requiring medical aid, and as many insane who are not properly provided for, that a county hospital, or a building more suitable than the one we now have, should be erected near the county seat or some other point easy of access, and placed under the control of an intelligent physician with proper assistants; and

WHEREAS, We believe such county or local hospital will meet the wants of the community better than the erection by the State of a large central hospital, as recommended by the Indiana State Medical Society at its last meeting, from the fact that a large portion of the cases requiring medical treatment could not be transported safely from distant and different parts of the State, such as patients laboring under acute diseases, many of whom would die before they could be got to the hospital; or those suffering from contagious diseases, the removal of whom, to a distant hospital, would endanger the public; or those surgical cases arising from accidents requiring immediate treatment, such as the reduction of dislocations, replacing of fractures and dressing of wounds, &c., all of which might be safely removed a short distance to a county hospital; therefore

Resolved, That a committee of three be appointed to present to our county commissioners, at their next session, the importance of having more suitable accommodations for the medical treatment of our poor and the comfort and treatment of the insane within our county, as wants which humanity demands and our community require, and report at our next quarterly meeting.

Drs. Sutton, Harding and Kyle, were appointed the committee.

Lieut. J. F. Vaughan, who lost a leg at the battle of Cold Harbor,

June 1st, 1864, which was re-amputated at Chicago, by Prof. Brainard, October 10th, 1864, kindly came before the Society and submitted his stump for examination. This is a case of necrosis which has gradually been extending itself up the shaft of the bone, and discharging from several openings.

On motion of Dr. Lamb, the Secretary was requested to furnish a synopsis of the proceedings for publication in the *Western Journal of Medicine* and *Cincinnati Lancet and Observer*.

Drs. Harding, Miller and Sale, were chosen delegates to the Indiana State Medical Society.

Dr. Robbins read a history of a case of spina bifida, occurring in the practice of Dr. Walter, in which amputation was resorted to, but the child only lived a few days.

Dr. Sutton reported a case occurring in his practice some years ago, of a tumor on the back of the head, so large as to give rise to the rumor in the city of a child born with two heads. He introduced a trocar and drew off a large quantity of serous fluid; the sack re-filled and he punctured it again; the child died some fifteen months afterward, of hydrocephalus.

Drs. Walter and Haines, each reported a case somewhat analogous.

Drs. Sutton, Haines and Lamb, were appointed Committee of Arrangements for next meeting.

On motion of Dr. Miller, a vote of thanks was tendered Lieut. Vaughan for the use of his room for this and future meetings.

On motion of Dr. Haines, a vote of thanks was tendered the physicians of Lawrenceburgh for their hospitable entertainment.

The Society then adjourned to meet at Aurora, on the last Tuesday in May, at ten o'clock A. M. C. B. MILLER, *Secretary*.

JOHNSON COUNTY MEDICAL SOCIETY.

This organization held its annual meeting at the Court House, in Franklin, on Tuesday, May 11th, beginning at ten A. M.

The following named members were present, viz: W. C. Bice, J. H. Donnell, J. L. Farris, J. H. Fuller, J. A. Marshall, D. H. Miller, A. Miller, J. T. Jones, P. W. Payne, J. B. Ream, J. J. Sadler, J. F. Wallace, B. Wallace, W. A. Webb, and R. D. Willan.

The record of the last meeting having been read and approved,

the Society was favored with an essay by President P. W. Payne, on "The Duties and Responsibilities of Physicians, as Experts in Cases of Crime committed under the Influence of Intoxicating Liquors." The essayist held that a man is not responsible for acts committed in the second stage of intoxication. The reading was followed by an animated discussion, in which the larger number held with the essayist, but some insisted that criminal responsibility does extend to the second stage of drunkenness.

Adjourned to one P. M.

AFTERNOON SESSION.

An essay was read by B. Wallace, on Post Partum Hemorrhage. The discussion of this subject was participated in by most of the members present.

This being our annual meeting, the officers were elected as follows:

President—J. A. Marshall.
Vice-President—J. S. Farris.
Secretary—B. Wallace.
Treasurer—J. H. Fuller.

The Committee on Obstetrics were not prepared to report, and were instructed to leave their blanks in the hands of practitioners till close of this year, and then call them in and prepare a report to be presented at a special meeting in January next.

A motion prevailed that we hold a special meeting the first Tuesday in July, to hear Dr. Jones' paper on Diphtheria, and also reports of any interesting cases which members may be treating.

J. H. Donnell, W. A. Webb and B. Wallace, were appointed a committee to confer with the present coroner in reference to resigning in favor of a medical man, and a motion prevailed requesting J. T. Jones to accept the office, if his appointment by the commissioners can be secured.

On motion, W. C. Hall was excluded from membership for contempt of this Society.

J. L. Kegly was elected a member, having been duly recommended by the "Committee on Admission of Members."

A resolution prevailed, that members be allowed to invite their friends outside the profession, to attend our meetings.

The Society was instructed to furnish a copy of these proceedings to the *Western Journal of Medicine* for publication.

Adjourned to July, 6th prox. B. WALLACE, *Secretary*.

CORRESPONDENCE.

PHILADELPHIA, MAY 15, 1867.

In my letter of March 15th, I alluded to the introduction of the Earth-Closet into the lower surgical ward of the Pennsylvania Hospital, and the employment of the dry clay as a surgical dressing by Dr. Addinell Hewson, one of the surgeons to the Hospital. The Closet has fully realized the expectations of its friends in its working, and has demonstrated its value as an appliance in hospital wards. One is now in successful use in the Philadelphia Hospital, and for some time past the earth has been used as a deoderizer in the urinals at the Episcopal Hospital.

During the past two months, Dr. Hewson has continued his investigations in the great variety of cases presented for treatment in the wards, to test most thoroughly its value and to determine the nature of its action. In order to do this, he has used it to the exclusion of all other applications, and has carefully observed the results. Thus far, he has found that its action is most decided in those cases in which exist high inflammatory conditions and excessive suppuration. Its power to prevent putrefactive change, has been shown in a marked manner in a case of amputation at the tibio-tarsal articulation. The injury was produced by machinery, and the structures were, as a consequence, very much lacerated. Desiring to give the patient—a working man—as serviceable a stump as possible, Pirogoff's method was employed. By reason of the lacerated condition of the parts, the vascular supply was cut off, and the posterior flap lost its vitality. Under the application of the earth-dressing, the decomposed tissue would not slough off, and in order to accomplish its removal, a fermenting poultice was resorted to. The first twenty-four hours of its application developed the putrefactive process, and the amount of pus discharged was quadrupled. When the dead tissue had been removed, the earth-dressing was re-applied, and the amount of pus discharged decreased in the ratio of its increase under the fermenting poultice. The results in this case seem certainly to prove its power to prevent the putrefactive process.

The method of preparation of the clay for surgical purposes, is

very simple. Yellow clay is selected, well dried, *not baked*, pulverized and finely sifted. Its application is easy, being placed in direct contact with the surfaces, and kept in position by compresses and bandages. Dr. H. uses exclusively the paper dressings, made of unglazed white paper. For application to the extremities, the paper is used in the form of the bandage of Scultetus. In amputations, the stump is *packed* in the clay, in the ordinary fracture box, or in boxes made of binders' board.

Whatever may be the ultimate verdict as to the value of the dry clay as surgical dressing, Dr. Hewson at least deserves credit for the thorough manner in which he has prosecuted his investigations.

It seems that Twitchell, the murderer of his mother-in-law, Mrs. Hill, was not satisfied with his efforts to puzzle the doctors during his trial, as to the character of the weapon used in producing the death of his victim, but endeavored, in his own death, to leave behind a problem for their solution. Early in the morning of the day selected for his execution, he was found in "rigor mortis," lying on the cot in his cell, evidently destroyed by some poisonous agent, the nature of which could not, at that time, be determined. An empty tin-cup, upon a chair beside the cot, gave no evidence as to what it had contained, or whether it had been used in the administration of the drug. The position of the body seemed to indicate that spasmodic movements had preceded death, as there were slight opisthotonos and flexion of the fingers; the pupils were but slightly dilated; the jaws were firmly closed. In other respects, the appearances were not characteristic of the effect of any particular poison. It was, therefore, left for the autopsy to decide the question. The examination was made about twelve hours after it is supposed death occurred. On removing the calvarium, the odor of hydro-cyanic acid was strongly exhaled, and as the examination progressed, this odor was found to pervade all the tissues. The mucous membrane of the stomach was slightly reddened, and the blood was in a fluid condition. With these exceptions, no abnormal conditions were discovered. The fluid state of the blood was an unusual condition, and attracted the attention of those present at the examination. It is not noted as a condition by writers on the subject, of the effects of this poison. Taylor, in his work, mentions one case of poisoning by prussic acid, in which "the muscles were red, and gave out, on section, a good deal of fluid blood." A specimen of the blood was presented at a meeting of the Pathological Society, by the President, Dr. Packard, and referred to a committee for examina-

tion. This committee, consisting of Drs. Keen and Hare, made their report at the last meeting. They had submitted the specimen of blood to repeated and careful examinations, but could discover no cause to account for its non-coagulability. Appended to the report was a statement of the results obtained in a series of experiments instituted by them, to ascertain the effect of the poison upon the blood of animals. Rabbits were selected for the purpose, and the experiments were conducted with great care. The poison was administered in varying quantities, and in different combinations, and in no case was the blood found fluid. They propose to continue their investigations, and will prepare a full report for publication in the transactions of the Society.

On Wednesday last, Dr. Washington L. Atlee, the distinguished ovariatomist, performed his two hundred and third operation. The case was one of unusal interest, owing to the involvement of both ovaries and the existence of extensive and complicated adhesions.

According to the history furnished, the disease manifested itself in the right ovary about one year since, and had steadily progressed without much constitutional disturbance. The patient, a native of Ireland, was the mother of four children, and in fair condition.

The operation was performed with all the skill and method which characterize the doctor, for he is one of the most systematic men in the profession, and his operations are models of system and good order. I venture, in the hope that it may prove interesting to some of your readers, to describe briefly his method. All preparations for the operation are made under his personal supervision. The patient is placed upon the table, with the shoulders elevated, limbs projecting beyond and supported upon stools. When all is in readiness, which is *invariably* at the time appointed, he enters the room where are assembled his assistants and the gentlemen invited to witness the operation. In a few words, the history of the case is given, his diagnosis is announced, and the method of operation explained, accompanied by the statement that it will not be completed, if such conditions exist as in his judgment render it improper to proceed. Silence is to be maintained, and the assistants are to take the places assigned them, and give strict attention to their duties.

The anæsthetic used is one part of chloroform to two parts of ether—liquid measure. When the patient is anæsthetized, the operation is commenced, the Doctor, standing upon the right side of his patient, an incision, from two and one-half to three inches in length, and about three inches below the umbilicus, is made in the linea alba.

Reaching the sac by careful division of the abdominal wall, he introduces a finger and frees the margins of the wound. Introducing now, two or more fingers, the extent of the parietal adhesions are determined and broken up. The cyst is now evacuated by plunging a *large* trocar into it, care being taken that none of its contents escape into the abdominal cavity. If other cysts exist, the perforator is re-introduced into the canula, forced through the septa, and the fluid evacuated through the opening made into the large cyst.

Further explorations are made by the hand to ascertain whether there are omental or intestinal adhesions. If necessary, the wound is enlarged and the points of adhesion brought into view. Omental adhesions are carefully separated, and the ends given in charge of an assistant, who prevents their return to the cavity, and also controls any hæmorrhage which may occur from divided vessels. Usually, intestinal adhesions are gently detached by the fingers. If they are extensive and firm, a portion of the sac is dissected off, and permitted to remain adherent. In this way, the intestine escapes the injury which might arise from the efforts made to break up the adhesions. The sac is, by gentle manipulation, drawn through the opening, the pedicle sought for and secured by the clamp. The pedicle being secured, the sac is detached, and attention is given to the hæmorrhage—if any occur from the omental vessels, they are ligated after being retrenched—hæmorrhage from the parietes is controllled by means of torsion acupressure, or if necessary; the ligature is resorted to. The abdominal cavity is now carefully sponged, tepid water and soft sponge being used for that purpose. The pedicle and the ends of ligated vessels are placed between the edges of the incision. The clamp holds the pedicle in position, and pins are used to secure the ends of the vessels. The edges of the incision are brought together by the introduction of interrupted wire sutures, and adhesive strips are applied. A compress, covered by a mass of raw cotton is applied, the whole being secured in place by a bandage of soft flannel. The patient is placed in bed, and a full dose of McMunn's elixir is administered. The clamp is usually detached in four days, and the sutures are removed in six to eight. These are, in substance, the steps of the operation, as it is performed by Dr. Atlee.

As with all ovariatomists, the treatment of the pedicle has been a subject of careful investigation by him. He has employed all methods, and his experience warrants him in pronouncing the clamp the best, and to be preferred above all others. In two successful cases, where

the pedicle was very small, he employed simple torsion. The ecraseur, the ligature, thread and wire, and the actal cautery, have all failed to produce the favorable results obtained by the use of the clamp. In his operations, as in those of the English ovariotomist, Mr. Spencer Wells, increasing experience has been followed by diminishing mortality. In the two hundred cases, the mortality is about thirty per cent. As reported in the transactions of the *Royal Medical and Chirurgical Society*, June 25th, 1867, the mortality in the first two hundred cases of Mr. Spencer Wells amounted to thirty-one per cent.

Considering the character of many of his cases, for he does not select them as is sometimes done, and the circumstances under which the operation is frequently performed, without the services of competent nurses, and lacking those appliances so essential to the proper care of the patient, the results are certainly extremely favorable, and establish his reputation as a skilled and successful operator.

He is now arranging the immense amount of material accumulated during the past twenty-five years, and proposes to issue a work upon the subject of ovarian disease. It will be a valuable contribution to the science of medicine.

As you may know, this city has an excellent record as to the success which has attended amputations at the hip-joint.

In the *American Journal of Medical Sciences*, for July, 1866, Dr. Thos. G. Morton reported eleven cases, seven of which had terminated successfully. Three operations have been performed since that time, two of which have been unsuccessful, and the result in the third is yet undecided. It was performed at the Philadelphia Hospital, by Dr. H. H. Maury, one of the surgeons, in the presence of a large class of students and a number of the most prominent surgeons of the city.

The method of amputation selected, was that known as the cutaneous-muscular, the anterior flap being composed of the integument and superficial fascia, made by cutting from without inwards, and the posterior flap of the gluteal muscles. The circulation was controlled by means of Signouroni's abdominal tourniquet, compressing the aorta just before its division into the iliacs. Not more than an ounce of blood was lost; the patient bore the operation well, and is at this writing progressing favorably. The cause of the operation was a tumor of the upper portion of the femur, involving all the structures about the trochanters. In a clinical point of view, it had all the features of a malignant growth.

Last week, I had the pleasure of examining one of Dr. Thos. G.

Morton's hospital wagons, or ward dressers, as they are properly called. It had been made, in response to an order from Bellevue Hospital, and was very completely furnished. A description of the wagon, accompanied by a drawing, is given in the last number of the *Pennsylvania Hospital Reports.*

Dr. M. informs me that two are in use in Europe, one in London and one in Paris. It is the most complete apparatus that could be devised for the purpose, and should have a place in the surgical wards of every hospital.

Prof. Francis G. Smith, of the University of Pennsylvania, has just returned from New Orleans. He speaks in the highest terms of the courtesy with which delegates to the National Medical Association were received by the citizens of New Orleans and by the members of the profession throughout the south.

During the past week, Dr. F. S. Newcomer, of your city, has made us a short visit. J. E. M.

CLINICS AND CLINICIANS OF VIENNA—No. 2.

VIENNA, MAY 3, 1869.

Not many years ago, before the chastisement and resulting chastenment of Austria by her haughty neighbor, when her police regulations were much more severe than at present, every stranger, on entering her borders, was subjected to rigid scrutiny. Not content with his nativity, age, avocation, religion and destination, as now, they demanded, also, the object and intention as well as the probable duration of his stay, and it was not long before the great influx of young men from America, England and France attracted the attention of these worthies to a suspicious and alarming degree.

Everywhere the answer to their interrogatories was, we have come to hear Skoda. Who and where is Skoda? In a little while he was ferreted out, an obscure lecturer on auscultation and percussion in the general hospital, comparatively unknown, outside of the profession, of course, in the city wherein he dwelt. The report reached the ears of those in authority finally, one of the principal wards of the hospital was allotted him, they honored him, or rather they did themselves the honor to vouchsafe him certain decorations of honor, and thus was

placed in high distinction the chief living authority in this department of science in the world.

To Skoda are we indebted for the thorough exposition and interpretation of the many symptoms which, in Laenneo's theories, are inexplicable and second only to him, the great father of science, is Joseph Skoda, of Vienna, entitled to rank. His doctrines are now in general acceptance over nearly all Germany, and are rapidly gaining ground in England, while France, with the prejudices against everything which does not emanate within her boundaries, still adheres to Laennec.

The corner stone to the entire edifice of Skoda's doctrines is the discovery, in direct contradiction to all the laws of physics which were formerly inculculated, that air is a better conductor of sound than a solid body. Grant this as a law and his views are all simple enough. To prove this he resorts to a number of interesting experiments. A normal lung is placed between two stethoscopes, the voice of one individual, at the free extremity of one, is better heard by the ear of another at the free extremity of the second instrument than if a condensed or infiltrated lung be interposed. The noise of two stones clashed together under water is appreciated more faintly by the ear, likewise under water, than if ear and sound be out of water: audition with the tubular stethoscope is better than if the tube be closed by a tightly fitting rod of the same material. Niemeyer forwarded Skoda a solid stethoscope on his (Skoda's) last birthday, turned from the fir wood and in the proper direction with the grain as proof that his last statement was untrue, but the universal testimony of every unprejudicial ear, and his assistant in his private course, subjects it to trial by every student, is to the effect that the tubular is still far the better. Why do we hear better in the open air than if a wall be interposed, and why is the auditory canal a tube, inquires Skoda, if air be not the better conductor? The reason that sound is better appreciated by the ear applied to the end of a rod, metal for instance, struck at a remote distance than in open air at the same distance, is not because the solid is the better conductor, but because nearly all the sound is conducted, but little of it escapes; substitute a tube of the same length and the sound will be still louder heard. And so the reason why sound is more intense over a condensed lung is not because the more solid lung conducts the sound better, but because the bronchial tubes are surrounded by a more or less solid wall which prevents its dispersion and intensifies it by reverberation, and thus it is

heard better in spite of and not on account of the increased solidity, etc., etc.

You may well imagine that an innovation of this character excited no little attention, and various were the explanations, especially from the physicists, to meet these points. The best objection raised is, that the better conduction through a tubular stethoscope is due to the difference in conducting power between the condensed lung and the solid stethoscope, and the consequent interference with uniformity, which difference they claim Skoda has altogether neglected.

Space precludes a farther history or report, suffice it to say that Skoda's views are gradually extending over the continent and bid fair some day to become the prevalent doctrines everywhere. All the good old terms and technicalities are being rapidly supplanted, and we can assure you that it was with feelings of no peculiar character that we hear them spoken of for their *historic* interest. So go by the board the mucous and sub-mucous, sonorous and sibilant rales, which are simply *consonant rales;* crepitation once the grand *pathos noma*, ceases to be of much value—that is, of course, in differential diagnosis; ægophony yields the ghost, bronchial respiration and broncophony become synonymous with *consonant* respiration and *consonant* voice sounds; *consonance* is rung in our ears by day and by night until we might fancy a grand cöordinative and cöexistent harmony universal. And now what is consonance? In respiration it is the sound of the air from a healthy or less diseased portion passing over and into the tubes of a non-diseased portion, awakening a vibration there which is consonant with its primary sound. The consonant sound, hence, is a secondary sound and a dependant sound. Plug the tubes of the diseased portion with mucus, and consonance of course ceases. *How explain the sudden cessation of abnormal sounds which occurs daily on the old theory when the solidity is, by necessity, the same?* Should the membrane of the tubes be inflamed, the air in its passage is more or less obstructed, and hence we have consonant rales (consonirendes rasseln,) which are subdivided according to the size of the vesicles ruptured into large vesicle rales (groszblaschen), small vesicles (kleinblaschen), and vesicles of medium size (mittelgroszblaschen), or if dry into consonant piping rales (consonirendes pfeifen rasseln). All respiratory sounds must come under one of the three following divisions, consonant rales (consonirendes rasseln); indistinct or undecided respiration (unbestimmles athmen): consonant respiration (consonirendes athmen). The first embraces the dry and moist rales, crepitation, etc., etc., the

second as its name implies possesses no definite character, and the third includes bronchial respiration, the so called tubular, etc., etc. The grand fundamental law is that no one symptom or feature of auscultation is pathognomonic. The consonance of sound is explained in the same way.

You must know also, my dear Editor, it is no longer *moderne* to speak of compression of the lung either from the abdomen by meteorismus, or enlargement of any of its organs, or even from pleuritic effusions, unless of great accumulation. The retractility of the lung tissue explains it all in a much more scientific way. This said power, like the centrifugal force, is constantly at work, and is only balanced, as by the centripetal in nature, by the atmospheric pressure in inhalation; and it takes advantage of every infringement on the cavity of the chest to reduce the size of the lung. Hence the displacement of the heart's apex becomes a valuable symptom as one of the first in any affection which may have this effect. In pleurisy, for instance, of the left side the apex beat may be recognized nearer the sternum than normally long before the small amount of effused material would afford any dullness on percussion. The protruberances of the intercostal spaces are not due to the mechanical pressure of the fluid which is impossible when the fluid is small in quantity, and which is further disproved by the fact that spaces may be protruded above the level of effusion, or further, by their permanence in any position of the patient, but which are due to the paralysis of the intercostal muscles from inflammation of the pleura costalis, just as deglutition is impaired by partial paralysis of the pharyngeal muscles from inflammation of their lining membrane, or as intestinal peristalsis is weakened or nullified by the paralysis of the muscular coat induced by catarrhal diarrhea. Now this retractile power is the same normally on each side; should the left cavity then, for instance, be infringed upon, the left lung will be drawn over towards the right, for the center of attraction is always, of course, at the root of the lung, and the heart can not but follow. This is the beautiful theory of Donders, which is now daily inculcated.

In a bronchitis the muscular coat of the tube may be lamed, and often is, and thus a dilatation of the tube occurs, bronchectasis, which is, of course, assisted by accumulations of mucus. Should the bronchi be surrounded by an inflamed lung tissue, this too, in contraction, would tend to forcibly dilate the tube, and since the tissue does not exert its force circularly, but rather between the tubes where the center of attraction lies, the bronchi would be dilated in a corresponding

direction. For an extensive dilatation, however, it is necessary that the cartilage should soften, which does occur when the inflammation is severe, and then even the ordinary contractile power of the lung would influence the calibre of the tubes. The periodic cough, or rather the cough and expectoration of a large quantity at long intervals, is due to the fact that mucus slowly accumulates in tubes, which are in a state of partial anæsthesia either from disease or consuetude, until it overflows into an unaffected tube, when reflex action is excited at once with the powerful contractions of severe cough and the whole collection is thrown off. The same explanation answers for the morning cough of phthisis.

The pathology of this disease, Tuberculosis, has undergone many changes. On one point, however, the German schools are united. Tuberculosis Pulmonalis means only and means always, what is known at home as miliary tubercle, while all those cases, by far the great majority, which lead to the formation of cavities are now known by the name Caseous Pneumonia. Niemeyer, who first promulgated this doctrine, devotes a number of pages in his work on Practice, which is the present standard, to a full description. Caseous pneumonia then is a local disease, the result sometimes of ordinary catarrhal pneumonia nearly always of the croupous form. Virchow explains the process, in Berlin, on his theory of cellular pathology; here in Vienna, except by Rokitansky who still adheres to the old doctrine, it is explained on Cohnheim's theory of the migration of the white blood cells, which has spread like wild fire over the land, so that it is now again fashionable to speak of a dyscrasia which term Virchow and his disciples with pyæmia, etc., ridiculed out of existence; and in Wurzberg it is explained on the bran new theory of Recklinghausen, the pathologist there and also one of Virchow's former students, which ascribes all these changes as originating in the epithelial cells lining the lymph vessels. Cohnheim's migration theory has the most numerous supporters, as well as some of the most able, and it posesses the additional merits of simplicity and beauty. Some remarkable experiments are now being made upon these same white blood cells with various coloring materials. Should they ever succeed in bringing their vagrant tendencies under human control, we promise to inform you.

Skoda's clinic is not confined, however, to thoracic diseases—he ranges over the whole territory of internal medicine, generally devoting an hour to each of the two patients which form the text of discourse. In the course of his remarks on a case of meningitis a few days

ago, he mentioned some points in the differential diagnosis between this disease and typhus fever* which are worthy of note. Typhus and meningitis are frequently confounded, indeed cases exist in which a separation is impossible. In meningitis the delirium is more marked and the mental disturbance more decided when the patient is half comatose; a rational answer then would be more likely obtained from a half comatose typhus than from a fully awake meningitis patient and *vice versa*. The mutterings of typhus evidence a constant change of ideas and words, of meningitis, often only one idea is constant or even one word chains the mind; the constant repetition of one word then, when this symptom exists, establishes the diagnosis of meningitis, though, unfortunately, there are many cases in which this symptom is absent. If the fury of the delirium has any weight it speaks rather for typhus than meningitis, as formerly believed. Sopor is the same or absent in both. A typhus patient is more easily awakened out of a slight grade of sopor than a meningeal. Meningitis much more frequently affects the muscles of the eye. A reduction of the pulse during an attack of meningitis, indicates a softening of the fornix, corpus callosum and lining of the ventricles.

The two chief medical clinics of Vienna, Skoda's and Oppolzer's, are properly held at the same hours, seven to nine A. M., in order to divide the immense number of students in attendance, which is so arranged that the younger students visit Skoda, and the elder Oppolzer, an arrangement which strikes every visitor as being diametrically the reverse of the proper one, for Oppolzer's clinic, as we shall take occasion to inform you anon, is thoroughly a propadeutic. Behold us now at Skoda's clinic room, a lofty, square, poorly ventilated war containing some twenty patients, in strained effort at attentio to the carefully weighed and then slowly uttered, yet all the whil thoroughly systematic, description of the disease before us. The litt old man is seated in a chair at the side of the bed with his eyes fixe and never changed from their original direction until the histor pathology, etiology, symptomatology, diagnosis, etc., etc., and finall the therapy are disposed of in regular order, and then, without a word c change of feature, he rises, establishes himself in exactly the same p sition at the next bed and commences anew. Shut your eyes a minu and you might fancy the description being slowly and distinctly rea for the voice is a monotone throughout: shut your eyes two minu

*Typhus, without qualification, means throughout Germany, our typhoid. Typhus abdo nalis—typhoid; Typhus exanthematicus—our typhus: our strong lines of distinction are n drawn.

and you would cease to fancy unless you dream. Our only preventive is to take diligent notes, the facts one might desire to cherish are interpolated among many familiar facts, but if the attention be not always concentrated they are mentioned in their order and if then lost, gone glimmering. Skoda is a profound thinker and a close observer, and whatever he has discovered it was never due to chance, but was coined deep from the brain. We saw him a few days ago in his carriage, hat down over his ears, eyes fixed forwards as perfectly oblivious of his surroundings as in the clinic room. He must be over sixty now, but is still hale, notwithstanding the illness which prostrated him during the past summer. Short, square build, but little bent, face full, round, folded here and there and framed in by a mass of unkempt hair.

The following incident, which occurred lately, and which created quite a sensation in medical and political circles, will give you the best insight into his private character. We condense from one of the weekly medical papers:

By the death of Professor Tuerck, the celebrated laryngoscopist, a large amount of material and space, which was formerly devoted to the purposes of instruction, fell into disuse. The executive authorities determined to appropriate this space to the use of a great number of syphilitic patients who were refused admission for lack of room. The medical staff urged an addition to the hospital, such as would accomodate, not only the syphilitics, but also the large number of other diseases, typhus, pneumonia, etc., which, to the number of nearly three hundred a month, were declined admission for the same reason. The executive department was obstinate; the Professors petitioned and the immense number of students clamorous for the extra facilities brought forward a powerful influence. The executive department would not yield, and commenced the arrangements necessary for their purpose as designed. So the staff decided to send a committee to the Minister of Instruction himself, and lay the matter before him. Rokitansky and Skoda were appointed; Skoda as the star of the assembly, and Rokitausky as the dignity supporter, as Hebra facetiously remarked. The minister's sympathies, however, had all been enlisted for the venereal sufferers, the medical gentlemen were frostily received, coldly informed that the relief of suffering was paramount to instruction, the affair was decided, and if they desired a hospital of their own arrangement, they were at perfect liberty to erect one at their own expense, he desired to hear no more of the matter, etc., etc. Report states that the

Star and the Dignity supporter were confounded beyond measure, and stood there a moment as petrified. Now the Star gazed at the Dignity supporter, and now the Dignity supporter at the Star, now both at the minister, now at the secretary and then again at each other. Finally, when Skoda had fully comprehended the matter, he bluntly interposed: "Well now, sir Minister, we are of the opinion that we are right, that is one difference between us, and another difference is, that we understand the matter better," whereupon the committee retired, Skoda remarking that with a man so false to his ancestry he would have nothing more to do. You will be better able to comprehend the audacity of the reply when you are informed that the Minister of Instruction is one of the chief officers of the national government, and, indeed, represents the hight of power on educational matters, and when you reflect on the difference between a government of this character and our own. As Skoda has since received the honor of Hofrath from the hands of the Emperor himself, an honor which is only conferred in imperial recognition of great ability, it is highly probable that the staff will triumph yet; at any rate the comic papers, which possess a very exaggerated illustration of the scene, have given the Minister an exceedingly unenviable reputation.

The most singular and eccentric genius whom we have ever had the pleasure to encounter, is the director of the chief medical clinic of the University, Dr. John Oppolzer. He has been in position a long time, long enough to have acquired the same reputation in South Germany, that Frerichs possesses in North, and like him to have been able to enjoy some of those immense fees which his position, as consulting physician at the imperial court, and for various members of the Russian nobility, occasionally furnish. Although well advanced towards seventy years, he still presents himself at the clinic punctually and lectures always, too often, three hours without interposition, never pausing for rest on Saturday or Sunday, never ceasing during the spring vacation, never observing any holiday, of whatever character, and only closing at the end of the summer course, when all the students have left. The old man is never so happy as when shoved about by, for there are no seats, and jammed in amongst the heterogeneous crowd of Bohemians, Hungarians, Poles, Jews, Hottentots, we had almost said, for such are most of them in demeanor, talking to them, wrangling with them, and heaping all sorts of invectives upon them for an incorrect answer. A single line of chairs in the middle of the ward seats the out door cases who have presented for treatment, and

at one end of this row the Professor commences, occasionally spending an hour on one case if interesting, occasionally again, especially when in a bad humor, dismissing the whole party in fifteen minutes, and commencing the regular rounds. The system of instruction is the Socratic, as he is pleased to term it himself, question and answer. In his examinations he evinces all the shrewdness and ingenuity of a criminal lawyer, he proposes all kinds of complications and enigmatical problems, sets regular traps, watches, waits, and should the student fall in, ah! then he is happy indeed. He becomes perfectly merciless. Now he pushes the examination to its utmost limits, ridicules unsparingly the ever increasing ignorance from additional embarrassment, and then finally, when the poor fellow's face has assumed a look of pleading despair, and not till then, he comes to his rescue and ferries him through. Such a method is indispensable among such students; we challenge the world to produce such a motley group of the great unwashed as the different territories of Austria cast into the medical profession; where they disappear or what their future, we can only surmise. Some of them say they will go to America. May Heaven help us.

But few students possess temerity enough to enter the field under such a fire, but those few become splendid scholars, while the interest attached to the cause never for a moment flags. It is really a magnificent drill. The old man's knowledge of medicine and all its collaterals is boundless, and even now, at the age when most men are content to rest on their oars and drift through the few and short remaining years on a past impetus, he still prosecutes his labors with a student's zeal. He is conversant with all new doctrines as soon as issued from the press, so that he is used as a kind of lexicon by the old practitioners who daily visit his clinic for the novelties of the day, which are always presented and criticised as only a scholar of his experience and ability can. He will carry his examination to the most minute anatomy of the brain or nervous system, or will plunge into the deepest recesses of the physiology of vision. He attacks dermatology fearlessly, and laryngoscopy with all those fields which are generally left to the specialists, and that too without any apparent preparation. In medicine the old man is omniscient, and that is the secret of his success. Straighten the stoop, with which years have weighed him, and he would reach above medium hight; face smoothly shaven, full below, presenting nearly a paralellogram which is perfected by the long straight iron-gray hair combed down over the temple, eyes so

deeply sunken as to be only visible on a square front view, and then only part of the corner, on account of the preternaturally small rima palpebrae; neck perfectly concealed by the high, heavy stock of the last generation; long, gaunt, bony fingers, seldom, or never, used in gesture; no delivery, a voice almost whining, disposition exceedingly irritatable, unattractive in personelle, he still draws a larger crowd than any professor in the University, simply by the power of superior knowledge. To any particular dignity he makes no pretention whatever; out of the clinic room he drops down among the students, is their referee and adviser, presides over many of their societies, visits them in sickness, his life is with them and among them, he is one of them indeed, and you may easily fancy what a real reverence and affection they entertain for him. His will be a sad and irreparable loss.

Though perfectly at home on whatever subject, the old man still has his favorite themes, and above all others he loves to dwell on the heart. Start him on a case of cardiac affection and he will run on two straight hours by the clock, only ceasing, like the time piece, when the force is all exhausted; and with a few notes on this subject we will bring this already too long letter to a close.

The normal cardiac percussion dullness is a triangular area enclosed on the right by the right border of the sternum, below by a line intersecting this and the point of apex beat, and outward by a curved line with the convexity outwards, whose center falls just inside of the nipple, and whose extremities, of course, touch the perpendicular and base, the former at the cartilage of the fourth rib, the latter at the cartilage of the sixth. The normal apex lies in the parasternal line, which is the line exactly half way between the sternal and the mammillary, and in the fifth intercostal space. The real limits of the heart extend a full inch further downward and outward. Dilatation, or hypertrophy, of the left ventricle lengthens the horn-shaped hypothenuse, leaving the angle of the base in the same position, while the same conditions of the right ventricle carry the angle of the base over to the right side of the sternum. Diseases of the mitral value broaden the heart, diseases of the semilunar lengthen it. A valvular disease is of no evil effect until the texture of the muscular walls has been altered. A strong clear sound is evidence of good muscular contraction. so, also, the thrill of the pulmonary which may often be felt. Hypertrophies are generally due to valvular diseases and are most marked in insufficiencies of the semilunars, because the walls here must sustain

the whole column of blood which otherwise falls on the valves. Stenosis never presents such hypertrophies as insufficiencies. An endocarditis in the foetus attacks preferably the tricuspid valves, because the right heart is the most active; generally in the adult insufficiency of the right valves is due to dilatation of the ostium, and hence the insufficiency is only relative. Insufficiency of the tricuspid leads to hypertrophy of the right ventricle, because of the increased pressure on its walls, then follows dialatation of the right auricle, and even of the venæ cavæ, but will not give rise to jugular pulsation unless the jugular valve be insufficient. Stenosis of the tricuspid, which is exceedingly rare, leads to comparative atrophy of the right ventricle, because its walls are freed from pressure. This pressure of gravity explains hypertrophies much more satisfactorily than the theory of compensatorily increased activity, as on this latter view stenoses should present in this state the more marked.

Insufficiency of the pulmonary valves is always, without exception, attended with tuberculosis. Experiments have proven that, in defective closure of the foramen ovale, it is not the mixture of arterial and venous blood which induces cyanosis, but the congestion which ensues therefrom. It may be necessary to establish a perfect diagnosis of any heart disease to render the heart active by exercise, a murmur may then often be elicited, which is inaudible when the patient is at rest.

We possess no positive evidence or symptoms of adhesions of the two surfaces in pericarditis. Should the pericardium be united with the walls of the chest, and the two layers with each other, then the intercostal space will be drawn in with every systole. Rapid filling and emptying of the jugular veins are evidence that the right auricle is interfered with by a too narrow pericardium, the veins are then filled in systole and emptied in diastole. An adhesion between the costal and cardiac layers may induce hypertrophy of the left ventricle, fatty degeneration and cyanosis. These are a few isolated points, selected from many different lectures which may explain their want of connection; they are transmitted more to show the character of his investigations than for any particular value.

He prefers the direct to the diagnosis by exclusion whenever possible; although we are occasionally compelled to take refuge in exclusion, it is always faulty on account of our present defective knowledge. This he illustrates by presenting a blind man fruit for description. "It is not a pear, it is not a peach, therefore it must be an apple."

WHITTAKER.

BIBLIOGRAPHY.

SYPHILIS AND LOCAL CONTAGIOUS DISORDERS.

BY BERKELEY HILL, M. B., LONDON, F. R. C. S.,

Assistant Surgeon Union College Hospital; Surgeon to Out-Patients at Lock Hospital, &c. Philadelphia: H. C. Lea. 1869.

During the past year, our English brethren have given us two new works on Syphilis, one by Barton, of Dublin, the other by Berkeley Hill, of London, works by no means as valuable to us as "Bumstead" or "Durkee," yet welcome additions to our authorities on venereal diseases. In a four hundred and fifty page volume, Mr. Hill has presented to the student and general practitioner, a very acceptable work on "Syphilis and Local Contagious Disorders.

Evidently well read in the literature of his subject, his connection with the London Lock Hospital has afforded him ample opportunity for studying the various forms of specific affections. His descriptions of these forms, their origin, delvelopment and termination, are clear and satisfactory; his treatment judicious. To the majority of his American readers familiar with the terms "chancre" and "chancroid," Mr. Hill's application of the term "chancre" to the non-infecting local disease will seem strange and improper. Having tried opinions by cases, and knowing the difficulties in the way of squaring all observed facts with any proposed theory, our author is, on certain points, quite guarded in his expressions. A decided *dualist*, he says, "while admitting the truth of Bassereau's conclusions, (if the *infected* person has constitutional syphilis, the *infecting* person is similarly affected; and conversely if the *infected* person escape general disease, the *infecting* person is also free from any but local disorders incapable of affecting the constitution), it must be observed that at present we do not know the whole of the connection between venereal ulcers and constitutional syphilis. But, when acknowledging this incompleteness, it is not necessary to refuse to believe in this essentially distinct nature of the principle exciting chancres, from that of the virus of general syphilis." Again, with reference to the "occasional sources for multiplying syphilis," he declares "gonorrhœal discharges in syphilitic persons prob-

ably also impart syphilis to healthy individuals, leading to the belief in former times that gonorrhœa and syphilis were the same disease." Yet he is at times sufficiently positive in his statements. For example, with reference to the diagnosis of gonorrhœa he says: "Constitutional syphilis has been in very rare and exceptional cases known to succeed discharge without induration. This apparent anomaly is caused by both affections having been contracted at the same time, for we know persons can suffer from the two disease at once, and the mucous membrane when swollen and inflamed by gonorrhœa, is an excellent hot-bed for the absorbtion of syphilitic poison. Bating this exception, syphilis has no connection with gonorrhœa."

It is interesting, with reference to this connection, to remember certain cases reported by Hammond and his conclusions drawn from their observation, that, *First*—"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;" and *Second*—"That 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."

As a plain, well written statement of the symptomatology and treatment of syphilitic affections, Mr. Hill's work will be a useful addition to the library of the general practitioner, and the author may rest assured that he has well succeeded in his expressed endeavor "to render the work complete, while keeping it concise and suitable for the student as well as the practitioner."

THE LIFE OF THE TRICHINA.

BY RUDOLPH VIRCHOW, M. D., P. H. D.,

Professor University of Berlin. Translated by Rufus Browne, M. D.

The above is a title of a neat pamphlet of forty-seven pages that comes to us without containing either date or place of publication. We suppose that Rufus King Browne, M. D., who presents, in an English dress, this valuable brochure of the celebrated Berlin Professor, is an American, yet no information on the subject can be obtained

from his work as here quoted. Professor Virchow presents, in a succinct manner, the principal facts now known in relation to the history of trichina, gives directions how to recognize them in meat, describes the dangers to the human body the trichniæ cause, what remedies there are for the disease they produce, and what preventive measures against the spread of the trichinæ are necessary. Under the latter head is included the "infection of pigs," the "investigation of the preparation of meat."

It is desirable that more knowledge, in relation to the subjects considered by Professor Virchow in this paper, be diffused among the profession; therefore it is unfortunate that this translation is not likely to become widely known, owing to the failure to give place of publication or sale. J. R. W.

EDITORIAL AND MEDICAL NEWS.

WE HAVE been required to devote so much space to the proceedings of the American Medical Association, that comments upon the action of the meeting must be postponed, as well as all notice of the last meeting of the Indiana State Medical Society.

There is one subject upon which we wish to say a few words, viz: the organization of an Association of Editors of Medical Journals. It will be remembered that, in our April number, we proposed such organization; upon arriving at New Orleans we found our brother editors, who were present at the Association, had considered the proposition, and were quite prepared for its execution. We give below the articles of agreement, etc., as reported in the *New Orleans Times*, pertaining to this new medical body.

Quite appropriately, Dr. N. S. Davis, a veteran in the ranks, a man of indomitable energy, and of national reputation, one who has been contributing to the press probably thirty years, was elected President. When the Association meets in Washington next May, we anticipate, from Dr. Davis, a most interesting address upon the History of American Medical Journalism.

One of the purposes of this organization, as our readers observe, is to secure the names of all of the regular physicians in the United States—to make a complete register of all American practitioners. Difficult as this task is, yet its accomplishment can be effected by none

so readily as by editors of medical journals. Now we propose to commence this work at once. Dr. William Lomax has promised us the names of all the regular practitioners in Grant county, Indiana: as soon as this list is received, we shall publish it—possibly giving the lists of two, three or even more counties in one number of the *Journal*, and thus on until our share of the labor is completed. Will our friends assist us? The following will be the *form* in which we would like the lists made out:

Name; Nativity; Age. If a graduate of a literary institution, *what institution and when.* Same as to *medical graduation.* P. O.

One or two good men, in each county in each state, can, within the next two or three years, through medical journals, give a complete register of all American physicians. Again, we ask our friends if we shall not go to work at once, and let this most desirable end be effected.

On Wednesday evening at eight o'clock, a meeting of the society of Medical Journalists was held in the office No. 1, Carondelet street. The result of the assembly of prominent physicians was the formation of a permanent society, the election of N. S. Davis, M. D., President, and W. S. Mitchell, M. D., Permanent Secretary. The address of the Secretary is lock box 890, New Orleans. We append a report of the proceedings:

Pursuant to adjournment from the preliminary meeting on Tuesday, the meeting of Medical Journalists was called to order at eight o'clock P. M., by Dr. N. S. Davis, of the *Chicago Medical Examiner.*

The Committee on Organization, through their chairman, Dr. Theophilus Parvin, of the *Western Journal of Medicine*, then presented the following preamble and plan of organization, which were unanimously adopted:

"The editors of medical journals in the United States, desiring to cultivate professional courtesies, to facilitate the conduct and general management of our journals, to promote their interests, their usefulness, and make them a still greater power for professional and popular good, and especially to advance the interests of medicine, hereby unite together under the following

ARTICLES OF ASSOCIATION.

Name—The Association of American Medical Editors.

Purposes—The cultivation of friendly relations, mutual assistance, community of effort and means, when practicable, in a system of receiving foreign exchanges, and of sending our own journals abroad; in urging, with hearty concert, improvements in the present system of medical education, and a higher standard of preliminary education of those who desire to enter upon the study of medicine; the collection of vital statistics; obtaining the names of all the regular physicians in the United States, age, place and date of graduation, if a graduate; also, the

same in reference to graduation at literary institutions, if such graduation has taken place.

Meetings—These shall be held commencing at ten A. M., on the day preceding, and at the place of the annual meeting of the American Medical Association.

Officers—President, Vice-President, Permanent Secretary and Secretary.

The President, Vice-President and Secretary shall be elected annually, and shall serve at the meeting of the succeeding year.

Committees shall be appointed where necessary for the carrying out of any of the special purposes of the Association.

These resolutions having been signed by the following delegates: Dr. N. S. Davis, *Chicago Medical Examiner;* Dr. James M. Holloway, *Richmond and Louisville Medical Journal;* Dr. William McPheeters, *St. Louis Medical and Surgical Reporter;* Dr. W. R. Bowling, *Nashville Journal of Medicine;* J. Berien Lindsley, *Nashville Journal of Medicine;* Dr. Greensville Dowell, *Galveston Medical Journal;* Dr. Samuel Logan. *New Orleans Journal of Medicine;* Dr. E. W. Jenks and Dr. George D. Andrews, *Detroit Review of Medicine and Pharmacy;* Dr. W. S. Mitchell, *New Orleans Journal of Medicine,* and Dr. S. M. Bemiss, *New Orleans Journal of Medicine;* Dr. Theophilus Parvin, *Western Journal of Medicine*—the officers, as follows, were unanimously elected:

Dr. N. S. Davis, President; Dr. W. M. McPheeters, Vice-President Dr. W. S. Mitchell, Permanent Secretary, and Dr. J. Berrien Lindsley, Secretary.

The following resolutions were unanimously adopted:

That a Committee on Foreign Exchanges be appointed, to consist of Dr. Parvin, as chairman, and the Permanent Secretary.

That the Permanent Secretary be instructed to correspond with such regular medical journals of the United States as are not now represented, informing them of the objects of the organization, and inviting their co-operation.

That a committee, consisting of Drs. Bowling, Dowell and Andrews, be appointed on the Registry of Physicians.

That Dr. Holloway be appointed a Committee on Revision.

That the President deliver, at the next meeting, an address on the history, progress, etc., of Medical Journalism in this country, and that the members of the Association furnish to him such material and information as they may be able to obtain.

That beside the members alreading signing the constitution, all physicians connected with regular medical journals, be considered members upon signing, in writing to the Permanent Secretary, their willingness to subscribe to the foregoing articles of agreement, until opportunity be afforded them of signing said articles.

That the President be requested to announce to the American Medical Association the formation and objects of this Association.

That these minutes be furnished to the secular papers, with a request that they be copied.

That Dr. Holloway be appointed a committee to arrange a general plan for the establishment of agencies in all the principal cities.

There being no further business, the meeting adjourned.

RANKING'S ABSTRACT, republished by Henry C. Lea, Philadelphia, BRAITHWAITE'S RETROSPECT, from Townsend & Adams, New York, and the HALF-YEARLY COMPENDIUM OF MEDICAL SCIENCE, published by Dr. Butler, Philadelphia, have appeared as usual. Each one is of great value to the busy practitioner, and each has merits peculiar to itself. "Braithwaite" tells very little of what American physicians and surgeons are doing; "Ranking" tells more, but the best of all, in this regard, is the "Compendium," and, therefore, it presents a strong claim upon the patronage of our profession.

TO DELINQUENTS.—Gentlemen, we would be glad never to think about money; but publishing a medical journal is an expensive work, and printers are inexorable. Many of our subscribers have not paid for 1868, some not even for 1867, not one-third for 1869. Now this is not right, and we do hope that every one who is indebted to us will at once remit.

PROFESSOR Paul F. Eve will remove to St. Louis in June next.

THERE is at present, in Dayton, Ohio, a child affected with chronic hydrocephalus. It is seventeen months old, and its head measurers, in the occipito-frontal circumfrence twenty-seven inches, and from one meatus of the ear to the other, over the top of the head, nineteen inches.

A NEW VERMIFUGE.—A young child of M—— E——, of this city, swallowed a small dress botton with an eyelet. Some hours after the button made its appearance, having traversed the alimentary canal, bringing away with it a large lumbricoid worm threaded through the eyelet.

Physicians would do well to "make a note on't," and where prejudice exists against "strong medicines," give a dose of buttons. They can recommend them as acting "cito and tuto," if not so very "jucunde" as some other therapeutic agents. H. S. F.

SPRINGFIELD, OHIO, MAY 20, 1869.

LOUISVILLE will probably soon have a second medical journal, and a third medical college.

A MEDICAL JOURNAL is to be published at Washington, D. C. The names of the editors we have not heard.

WANTED.—A purchaser of an order for an artificial limb, at a great reduction from the original price. Will some one of our surgical friends take notices.

STILL WANTED.—Copies of the April number, 1868, of the *Western Journal of Medicine*; also of the *Cincinnati Journal*, February, 1866. Twenty-five cents for each one of these returned in good condition.

*THE UNIVERSITY OF LOUISVILLE, U. S.—We have received a pamphlet entitled "Commencement Exercises of the University of Louisville, Medical Department, containing addresses by W. C. Maul, A. M., and Prof. Lunsford P. Yandell, Jr." As the latter author made a very favorable impression upon us when we had the pleasure of seeing him in London, we turned to the pamphlet with some curiosity. We were at first puzzled, as one of the discourses of the "Commencement Exercises" is a *valedictory* address. But it would appear that it is customary with our cousins to give some advice to newly-created doctors assembled on the occasion, when the new-comers begin their studies. Judging from the sound counsels contained in Dr. Yandell's address—though the language to us on this side of the Atlantic seems quaint—the custom is not bad. Our own introductory lectures have, on the contrary, this defect, that they often contain advice of use in actual practice, whilst the hearers are but embryo doctors. A feature of this pamphlet, rather unusual with us, is the speech of one of the newly-made physicians, full of hope for the future, and teeming with praise of the professors; the diction is high-flown, and approaches bombast. Dr. Yandell, however, does not conceal from his hearers the shortcomings and the dark sides of our profession. But we have rewards, also, and the author says:—"In truth, you may very correctly judge of the civilization of a country by the estimation in which medical men are held in it. The worthy representative of the noblest people on this planet, Queen Victoria, delights to honor the conspicuously worthy members of our profession in her kingdom. And that wonderful man, the third in name, but hardly second in point of wisdom, the peerless-minded Emperor of the French, is scarcely behind the good Queen of England in rewarding medical merit." The author is very full and explicit on the "duties and qualities of the good physician." Here he says,—"Never tell your wife's secrets to your patients, nor your patients' secrets to your wife." On the subject of cleanliness Dr. Yandell remarks: "The healthiest people in the world, and the longest-lived, I believe, are the English of the higher-classes, and beyond all peradventure they are the most cleanly." He insists on the necessity of pure air and good cooking; and with reference to the latter the author has the following bold outburst:—"Bad cooking, which spoils food, however good in itself, is the cause, I strongly suspect, of half the sins of the world, and of quite three-fourths of the domestic

*Prof. L. P. Yandell, Jr., will not feel offended at this notice which we find in the *Lancet*, May 8th.

infelicity. If I had the training of a girl, I should charge and beseech her, above all things, to be amiable and unselfish, and a good cook. There is little doubt in my mind that the bad biscuits of America are in a great measure to blame for the numberless homicides which render our country a bye-word among the nations. Bad bread breeds battle, murder, and sudden death. Bad cooking probably killed more Confederate soldiers than the bullets of the enemy. I am not sure that our Legislature ought not to pass laws making bad cooking, if by a servant, punishable as a felony, and if on the part of a wife, unquestionable ground for divorce." This is certainly a savory bit, and will frighten any *gourmand* intending a trip to Kentucky. But Dr. Yandell is in sober earnest when he speaks of the art of "giving advice," on the "duties of physicians and patients," and on the "bearing of doctors towards one another." We wish the Professor and his University much success.

INDIANAPOLIS, MAY 22, 1869.

I desire to inform the members of the State Medical Society, and all societies tributary to it, that the assessment for this year has been reduced to one dollar.

All those desiring the Transactions this year will please send me their names and the assessment at once, so that it can be ascertained what number shall be issued.

No one will receive them otherwise, as only sufficient will be published for the real wants.

G. V. WOOLEN,
Secretary.

INDIANA MEDICAL COLLEGE.—The subject of organizing a Medical College at the State Capital, has long been a theme for discussion among medical men at the annual meetings of our State Society; but now discussion has been ended by the action of the Indianapolis Academy of Medicine.

The following faculty has been selected by the committee appointed for that purpose:

J. S. Bobbs, M. D., Prof. of Surgery.
J. A. Comingor, M. D., Prof. of Operative and Clinical Surgery.
R. N. Todd, M. D., Prof. of Practice of Medicine.
W. B. Fletcher, M. D., Prof. of Physiology.
L. D. Waterman, M. D., Prof of Anatomy.
T. B. Harvey, M. D., Prof. of Diseases of Women and Children.
George W. Mears, M. D., Prof. of Obstetrics.
R. T. Brown, M. D., Prof. Chemistry.
F. S. Newcomer, M. D., Prof. Materia Medica and Therapeutics.
Charles E. Wright, M. D., of Demonstrator of Anatomy.

The faculty thus appointed, have organized, under the laws of the

State, with a capital stock of $100,000, and have leased, for a term of years, the building, in course of erection, on Delaware street, opposite the court house, where the necessary rooms will be fitted up on the most improved plans.

The first course of lectures will be delivered next fall and winter, commencing sometime in October.

The faculty have appointed the following gentlemen to lecture on the subjects named:

Diseases of the Eye and Ear, Charles E. Wright, M. D.

Diseases of the Mind and Nervous System, Wilson Lockhart, M. D., J. H. Woodburn, M. D., James S. Athon, M. D.

Medical Jurisprudence, Hon. J. W. Gordon, M. D., and Judge S. E. Perkins.

Dental Surgery, P. G. C. Hunt, D. D. S., and J. F. Johnston, D. D. S.

The Board of Trustees consists of the faculty, Judge S. E. Perkins and Hon. John D. Howland.

KENTUCKY SCHOOL OF MEDICINE.—At a meeting of the Faculty of this school, May 13th, the following preamble and resolution were unanimously adopted:

WHEREAS, The medical colleges of the United States have, hitherto, in vain sought for an expression of the wish of the American Medical Profession in regard to the amount of fees proper for a single official course of collegiate lectures; and

WHEREAS, The American Medical Association did, by a vote conspicuously, decide on the 6th of May, 1869, that $120 should be accepted as the MINIMUM amount to be charged for such a course of lectures; and

WHEREAS, This vote is morally and honorably binding upon all who personally or by delegate authority entered into it; and

WHEREAS, The Faculty of the Kentucky School of Medicine, in common with all reputable members of the medical profession, accepts the decisions of the American Medical Association as representing, through its delegate organization, the sentiment and desire of the great body of American physicians;

Be it hereby resolved, That the Faculty of the Kentucky School of Medicine acknowledges this officially expressed wish of the Association as its guide in this relation, and that it will hereafter charge $120 for each official course of its collegiate lectures. L. J. FRAZER, M. D., *Dean.*

The undersigned, by a special vote of the Faculty, is instructed to send a copy of the above proceedings to the Deans of Medical Schools in the United States, for the information of their respective Schools; and to also send a copy to each American Medical Journal, with the request, that the facts mentioned may be made public in such manner, as in the judgment of the editors of these Journals may appear expedient and best. L. J. FRAZER, M. D., *Dean.*

LOUISVILLE, KENTUCKY, MAY, 1869.

COLUMBUS, MAY 26, 1869.

DR. THEOPHILUS PARVIN—*Dear Sir:*—Please announce in the *Western Journal of Medicine*, that the meeting of the Ohio State Medi-

cal Society, for Tuesday, June 8th, will be held in the hall of House Representatives, and that arrangements for the return of members and their families, free on certificate of attendance, have been completed with the following roads:

Little Miami and Columbus & Xenia; Baltimore & Ohio; Panhandle; Cleveland, Columbus & Cincinnati, including the Springfield & Columbus via Delaware; the Columbus, Chicago & Indiana, and the Cincinnati, Sandusky & Columbus, including London branch.

All applications have been made in person, and so far, without exceptions, received affirmative replies. Other applications are being made by proxy and by letter, and the success has been such, up to this time, as to justify the expectation that our railroad companies will give us every facility we can reasonably ask or desire.

I think it safe to predict that this will be the most successful meeting the Society has ever had.

I would respectfully suggest that every physician in the State, (as well as a liberal sprinkling of those of Indiana, Kentucky, Western Virginia, and Pennsylvania), who wishes to see and make the acquaintance of every other physician, that he will do well to embrace this opportunity.

J. W. HAMILTON,
Chairman Executive Committee.

OIL OF TURPENTINE IN AFFECTIONS OF THE SKIN.—Prof. Von Erlach and E. Lucke have recently communicated the results of their experience in the external use of oil of turpentine for parasitic affections of the skin as it acts quickly, and upon the whole of the diseased structure. Alcohol, it is stated, does not extend its action to the spores, etc., seated deeply at the bottom of the follicles; and iodine requires frequent applications, and is often useless. Cases of herpes tonsurans and mentagra are reported, in which a rapid cure was brought about by brushing oil of turpentine over the diseased surfaces. The same agent has been employed in a similar manner by Lucke in cases of surgical erysipelas, with great success. According to the results of nine reported cases, recovery takes place in about three days. The local application of the turpentine was followed by a rapid disappearance of the eruption, and by an immediate fall in the temperature of the body. The last fact is explained by Lucke as due to a destruction of septic material at the inflamed surface, and a consequent diminution of the general fever.—*Berliner Klinische Wochenschrift, 45, 1868.*

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G. H. WYNKOOP, M. D.....Professor of Physiology.
A. B. BALL, M. D.....Professor of Materia Medica.
SAMUEL B. WARD, M. D.....Professor of Anatomy.
PROF. ARTHUR MEAD EDWARDS.....Professor of Chemistry.
JAMES R. LEAMING, M. D.....Professor of Principles and Practice of Medicine.
EMILY BLACKWELL, M. D.....Professor of Obstetrics and Diseases of Women.
ROBERT F. WEIR, M. D.....Professor of Surgery.
CHARLES T. TERRY, M. D.....Lecturer on Pathological Anatomy.
LUCY M. ABBOTT, M. D.....Assistant to Chair of Obstetrics and Teacher of
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DR. B. W. McCREADY.....Materia Medica.
DR. A. L. LOOMIS.....Physiology.
DR. C. R. AGNEW.....Hygiene.

Students of this school can attend the clinics at Bellevue Hospital, the Eye and Ear Infirmary and the City Dispensaries. They receive practical training in the New York Infirmary, which treats about seven thousand patients annually.

Winter Session 1869–70 begins on first Monday in October, 1869. For announcements and particulars, address the Secretary of the Faculty,

DR. EMILY BLACKWELL,

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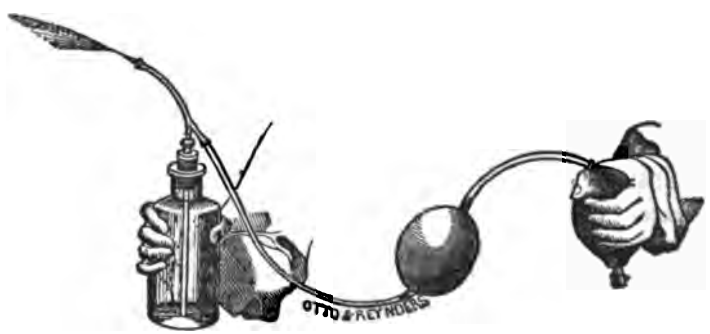

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THE WESTERN JOURNAL OF MEDICINE,

(*Formerly*, "CINCINNATI JOURNAL OF MEDICINE.")

Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

VOL. IV. INDIANAPOLIS, JULY, 1869. No. VII.

ON SICK STOMACH AND VOMITING IN PREGNANCY, WITH REPORT OF A CASE WHICH PROVED FATAL.

BY W. T. S. CORNETT, M. D.,
Formerly of Versailles, now of Madison, Indiana.

I was called on, March 28th, 1863, to visit Mrs. C. S——, aged twenty-eight, an educated and intelligent lady of general good health. I learned from her that she was pregnant for the first time, and was advanced about one month in her term of gestation. I was called on account of sick stomach and vomiting, which had become so annoying as to demand attention. Many remedies were used, one after another, and every diversity in the way of food which our ingenuity could suggest, but without success. Small doses of morphia, made into pill with bread crumb seemed to give more relief than any other remedy. Next to this I may name minute doses of sulphuric acid and brandy, as recommended by Dr. Lee, of Philadelphia.

About the 8th of June I had reached the conclusion, from careful observation upon the progress of the case, and the futility of remedies, that she must perish unless the uterus could be relieved of its contents. I stated my opinion to her husband and demanded a consultation, for the purpose of considering its propriety. My proposition was communicated to her, and I was informed that she begged to have the

consultation deferred; stating that her mother, who had raised quite a family, had always suffered much in the same way during the earlier months of pregnancy, and that she hoped to get better after a time, as her mother had done. Her husband was now called from home on business and was absent for a week. On his return I renewed my demand for a consultation which was now acceded to. A gentleman of long experience in business (now deceased) was called, and after examining the case, learning its history and treatment, delivered an opinion adverse to the conclusion which I had reached. He thought there was yet hope of success without resort to the procurement of abortion, and suggested the oxalate of cerium (which I had not used) as the remedy which would be most likely to bring relief. On questioning him in reference to it I was satisfied that his confidence was based more upon eulogiums pronounced upon it by Professor Simpson than from his personal experience. She was now placed upon the use of the remedy, which was faithfully persevered in for several days without any perceptible good effect. I now wrote the Doctor for his further advice, who, in reply, urged me to proceed without further loss of time to relieve the uterus of its contents. This I now declined to do, being well satisfied that she had reached a degree of exhaustion incompatible with the propriety of such a procedure. She died on the 26th of June, at the end of the fourth month of pregnancy, as I think, purely of inanition. I do not believe there was disease of the stomach, or uterus, or any other organ, independent of the sympathetic irritation from pregnancy. I know there are gentlemen high in authority who would join issue with me here. They contend when the case ends in death that it is caused by organic disease of the stomach, or uterus, and that the procurement of abortion would accomplish nothing. I can not state positively that no organic disease of the stomach existed in this case, as no post mortem was had. I knew the lady well for years anterior to her death, was physician to her father's family, and believed her to have been in good health up to the time of conception. Before I conclude this paper, cases will be referred to which ended in death, where no organic lesion was found on post mortem examination. With regard to the propriety of resorting to the procurement of abortion as a measure of relief, there is difference of opinion amongst those high in authority. Professor Hodge, I believe, (I speak from memory), thinks it should never be resorted to. This, as a rule, is, perhaps, correct; but that exceptional cases do sometimes occur I have no doubt. In forty years of observation I have seen but the one case which

proved fatal. The late Professor J. P. Harrison speaks of one which occurred in his practice. Our records upon this subject in this country are meagre—in France they are more full. For some time anterior to death this lady complained of dimness of sight, accompanied by dilatation of the pupils, which continued up to the period of death. It was strangely suggested that this was caused by the morphia which had been used. It is a symptom which very uniformly occurs in cases of starvation. It occurred in all the cases seen by M. Dubois, which will be referred to further along.

In the physiological experiments of M. Chossat, in 1841, which secured him the gold medal from the Royal Academy of Sciences of Paris, forty-eight warm-blooded animals were made the subjects of starvation, and dilatation of the pupil is noted as having occurred in every instance anterior to death. See account of experiments condensed from *Annals D'Hygiene*, by J. R. Beck, for *American Journal of Med.*, volume II, 1844, pages 264–5. Starvation causes debility of the whole organism in which the retina participates, and being no longer fully sensible to the stimulus of light, or, unable to transmit it to the brain, the third nerve does not receive any impulse from the brain, and, therefore, does not contract the pupil—hence the dilatation.

I will now quote from the *Gazette Medicale de Paris*, as I find it in volume I, pages 250–1, *American Journal of Med.*, 1853, the views of M. Dubois and Professor Stoltz:

"Induction of abortion in the vomiting of pregnant women. During a recent discussion at the Academie de Medecine, M. P. Dubois states the results of his experience in relation to obstinate vomiting in pregnancy. In proof that this is often a more dangerous affection than is usually supposed, he stated that in the course of thirteen years, he had met with twenty cases which had proved fatal. That obstinate vomiting is but the exaggeration of the natural sympathetic vomiting of pregnancy, and not due to any special lesion, is proved by the facts that at the autopsies nothing is found, and that when the process of gestation becomes arrested, whether spontaneously or artificially, the vomiting is ordinarily put an end to, although the woman may not be delivered until several days after, of a dead child, and may yet die of the effects of what she has already undergone. M. Dubois refers to several cases in which the women, apparently at the point of death, were saved by the *spontaneous* death of the fœtus, this being expelled only sometime afterwards. In respect to the question of how far *artificial* interference is attended with the same result, he furnishes notes of the four cases in which he has employed it. Three of these cases died, and one recovered—this last being added to the other cases on record, making the number of recoveries he is aware of certainly seven, and probably nine. In all the cases, however, whether fortunate or not,

the vomiting was suspended by the operation. The difficulty is, indeed, to fix the period at which this should be resorted to; for it is the natural desire to delay this as long as possible, which leads to the fatal result—the woman dying, in fact, from the exhaustion and prolonged abstinence which the vomiting has induced, prior to the operation for arresting it being undertaken. M. Dubois lays down as a rule, never to perform it when the signs of extreme exhaustion are present, as evidenced by considerable loss of vision, cephalalgia, comatose somnolence, and disorder of the intellectual faculties. On the other hand, we should also abstain from operating when the vomiting, though violent and frequent, still allows of some aliment being retained; when the patient, though wasted and feeble, is not obliged to keep her bed; when the suffering has not yet induced intense and continuous febrile action; and when other means still remain untried. In the first case we should not save our patient, but, perhaps, accelerate death, and bring discredit on the operation; while, in the other, we should sacrifice a pregnancy that might have gone on to the full time. It is, therefore, the intermediate period that should be chosen, and this is characterized by the following signs: *First*—Almost incessant vomiting by which all alimentary substances, and sometimes the smallest drop of water, are rejected. *Second*—Wasting and debility, which condemn the patient to absolute rest. *Third*—Syncope, brought on by the least movement or mental emotion. *Fourth*—Marked change in the features. *Fifth*—Severe and continuous febrile action. *Sixth*—An excessive and penetrating acidity of the breath. *Seventh*—The failure of all other means. But even within this period, which is of variable duration, the opportune moment must be chosen. This seems to have arrived, when the inefficacy of the most approved treatment has been proved, when fever is found to persist, and the debility and wasting of the patient are making sensible progress. The attendant should now declare that the operation is indicated, leaving to the patient and her friends the duty of deciding upon its adoption.

"Prof. Stolz, of Strasburg, has published a highly interesting communication upon this subject, in which he also states his belief that vomiting during pregnancy is much oftener fatal than is usually supposed. He relates four cases from among others that have come under his own notice. In three of these, death occurred, and life was saved by the operation in the fourth, although the case seemed hopeless. M. Stolz lays great stress on the operation being performed in good time, because if we wait until the effects of the sympathetic reaction constitute in themselves a serious disease, the evacuation of the womb does not induce a cessation of these, and may, in certain cases, even hasten death—life, so to say, hanging upon a thread. It is, undoubtedly, difficult to say when the moment has arrived that we can no longer hope for benefit from nature or therapeutical agents. But may not the same objection be made with regard to many important surgical operations? It is true that neither spontaneous nor artificial abortion always saves the life in these cases; but there is a great inconsistency on the part of those who do so, and who still advocate the operation in the case of narrow pelvis. A woman who has undergone artificial abortion for obstinate vomiting, may hereafter (and these cases mostly accur in primiparæ,) give birth to a living child, which can never be the case in one who has so narrow a pelvis as to call for the induction of abortion rather than premature labor."

From *Gaz. des. Hop.* (See Nashville Journal, volume IX, page 504):

"VOMITING DURING PREGNANCY.—In an interesting thesis upon the non-coercible vomiting of pregnancy, and especially in relation to the induction of artificial delivery, M. Castaya has collected fifty-eight cases that have been published by various authors. He distributes those according to their mode of termination, into five groups: *First*—Cases which proved fatal, twenty-four, without abortion occurring, and notwithstanding every variety of treatment. *Second*—Cases of recovery, eleven, after spontaneous abortion, or after the infant has died, although the expulsion was sometime delayed. *Third*—Cases of recovery, three, without spontaneous abortion. *Fourth*—Fatal cases, three, notwithstanding spontaneous abortion, this occurring too late to avail, the patient's powers being exhausted. *Fifth*—Cases of artificial abortion, seventeen; these are subdivided into two groups, successful, fourteen, and unsuccessful, three. In these cases, pregnancy was sufficiently advanced to admit of a living child being born, as well as the mother's life being saved. Thus, in fifty-eight cases, we have thirty deaths and twenty-eight recoveries. Of these last, eleven cases were due to spontaneous abortion, three to medicine employed, and fourteen to the operation."

Dr. Chailly, (*Bull. Gen. de Therap.*, October, 1844), relates the particulars of three cases of vomiting during pregnancy, which proved fatal by its severity. In the first case, the patient died in the fourteenth week, of utero-gestation; and vomiting unattended by fever, had existed for three months. There was no lesion of the stomach, but "evident inflammation of the decidua. In the second case, death took place at the same period, and obstinate vomiting had existed from the very beginning of pregnancy. Very slight lesions were found in the stomach, but there was sanguineous engorgement of the decidua and of the uterine tissue, with softening and thickening of the uterine parietes. In the third case, death took place at four and a half months, the patient being then in a state of complete marasmus, from vomiting, which had existed for two months." See *Am. Jour. Med.*, volume I, 1846.

TREATMENT.—I will now proceed to speak of some of the remedial means which have been found useful under varying circumstances.

Dr. Stackler communicated to the Society of Bas. Rhin, two cases of obstinate vomiting in pregnant women, which yielded to the black oxide of mercury. Dr. Jauger also referred to cases cured by the same remedy, *Am. Jour. Med.*, volume I, 1846.

M. Bretonneau and M. Trousseau, have each reported cases of obstinate vomiting during pregnancy, relieved by a belladonna lotion applied to the hypogastric region. Same journal, volume II, page 225, 1848.

Dr. J. B. Schmidt, when vomiting in pregnancy may be regarded as a neurosis, gives with success, two drops tincture iodine every two hours. This practice is also recommended by Dr. Eulenberg, *Am. Jour.*, volume II, page 272, 1857.

M. Teissier, reports a case in the fourth month of pregnancy, which had become so reduced as to induce him to think seriously of inducing abortion as a means of saving her life; but as a last resort, tried with success, pepsine as-follows, viz: One gramme, to be divided into two doses, and taken every day in a spoonful of broth. See *Am. Jour. Med.*, volume II, 1858.

M. Corvisart, M. Brandot, and M. Gentitez, all recommend pepsine. The latter, in *London Lancet*, relates a very severe and obstinate case in which ten grain doses acted like a charm. See *Am. Jour. Med.*, volume II, page 270, 1860.

Dr. C. E. Bagot, in *Dublin Medical Press*, October, 1859, states that after failing with other remedies, he has succeeded in extreme cases with calomel, given so as to cause slight salivation, *Am. Jour.*, volume I, page 275, 1860.

Dr. Charles E. Lee, physician to Blockley Hospital, Philadelphia, uses for vomiting in the early months of pregnancy, creasote, prussic acid, and better still, minute doses of sulphuric acid and brandy. For vomiting in advanced pregnancy, he has found oxalate of cerium preferable. He gives it in a two grain pill every third hour. See his essay upon this subject, *Am. Jour. Med.*, volume II, page 391, 1869.

Many other remedies have been used sometimes with good effects, such as various of the tonics, antispasmodics, narcotics, absorbents, sugar of lead, tinct. nux vomica, in doses of four drops every two hours, &c.

Dr. Henry Bennet, *London Lancet*, January, 1865, thinks that intractable sickness during pregnancy is generally occasioned by the antecedent existence of inflammation of the body, or of the neck of the uterus, and that under such circumstances it is vain to expect medicine to accomplish relief. "In such cases, a few touches of nitrate of silver, and an astringent injection, will arrest sickness that has baffled the skill of half a dozen medical men and the resources of the pharmacopœia. I have thus saved the lives of many children, and I believe some mothers." See *Am. Jour. Med.*, volume I, page 524, 1865.

Also, in such cases as referred to by Bennet, Dr. Warren, of Boston, recommends slight pencillings with nitrate of silver. He says:

In cases attended with much neuralgic pain and excessive leucorrhœal secretion, he strongly recommends the following:

℞. Tincture Benzonii, ʒi.
Chloric ether, ʒi.
Acet. Morphia, grs. ii.
M. It should be painted upon the cervix once in three or four days.

Dr. Warren also remarks that he has used with benefit, injections of ferri alumini, ʒi; infus. opii, ʒii; aquæ dist. ℥viii.—*Boston Medical and Surgical Journal*, from *Western Lancet*, volume II, page 763, 1859.

Sick stomach and vomiting are sometimes caused by mal-position of the uterus. When this is ascertained to be the case, the organ should, of course, be restored to its normal position.

I stated in the forepart of this paper, that opinion was divided as to the propriety of resorting to operative procedure in bad cases. In addition to what I have already quoted from Dubois, Stoltz, and M. Chossat, on the subject, I will state that M. Cazeaux is opposed to it because no special time can be fixed. Villeneuve is in favor of it when the life of mother or child is seriously endangered. Hohl objects, because such cases rarely prove fatal. Churchill and Lee, have by this means obtained very satisfactory results. C. Braun recommends it only when the life of the mother is seriously endangered. See *Am. Jour. Med.*, volume I, pages 543–4, 1864.

I have now brought together in a condensed form, material upon this important subject, which occupies a widely scattered position in our professional annals, and hope it may be found convenient and profitable for reference by such of my professional brethren as may find themselves involved in the treatment of such serious cases as the one which I have herewith reported.

DEATH FROM CHLOROFORM.

BY W. E. JONES, M. D., CIRCLEVILLE, OHIO.

In the May number of your journal may be found some interesting theorizing by Dr. Z. C. McElroy. The caption of the article in question reads, "*The conversion of gravity into organic force in resuscitation from impending death from overdoses of Chloroform.*"

In order to render the subject somewhat clear, the author lays down a few "*fundamental propositions*," some of which he informs the reader are original. This precaution seemed absolutely necessary—one claiming to set forth "*The only possible definite conception of how chloroform destroys life, consistent with the known facts of the anatomy, physiology and pathology of the human body*," should have a firm substratum on which to build. It is not unpleasant to have our philosophy changed, when the correction is made by facts. These alterations work for the good of science; but the nomenclature of things unknown, gains nothing by change of terms, without alteration in the ideas of relation. While it is easy to say, "*The so-called vital force or forces, have hitherto been a great stumbling block in the pathway of investigation in the phenomena of organic life*," it is no trivial task to remove this *obstacle* out of the "*investigation*," and if removed, what would there be left to *investigate?* The doctor attempts it, however, by multiplication—by using two terms, expressive of these forces, for one term and one force. If comprehended correctly, he speaks of a force "confined *entirely*" to the preservation of types and forms of organs and tissues—a "*form force or architect of organization*," and an *organizing force, which is under the control* of the *form force or architect*. What these forces are—how divided and subdivided, how all or any are generated—he has not given any definite idea. At one time they are spoken of as dependent manifestations, while at another, as inherent qualities of matter, connected with the ordinary physical forces of the universe, readily transmuted from one mode to that of another—from *gravity* to the *dynamics* of life.

These speculations are alluded to, more from the conclusions formed, than from any real importance in the distinctions created. For it is stated, rather as an objection to the term *vital force*, "that it would make man immortal" by perpetuating the forms of organic life. Still his new forces do not escape a like objection. It may be asked, why *they* cease—why the "*architect*," "*form force*," and other *forces*, which have builded the temple "of constantly changing material" once, should not be able to continue it in existence indefinitely?

It is to be regretted that these "*propositions*" *and deductions* were left in so much obscurity that they apparently exhibit a want of agreement.

Three things, however, the doctor lays down as facts arrived at inductively, viz:

First—When death occurs from chloroform, "it is *always* due to paralysis of the *heart* or lungs, or both."

Second—That "the paralysis is *invariably* owing to arrest of destructive metamorphosis in the nerve masses supplying their dynamics."

Third—That the arrest of destructive metamorphosis in the cerebellum and medulla oblongata, or nerve masses supplying the dynamics of circulation and respiration, *is caused by a deficiency of oxygen in the blood and diminished volume of blood.*

It would seem unfortunate for the first conclusion, that the numerous experiments upon quadrupeds, as well as observations made upon mankind, living and dead, show that chloroform, seldom, if ever, produces paralysis of the *heart*, or affects the functions of this organ directly—the failure, when it occurs, is a natural consequence of the absence of respiration.

Respecting the second and third conclusions, (as drawn from Dr. Mobley's case), there are no facts from which such inferences can logically be drawn. But on the contrary, experiments teach the respiratory sense is not generated by the *cerebellum, medulla oblongata, and nerves, nor by their destructive metamorphosis;* but is transmitted to the medulla from every part of the body receiving oxygen carrying fluid; and it is the *suspension* of this sense that causes death, when the casualty is produced by anæsthesia. Now, while the doctor says it is *suspended* by the arrest of the *destructive metamorphosis*, from want of oxygen in the blood furnished the nervous masses, experiments have repeatedly shown that destructive metamorphosis goes on undisturbed, in an atmosphere of hydrogen and nitrogen, and that it is in no way connected, or *directly* dependent upon the absorption of oxygen, and that the respiratory sense is augmented in the inverse ratio to the amount of free oxygen in the body—everything diminishing the oxygen increases the respiratory sense, and augments muscular contraction, whether it be from the loss of the life-giving principle in hemorrhage, or a restriction through the pulmonic channels. Experiments have also shown, that *destructive metamorphosis* is not arrested by *anæsthesia* —that chloroform does not diminish the oxygen of the body. Therefore, we can not say the respiratory sense, in these fatal cases, is *invariably* suspended for want of oxygen, for we know it may be *suspended* from other causes, alike in subjects under, as well as not under the influence of chloroform. Artificial respiration completely suspends this sense, and the muscles of inspiration and expiration become "paralyzed" in the same way as when under an overdose of chloroform, so long as the oxygen is supplied in this way.

No one, however, as yet, has suggested that destructive metamorphosis of the cerebellum and medulla oblongata *is arrested*, because no muscular contractions of the chest take place during these experiments.

In one hundred and twenty-one deaths reported by Snow and Kidd, ninety-six deaths transpired very soon after the administration; and Dr. Marcet, a competent observer, says, he believes a spasmodic closure of the glottis (and not paralysis), takes place from the action of chloroform. He was led to this conclusion, "Because several substances possessing anæsthetic properties, are positively known when present in the blood to have given rise to closure of the glottis." "*Second*—Because the symptoms of death from chloroform, are consistent, more or less, with sudden asphyxia;" and *Third*—"Because the post-mortem appearances after death from chloroform, may be accounted for by assuming that death has taken place from asphyxia."

In two instances of alarming suspension of respiration from chloroform under my care, this seemed to be the cause; at least when respiration returned, the first inspiration was of the character as that from the removal of some mechanical or spasmodic obstruction in the upper portion of the air passage; the air entering as into a vacuum; and several cases have been reported as saved by Dr. Petries' plan—by drawing the tongue forward, and thus overcoming obstructions that may exist to air entering the larynx.

One thing is, however, quite apparent—the recoveries from dangerous symptoms of chloroform, are attributed to a most singular variety of circumstances—circumstances, too, which have had little or nothing to do in sustaining or regaining the life forces. One says this, another that. The correspondent of the *Medical News and Gazette* saved the life of his patient by injecting a glass of brandy and water into the rectum, while Dr. Mobley would have us infer that his recovered by inverting the body at an angle of forty-five degrees—both recovered vitality, after the pulse was *almost imperceptible*, and the movements of the thorax had *almost ceased*, and also after the things named were done. But, taking another step, if we should go on constructing theories of the vital forces, to explain and reconcile the things done, and recovery as the sequence, the science of physiology would soon be transferred into an ark, filled with a heterogeneous mass of attic trash. It is true, the position of the patient and change of posture, have always claimed much for mechanical reasons; but not ever before upon the theory "*of gravity being transmuted into organic force*," by the most etherial thinkers in the profession.

FORTY YEARS PRACTICE, OR REPORTS OF EXTRAORDINARY CASES.

BY N. FIELD, M. D., OF JEFFERSONVILLE, INDIANA.

On the 20th of August, 1863, Samuel Rousseau, nephew of the late Gen. Rousseau, a youth about fourteen years old, was brought from Louisville to Jeffersonville and placed under my care for chronic dysentery. He had been under medical treatment for several weeks, without arresting the progress of the disease. At the time I saw him the bloody dejections had ceased, but were succeeded by muco-purulent discharges, occasionally mixed with a dark fœtid sanies. He had constant fever, tormina and tenesmus. These were to my mind unmistakable symptoms of ulceration of the colon.

But notwithstanding I regarded the case as very unfavorable, every effort was made for his relief. Anodynes, demulcents, astringents and indeed every remedy that promised the least benefit was fully tried without success. In the meantime the patient had become greatly emaciated; and it was very evident that without an extraordinary change for the better, he must speedily succumb. But what more could be done, was the question.

Reasoning from analogy I concluded to try chlorate of potash. Knowing it to be a valuable remedy for ulcerations of the mouth, tongue and fauces, I thought it might have the same effect in intestinal ulceration, provided it could be brought in contact with the seat of disease in sufficient strength.

His aunt, Mrs. Patterson, at whose house he was staying, being a lady of much experience and good judgment in nursing, was made acquainted with the proposed experiment, for such it really was, and its *modus operandi* fully explained. Having practiced in her family for thirty odd years, I had always found her an excellent assistant in carrying out to the letter my prescriptions and recommendations.

I administered by the mouth a bolus of five grains of chlorate of potash every four hours, held together by pulv. gum acacia. In addition to this, I dissolved four drachms of the salt in one pint of warm water, to be used as an enema. For this purpose I had the patient laid on his right side, with his hips raised on a pillow, placing his body on an inclined plane. Anticipating great difficulty in the re-

tention of the injection, I took the precaution to have Mrs. P. seated by him so as to hold his hands securely. When the enema was passed into his bowels, the pain caused by its presence was intolerable; but to prevent its discharge, the instant the syringe was emptied, I seized the flabby integuments of the nates, folding them as it were over the anus, and held them firmly and pressed steadily against it. The pain produced by the injection was intolerable for about a half an hour. But after it became diffused along the colon it gradually subsided. After holding him down for one hour he was released and allowed to get up if he desired it. But the inclination had disappeared. And it was some time in the night before the injection passed off.

On returning next morning, Mrs. Patterson greeted me with the good news that the patient was much better, not having had more than one or two alvine discharges during the night.

From that time he recovered rapidly. If I mistake not, the injection was repeated about the second day after the first, without, however, producing the same amount of pain.

PROTRACTED RETENTION OF A BLIGHTED OVUM.

BY W. HOBBS, M. D., CARTHAGE, INDIANA.

(Read before the Union Medical Society at Knightstown, at their June session, 1869, and presented for publication at their request.)

During the latter spring and the summer months of 1854, I was in attendance upon Mrs. J., who reported herself to me to be pregnant, and without notes of the case at the time, or a distinct remembrance of the several symptoms of gestation which she presented, or the order in which they occurred, they were such as satisfied me that her conclusions were correct. She quickened at the time expected, and advanced to what was supposed almost the first of the seventh month, when the size of the abdomen and her general contour fairly indicated the normal progress of utero-gestation to that period. At this juncture the motions of the foetus ceased and were never afterwards felt; all other signs of pregnancy disappeared, and the abdomen gradually diminished in size and left no evidence of pregnancy except a hard tumor of considerable size above the pubes.

All appearances of gestation having subsided, and no miscarriage having occurred, I determined that there had been no pregnancy, but that it had been simulated by some unknown affection of the womb, which had eventuated in hypertrophy of that organ. The patient was about thirty-five years of age, of medium stature, weak and nervous, and a chronic complainer. She had two living children, and had had one or two miscarriages before I knew her.

From September, 1854, when the signs of pregnancy disappeared, until September, 1855, the state of her health was not noticeably different from what it had been for years before. I often saw her, and my calls were for the treatment of chronic indigestion, and the various forms of hysteria from which she had long been a sufferer. There was no return of the catamenia, but as her health was poor, and she had before been subject to great irregularities in the performance of that function, I thought but little about it. She resided five miles from my office.

Late in September, 1855, eighteen months after conception was supposed to have taken place, and twelve months after the last indication of it had disappeared, and when it had been long since forgotten, the husband of this patient called one day three several times for me in my absence, and at his last visit, in order to hurry my movements when I returned home, he told my wife to tell me that his "wife's womb had come down, and was coming right out of her." I arrived at home about dark, and as this was one of my most prompt paying customers, I hired a fresh horse and driver, and immediately set out by moonshine, my mind occupied with the problem of replacing an inverted uterus.

Upon my arrival I found Mrs. J. lying upon her back, with her knees tied together with a garter, and her limbs straightened. She had taken this precaution, she told me, to prevent the whole of her "insides from coming out." She said her womb had come down and a part of it was "in the world." She had no pain except a little in the back—was as well as common until early that morning, when she felt the organ descending—was then lying at ease except from apprehension, and the discomfort of so long maintaining the position in which I found her.

By the touch I discovered a large tumor presenting at the *vulva*, and for the moment my mind so involuntarily accepted her statement of the case, that I found myself determining upon the means of its replacement within the pelvic cavity. It had played such

tricks upon me before that I could not now doubt its treachery. But in another instant my touch taught me that I was not handling a mucous but a serous surface, and upon passing my left hand to the lower part of the abdomen of the patient, I found a tumor about as large as my fist, which I recognized as the uterus in its normal position after natural labor, hard and well contracted.

I next punctured that which by this time I had decided to be an amniotic sac, and extracted a dead foetus which was presenting the lower extremities. The placenta and membranes immediately followed. I suppose the uterus had been empty since early in the day, the foetal mass being lodged in the vagina. There was no hemorrhage—not even the stain of blood.

The amniotic liquor I had no means of examing, it having been immediately absorbed by the bedding. Its odor was not much different from health, except not quite so distinct—there were perhaps twelve or sixteen fluid ounces of it.

The foetus indicated by its development that it had arrived at the sixth month, or a little more, of uterine life. The whole ovum, foetus, chord, membranes and placenta were perfect and complete in all the parts—of a dusky brown or yellowish color, and completely mummified. The appearance and feel of the textures were much the same except in color, as though they had been long macerated in alcohol. They seemed as if all the fluids had been extracted from them, and they consolidated by pressure and afterwards smoked, but still preserving a good degree of softness and pliability. The placenta was not more than one-fourth the usual size at the sixth month, and the foetus was proportionally reduced in dimensions, except in length.

The patient convalesced, if it could be called such, in a very short time—was up and at business in a day or two, not having been sick.

Query First—Was the foetus which was delivered in the last of September, 1855, the product of a conception which occurred in April, 1854, about eighteen months before, and which died in utero in September, 1854, about twelve months before?

Answer—It was; and I base this conclusion upon the following facts, viz:

First—From April to September, 1854, the patient presented the usual signs of pregnancy, including quickening, and visible increasing of the size of the abdomen, about which time such signs all disappeared, the gravid uterus diminished in bulk, until it formed a hard

mass or ball in the lower part of the belly above the pubes, in which position it remained unchanged until the day of delivery.

Second—The product of no such gestation was ever before expelled.

Third—No signs of another fecundation and pregnancy ever afterward occurred during the time under consideration.

Fourth—The development of the ovum corresponded with the duration of life attributed to it.

Fifth—The condition of the ovum at the time of its discharge, although in a state of complete preservation, indicated that it had long been dead.

Sixth—The operation of the same forces which can arrest putrefaction for a day or a week, may, by their continuance, arrest it for months or years.

The death of the embryo, or foetus, in utero, is usually quickly followed by the death of the entire ovum—indeed, the death of any of the products of conception is usually followed by this result. The lifeless mass, then acting as a foreign body in the uterine cavity, is soon afterwards expelled, in a state of decomposition, more or less advanced. Dr. Simpson states the general law for the discharge of the dead foetus to be from one to three weeks.*

But the chemico-vital forces are known to exert great control over the process of putrefaction within the body. Every observer is aware that the decomposition of an ovum in the uterus is so modified as to differ greatly from that which goes on in the open air. It has neither the odor nor the appearance of ordinary putrefaction.†

But while these are the usual results of the death of the embryo or foetus, they are by no means uniform: there are three large exceptions which observation has established.

Exception First—The death of the placenta and the investing membranes does not always attend the death of the embryo. It is sometimes discharged after an abortion, while they remain within the uterus with continued life, and are transformed into what are known as "*fleshy moles*" or "*moles of generation.*"‡ Or, in the earlier stages of gestation, when the embryo is in a condition which approaches the mucilaginous state, it is sometimes dissolved in the amniotic liquor, never afterward showing a trace of itself, after which the ovum takes on the changes just alluded to, is filled with hydatids, or assumes other unnatural appearances.§

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* *Simp Obst. Works*, vol. 1, page 13.
† See *Cazeaux Mid.* p. 339 notes.
‡ *Velpeau Mid.* 2, Am. ed., p. 242.
§ *Montgom. on Preg.*, page 217, *Cazeaux Mid.*, p. 339.

Exception Second—The ovum may die and be long afterward retained within the uterus. Velpeau "says when the child has ceased to live it is generally thrown out by the uterus, but in some cases its expulsion does not take place for a considerable period."* He saw a case in which the child died at seven months—was retained twenty-eight days afterward, and another in which the signs of gestation disappeared at six months, the "belly lost half its size," and when he wrote, eight months afterward, there had been and were still no signs of miscarriage. Churchill says "it is a matter of common experience that women retain a dead foetus in utero for weeks or months."† M. Prout had in his collection a foetus of three or four months, which was not discharged until five months after the symptoms of abortion. Cazeaux says "the term for the discharge of a dead foetus is not uniform—it is not uncommonly retained for weeks or months"—he has known many women to carry a dead child several months.‡ Velpeau says that under the conditions which existed in my case (that is when the membranes remained entire), the ovum may be carried not only for seven months, but even for several years.‡

It is to be understood however, that these are exceptions to the operation of a general law of delivery. The conservative forces of the animal frame are usually on the alert to expel every intruder upon the corporeal good, and at once to eliminate and rejeet all dead matter, whether in molecules or masses, which can threaten it with danger. The uterus is no laggard in her watchful care in these respects, and if the dead ovum is not expelled soon after its vitality ceases, it rarely passes the full term which nature, in the outset, designed it to remain within the body, without an effort, either successful or unsuccessful, for its discharge. This is a law not only of *intra*, but also of *extra* uterine gestation. The testimony of observers is, that in pregnancies of the latter kind, at the close of the usual term of utero-gestation, if not before, the womb makes expulsive efforts, as though it contained the foetus. Schmidt reports a case where the gestation lasted three years, and within the period labor pains were renewed eight times; and Cazeaux one of ten years, in which the pains recurred regularly at periods corresponding with the term of utero-gestation.

Exception Third—The ovum may be long retained within the body of the mother without undergoing putrefactive decomposition.

a. It may be mummified, and as completely preserved, as though

* *Velpeau Mid.*, 2d Am. ed., p. 241.
† *Mid.*, p. 178.
‡ *Cazeaux Mid.*, p. 338,

it had been steeped in alcohol, as in my case reported. Velpeau states that if the membranes are not broken, and the air does not get access to the interior, the foetus may be preserved *without change* for several months, or even several years, which has given rise, I presume, to supposed pregnancies of fifteen, twenty, or thirty months duration, &c., that are spoken of in the scientific collections. This occurrence is met with particularly in compound pregnancies—one of the foetuses dies at two or three months—the other continues to grow, and at the lying-in the practitioner is astonished to receive both a full grown child and an abortion.* M. Martin, of Lyons, says "the mode of alteration varies with the period of pregnancy at which the child dies. * * * * From the second to the fifth month it withers away, becomes shriveled and dried up, and looks like a little mummy of a yellow color, or like a foetus preserved for a long time in alcohol." "Not unfrequently the placenta likewise participates in this state of desiccation."† Simpson says "when the dead foetus is thus retained, it is preserved free from the decompesition usually following death, by all access of air to it being prevented. Sometimes it retains its usual rounded appearance and form, if it continues to be surrounded by a sufficient quantity of liquor amnii."‡

By consulting Dr. Montgomery's *Obstetrical Essays*, numerous cases bearing upon these facts will be found reported.

In extra-uterine pregnancy where the foetal mass is of necessity retained within the body of the mother beyond the term of its life, the same facts are observed. The products of conception are often encysted in a dense fibrinous sac, in which they are perfectly preserved for many years. Dr. Ramsbotham mentions a case in which he twice attended a lady in natural labor, and through her abdominal wall he could feel the limbs of a foetus which was the result of a previous extra-uterine pregnancy. In other cases of such gestation the ovum is incased in a hard calcareous crust in which it is preserved and carried for a quarter or half a century. Dr. Montgomery, in the essays quoted, relates a case of a foetus in utero, which was preserved, encased in a red calcareous deposit, aud Dr. Gooch two similar circumstances, which occurred at different pregnancies of the same woman.

b. Such dead and retained foetuses are at other times transformed into an osseous or cretaceous mass, resembling petrifactions. Almost all writers upon extra-uterine foetation give examples of this, and authority is not wanting to prove its occurrence in the uterus.

* *Velpeau's Mid.*, page 241.
† *Cazeaux Mid.*, p. 338.
‡ *Simpson Obst.*, p. 315.

c. Such foetuses are sometimes converted into adipocire, and in this state retained with the body an indefinite period of time. This substance is a species of soap into which the fatty parts of the body may be converted by maceration in water under circumstances which favor it. The experiments of Chevreul have proved it to be an animal soap with a base of ammonia or lime; the ammonia being the result of the decomposition of the nitrogeneous principles of the body, while the fat becomes acidified. This change more commonly occurs in extra-uterine foetation, but if I read * Velpeau aright, I have his authority for saying that it may and does occur in the uterus.

Query Second—Is the conclusion that a dead foetus was carried twelve months in utero compatible with the fact that the patient's health was undisturbed during this time?

Cazeaux says, "as a general rule the prolonged retention of a dead infant does not produce any disastrous result to the mother, and I suspect that writers have greatly exagerated this point: they say indeed that the woman becomes depressed, uneasy, and of a fretful temper: that she experiences lassitude, alternations of heat and cold, oppression at the epigastrium, headache, syncope, palpitations of the heart: her face is pale, the eyes dull and surrounded by a lived circle, the breath fetid, pulse frequent and irregular: in a word, all these general phenomena of a slow fever have been considered by them as so many rational signs of the child's death. But these symptoms are certainly absent in a majority of cases. I have known many women to carry a dead child for several months without ever suspecting it." †

Other and confirmatory authorities might be cited upon this point, but as my paper is growing too long, I will submit it to your criticism without further comment.

USE OF COLLODION IN ENTROPIUM.

BY S. B. ROBBINS, M. D., OF LAWRENCEBURG, INDIANA.

Among the many and varied uses of collodion by the surgeon and physician, to which our attention is so frequently called by standard authorities, and in medical periodicals, I do not remember to have seen

* *Velpeau's Midwifery*, page 242.
† *Cazeaux Mid.*, p. 338.

any especial attention directed to the value of this agent in the treatment of perverted conditions of the eyelids; so I trust I will be excused for giving, briefly, my experience in the treatment of such cases, by collodion; but more particularly, cases of entropium.

For this condition of the lid I have used it with very great success, overcoming several very bad cases of long standing, and I imagine there are but few cases of entropium but will yield to the thorough and repeated application of collodion. Simply a good article of commercial collodion applied to the outer surface of the inverted lid, with a brush (or what I have found equally as good, the end of the cork with which the bottle is stopped), several times per day, as occasion requires, effects, by its mechanical power to contract the surface upon which it is applied, an immediate contraction of its outer surface, and consequent bringing of the ciliary margin to its natural position. If one application is insufficent to bring the cilia into position, we can repeat it until the desired position is attained, where it may be held for any length of time, by repeating the application. And this gained, you have gained all that is offered by any other mode of treatment with which I am conversant, be it either of the many operations proposed, or the application of compress and bandages, adhesive strips or sutures. It can be applied without any inconvenience; produces no pain, but a warm, pungent sensation; is very cleanly and not unsightly, and the tears that prevent the thorough use of adhesive strips, and excoriate the skin under the compresses, have no effect upon the surface covered with collodion; the lid loses its reddened, swollen look, and assumes a more healthy appearance. * * * *

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In ptosis I have used it with equally good effect, especially in cases occurring in aged persons, and have been led to believe (by experience) that it exerts some influence in restoring to healthy action the levator palpebræ muscle when rendered inactive by palsy of the third nerve.

I hope that these jottings may be worth your attention, and that they may be of benefit to physicians having these tedious cases.

CHEMISTRY OF THE CINCHONA BARKS—CINCHO-QUININE.

The chemical manipulation of the Cinchona or Peruvian barks reveals the presence in them of quite a number of most remarkable, complex bodies. No vegetable production, except the poppy, affords such a marvelous combination of valuable medicinal principles as the *loxa* and *calisaya* barks, and no substances have been studied with greater care or more intense interest by chemists. Nothing short of the subtle chemical forces controlled by the Infinite One, could construct from the elements of the earth and air a bitter principle like quinia, or those other agents associated in bark, so closely allied to it physically and chemically. A handful of the finely comminuted fibres of the yellow bark, which resembles physically a dozen other varieties, is made to yield by the chemist, when treated with aqueous and alcoholic liquids and acids, a dark, bitter solution, unattractive in taste and ap pearance. If the process is skillfully conducted, or exhaustive in its results, there remains, beside the solution, a portion of woody fibre, inert and almost tasteless. It holds considerable coloring and some waxy matter, together with a little tannin; but the active chemical or medicinal principles have been removed, and are held in the dark liquid. The exhausted bark is not entirely worthless, for it may be dried and used as fuel. But what of the dark liquid? From this the chemist obtains, beside other substances, a portion of beautiful, white, silky crystals; not wholly of one distinct kind, but of several, all of which possess about equal chemical and therapeutical importance. No wonder it seems, to the uninitiated in chemical manipulation, a difficult work to perform. It is however, quite easy to the thoroughly instructed. The first principle isolated may be quinia. This is not held in the bark in its naked alkaloidal condition, but locked up, in the form of a salt, with another principle called *kinic acid*. In the bark it is *kinate of quinine*. We isolate the quinia, tear it from its embrace with kinic acid, throw that away, force it into a kind of matrimonial alliance with sulphuric acid, and in this condition of *sulphate of quinia*, use it as a medicine. This kinic acid marries into several other families resident in the bark, prominent among which are *cinchonia*, *cinchonidia*, *quinidia*, etc. Precisely how many of these alkaloidal principles the different kinds of barks contain, is unknown; but it is safe to assume that there are as many as four others which, although not distinctly pointed out, are tolerably well recognized. These *kinates* are all *kindred* in nature, and all labor to the same end, when isolated and set to work as therapeutical agents in the human system.

In one hundred ounces of good yellow bark, we obtain about two and three-fourths ounces of quinia, and two ounces of cinchona, with variable amounts of the other principles, but less than the two named. It is to be regretted that we can not remove the different families of kinates from the bark in their natural state of saline combination. It seems reasonable to suppose their action upon the system would be

more salutary than in other form. It is easy to isolate the kinic acid, and having the alkaloids, the kinates of quinia, cinchona, etc., can be re-formed; but in these chemical changes so much disturbance to natural organic combination is made, that practically, we realize no marked advantages. It seems unnatural to force a natural alkaloidal base out of its association with an organic acid, and recombine it with a mineral acid. This we do in the preparation of the sulphate of quinia. However, as it has served so good purpose for many years, it is not best to quarrel with the theory.

All the alkaloids of bark possess about equal febrifuge and tonic properties, when isolated and administered in that condition. This has been proved over and over again by all competent chemists and physicians, from Drs. Gomez, Duncan, Pelletier, Caventou, down to the time of Leibig's researches, a quarter of a century ago, and from that time to the present by a hundred careful chemical and medical observers.

How the one alkaloid, quinia, came to supersede the others, and drive them into the background, is easily understood, when we remember that it was about the first that was eliminated, studied and experimented with; and the *eclat* it acquired caused everything else to be neglected. The natural bark, holding all the alkaloids, the quinia, cinchonia, quinidia, etc., has always been observed to produce more efficient and prompt results, both as a tonic and febrifuge, than the quinia, or either of the other principles in themselves; but holding also, as it does, tannin, gum, starch, fibrine, and coloring matter, all of which are medicinally interfering or inert, its use is rendered inconvenint and inadmissible in many cases. Beside, it is apt to produce disturbance of the gastric functions of an unpleasant character. Acting upon the idea that the natural alkaloidal principles of bark, in their simple, unchanged condition, separated from the gross, woody, and other matters, would better subserve all therapeutical ends than themselves, or *any one* of the alkaloids separately employed, Jas. R. Nichols & Co., Chemists, Boston, have prepared CINCHO-QUININE.

Cincho-quinine contains no external agents, as sugar, licorice, starch, magnesia, etc. *It is wholly composed of the bark alkaloids.* 1st, quinia; 2d, cinchonia; 3d, quinidia; 4th, cinchonidia; 5th, other alkaloidal principles present in barks, which have not been distinctly isolated, and the precise nature of which is not understood. In the beautiful white amorphous scales of cincho-quinine, the whole of the active febrifuge and tonic principles of the cinchona barks are secured without the inert, bulky lignin, gum, etc. It is believed to have these advantages over sulphate of quinine:

First—It exerts the full therapeutic influence of sulphate of quinine, in the same doses, without oppressing the stomach, or creating nausea. It does not produce cerebral diseases as sulphate of quinine is apt to do, and in the large number of cases in which it has been tried, it has been found to produce much less constitutional disturbance.

Second—It has the great advantage of being nearly tasteless. The

bitter is very slight, and not unpleasant to the most sensitive, delicate woman or child.

Third—It is less costly than sulphate of quinine. Like the sulphate of quinine, the price will fluctuate with the rise and fall of barks, but we shall supply it at all times at less than the lowest market price of that salt.

Fourth—It meets indications not met by that salt.

Cincho-quinine admits of several pleasant forms of administration. We present the following

Formulæ, and Methods of Using Cincho-Quinine.

A perfectly clear solution of *cincho-quinine*, may be made, by taking ten grains, rubbing it fine in a mortar, and gradually adding two fluid ozs. of water, in which is dissolved thirty drops of No. 8 acetic acid, or six drops of sulphuric acid. The solution is not disagreeably bitter, and a pleasant elixir may be made from the solution, by adding syrup and aromatic flavors.

CINCHO-QUININE PILLS.

℞. Cincho-Quinine (finely powdered), xx gr.
Acid Sulph. Aromat. (Elix. Vit.). xx gtts.
Fiat pil. xx.

Mix, and rub in mortar until it becomes hard enough to form into pills. The mixture is at first quite liquid, but it soon hardens, and pills can be readily formed from the mass. This is the preferable form in which to administer the remedy, as the pills are small and can be readily taken. They need no *sugar coating* to render them palatable.

CINCHO-QUININE ELIXIR.

℞. Cincho-Quinine (finely powdered), grs. xlviii.
Aqua Rosæ (fresh), ℥ viii.
Syrupus Simplex, ℥ iv.
Tinct. Cardamon, ℥ ii.

Mix. Dose as a tonic, a dessert spoonful three times in the twenty-four hours. The Elixir should always be shaken before it is administered.

CINCHO-QUININE POWDERS.

℞. Cincho-Quinine, ℥i.
Sacch. Alba (powdered), ℥iv.

Rub together in mortar and divide into powders of any size desired.

When cincho-quinine is required to be given in large doses, as in intermittents, the pill form is preferable, as the pills can be made into those containing five grains, and not inconveniently large.

There are many other ways in which it may be prescribed, which will suggest themselves to the physician.

It is doubtful if it can be placed in a form suited to hypodermic use. But few experiments have, however, been made in this direction.

In intermittents, cincho-quinine may be given in five, ten, twenty, or even thirty grain doses, the same as sulphate of quinine. As an introduction to the treatment of fever and ague with cincho-quinine, an ipecac, or

other emetic, is often of the greatest service. Ten or twenty grains of cincho-quinine, or of sulphate of quinine, might as well, so far as medicinal effect is concerned, be dissolved in the contents of a waste bucket, as in a stomach loaded with food and the attendant juices. The remedy must act upon the walls of the stomach and the connecting organs, to produce constitutional effects.

In a recent visit to the wards of the United States Marine Hospital, Chelsea, Dr. Graves, the physician in charge, politely invited us to thoroughly examine the numerous intermittent patients, with reference to his treatment of this disease, it being based upon the use of emetics prior to administering the bark preparations. We believe the wards of no hospital in the world can show more cases of prompt and thorough recovery from the affection than this. It is not probable that the marked beneficial influence of the emetic is due alone to its work as an evacuator, but its general influence on the system admirably prepares it for the use of anti-periodics.—*Boston Journal of Chemistry.*

CORRESPONDENCE.

PROF. BOWLING VERSUS "THE OHIO DOCTOR LAW."

T. PARVIN, M. D.—*Dear Sir:* In the May number of the *Western Journal of Medicine*, we notice an extract from the *Nashville Medical Journal*, written by the distinguished Prof. Bowling, reflecting upon the Doctors of the Ohio Legislature, who were instrumental in enacting the law "To protect the citizens of Ohio from empiricism." Now, we do not object to the learned Professor entertaining whatever opinion he may have formed in regard to this law and those who are responsible for its passage through the General Assembly of Ohio, but we do think that he has arrived at his conclusions hastily, and that he is ungenerous, unkind, and withal, very dogmatical and discourteous in casting reflections upon more than a dozen physicians of the Ohio Legislature, about whose ability and standing in the profession he knows no more than does the most ignorant quack and nostrum vender about the modus operandi of the most intricate remedy of the pharmacopœia. We have ample assurance and undoubted evidence that this law has done much good in Ohio, by causing many men who were engaged in the practice of medicine, and who had not completed their studies, to attend lectures and graduate, not at colleges where "one

fellow opened a college, and filled all the professorships himself; held commencements opened by prayer, and closed by benediction in the most fashionably approved style," spoken of by Prof. Bowling, but at colleges where after prosecuting their studies they graduated, and in which men of more professional ability than either Prof. Bowling or the doctors of the Ohio legislature instructed them. It really does appear clear to our mind, that if this distinguished Professor will only direct his attention to quackery in Tennessee, and endeavor to eradicate it there, that he will find quite a sufficient amount of labor to engage his whole time and attention, without ridiculing those "unfortunate doctors in a legislature," of Ohio, who are endeavoring to put a check upon quackery for the protection of the community and the honor of the profession. The friends of this law do not claim that it is anything like perfection, but that it is one step in the right direction, and that it was not all we wanted, but as much as we could get at the time of its passage, we sincerely hoped and flattered ourselves that it would meet the approbation of the profession, and that all medical men and the true lovers of science everywhere would be pleased to see it enforced, and willingly give aid in carrying out its provisions, and thus, in a few years, by a proper exposition of all species of quackery, and by educating the people against its evils, this law could be so amended as to make legislation almost entirely effective and complete against the impositions upon community. Since this law has been enacted in Ohio, several other States have passed similar laws, and this affords sufficient proof that all people are not of the same opinion as is Prof. Bowling, even though a poor and unfortunate doctor does occasionally get into a State Legislature, where he "concludes to 'bring in a bill' 'to elevate' the profession he has abandoned, so that his old friends may see that he is 'still working for them,' and who ought to continue to think well of him." We must confess that we are at a loss in comprehending Prof. Bowling's comparison in legislation on religion and medicine as analogous, and we think that he is here "hammering" on cold iron to no purpose, and to his entire disadvantage. Religion needs no special legislation for its protection, or for the protection of those who embrace it, because it is a responsibility devolving upon man, and a question between him and his God, irrespective of legislation and the laws of political economy. But the practice of medicine is a responsibility resting upon those who are engaged in it, and a question of right and wrong between such persons and their fellow human creatures. We make laws to protect people in

the rights of person and property, and to punish those who infringe upon and debar them from the privilege of enjoying those rights, then, why not, with equal propriety, enact laws to protect the community from quack doctors, in something that is far more valuable and of much greater importance than mere property, health and life? Permit us to use the language of Prof. Palmer, of the University of Michigan, as to his opinion of the mode in which homœopathy should be attacked by the regular profession, for the same is precisely applicable to the manner in which all other species of quackery should be attacked and exposed by those who understand its pretences and absurdities. "There are differences of opinion as to the policy of attaking homœopathy, and, as to that, much will depend upon the manner in which it is done. But the policy which has generally been pursued, of passing it by as unworthy of serious attention, has resulted in its advancing pretensions, in its assuming a boldness of front which it could not have done had its real merits been more fully discussed before the people." Then, we answer, let the profession fully discuss the merits of quackery before the people, let States enact laws to prevent its absurdities from being practiced upon the community, and then, should any editor of a medical journal interpose in its behalf, let it be hoped that he will instantly "take a fit, to the dismay and utter consternation of his 'professional brethren,' and the rest of mankind." Hitherto the objections urged against this law have come from debased and disaffected quacks, and we must confess that it is somewhat of an enigma to us to determine how a man of the learning and intelligence in the profession, possessed by Prof. Bowling, should wildly fly from his natural orbit in the denunciation of the Ohio medical law, and those who were instrumental in its passage. Our motto is, elevate the standard of medical education, have a less number of medical schools, expose quackery wherever found, educate the people against its absurdities and dangerous consequences, and then, by proper legislation, we may finally eradicate it.

AN M. D. OF THE OHIO LEGISLATURE.

NEW YORK CITY, JUNE 15, 1869.

DEAR JOURNAL: One year ago, in one of our communications to the *Western Journal of Medicine*, we made the startling announcement that in this great city of ours there were thirty thousand children

growing up in idleness and ignorance, whose only occupation was to lie and steal. It is sad to contemplate that this vast army is constantly on the increase, notwithstanding the great efforts put forth in their behalf. In the *Atlantic Monthly* for March, there is an exceedingly interesting account of these poor waifs, these "small Arabs of New York." Thousands of them have no home, no parents, no friends. Their living is most precarious. In summer they do not suffer so much, for then they can sleep in the parks, and amidst the rubbish of old buildings; but in winter their lot is a hard one indeed. At that season, market stalls and great iron boilers are often their resting places. Their occupations are various, when they are inclined towards work, and their attention is divided between the trades of boot-black, newsboy, and hawking small wares around the streets. A few days ago forty-six boys and girls from the New York Juvenile Asylum left for the west, having been trained and educated in the institution from six months to a year. They go to Illinois, where all children in the west from this institution are located, and are indentured mostly to farmers until of age. The Directors of the Asylum continue their care and guardianship over such children during their minority, and employ two agents finding homes and making visitations. About three thousand children have been thus cared for by the Asylum during the sixteen years of its existence.

With these brief prefatory remarks, we propose to give the readers of your valuable journal a short account of two or three of the charitable institutions of our city, where these poor children, these little wanderers, find protection and are kindly cared for, and to follow them, if agreeable, with accounts of others, in our succeeding communications. The New York Juvenile Asylum, one of the most prominent of these charities, is situated on 175th street, near 10th avenue. The bill incorporating this institution was passed in 1851, and became a law. The object of the corporation is "to receive and take charge of such children, between the ages of seven and fourteen years, as may be voluntarily intrusted to them by their parents or guardians, or committed to their charge by competent authority, and to afford them the means of moral, intellectual, and industrial education." The average number of children here and in its associate home, the House of Reception, number seventy-one West Thirteenth street, is six hundred per annum. Up to the year 1867, twelve thousand children had been committed to the Asylum. The children attend school six hours daily. There are morning and evening prayers, and regular worship

on the Sabbath. A few hours each day are devoted to indoor labor. Of the children apprenticed in Illinois, not over five per centum have proved to be incorrigibly bad, or guilty of gross misconduct. Private benevolence has contributed over two hundred thousand dollars toward the support of the institution, since its organization.

The rules of admission are as follows: (1) Truant and disobedient children, and such as require discipline from any cause; and those wishing to be provided with a home in the country, between seven and fourteen years of age, belonging to the city of New York, may be committed to this Asylum.

2. An order of commitment from a police magistrate, or a surrender from parents or guardians, is required as the condition of admission.

3. Children may be taken to any police court in this city by their friends, or by a police officer, and upon a proper affidavit that they are in the condition above specified, such order or commitment will be issued by the police magistrate. When parents or friends desire to surrender children, it is only necessary to bring them to the House of Reception and sign the proper form of surrender.

4. The notice of commitment which is sent to the parents, though sent in all cases, is of real use only when children are arrested by the police and committed without the knowledge of their friends.

5. Children are kept only a few weeks at the House of Reception, and are then sent to the Asylum on 175th street, where they remain until finally discharged. While in the Asylum, they are kept constantly at school six hours a day.

The *Atlantic Monthly*, in the article that we have above referred to says, "New York is by no means unprovided with Asylums and Reformatory Institutions for the small Arabs by whom it is so ubiquitously pervaded, but they are as yet far from sufficient to meet fully the objects for which they have been so laudably planned. A "Childrens' Aid Society" has been in existence for a number of years, and from this excellent institution numbers of boys and girls are sent annually to the west, where so many fields of healthful labor are open for them. Out of this grew the "Newsboy's Lodging House," in the large dormitories of which some two hundred boys find comfortable lodgings every night. Each boy, when he comes in at night, hands fifteen cents to the superintendent, and for this he is entitled to supper and sleeping accommodation, and to his breakfast next morning. In addition to this, he is provided with a bath, and with all the necessary

appliances for maintaining cleanliness of person. The institution also comprises a "Newsboy's Bank," which consists of a table with a drawer divided into compartments, each of which has in its lid a slit, through which depositors drop their pennies into the compartment numbered for them respectively. At the expiration of two months the bank is opened; and many of the depositors are both surprised and encouraged when they see how their savings have accumulated. Most of them make necessary purchases with some of this money, and deposit the rest of it in city savings banks.

Other asylums besides those just mentioned are provided by New York charity for the juvenile waifs and strays of the city. At the "Five Points House of Industry," for example, nearly two-thirds of all received into the institution are children; and on the islands in New York harbor many small ramblers of the streets find a home in the various institutions established there. Yet there does not appear to be any diminution in the hosts of ragged children that stray abroad in all quarters of the city."

The health of New York City is excellent. The excitement concerning the prevalence of the small pox is gradually subsiding. Of last weeks' mortality, Dr. Harris says: "Small-pox and varioloid caused only four deaths in New York, and none in Brooklyn. This disease not only causes little mortality, but must soon cease to prevail in New York, as the effort to secure the vaccination of all persons who need such protection is proving entirely successful. The first three weeks of June are the most healthful of the year, and vaccination is now given with the very greatest degree of success and safety. No other great commercial city in the world is less liable to distribute contagion."

The opening of the Presbyterian Home for the training of young girls was celebrated last week by a reunion of about one hundred ladies and gentlemen, who were entertained by interesting addresses from the Rev. Messrs. Offer, Rogers, Mingins and Maclise. The Home thus opened is an old but spacious and comfortable wooden mansion, delightfully situated on the East river bank, at the foot of eighty-third street, and surrounded by grounds about equal in extent to a city square. The Rev. Cyrus Offer, his wife, two lady assistants, and about thirty girls from twelve to twenty years old, constitute the family. This Home, which can accommodate fifty inmates, is under the direction of about thirty ladies, mostly belonging to the Presbyterian or Reformed Churches, and aided by an advisory committee of gentlemen,

of whom E. S. Jeffrey, Esq., is one. The same ladies have been working for two years, under another name and further up town, for the reformation of fallen women; but are now confining themselves to saving poor but virtuous young girls from a life of shame, by giving them a home, instruction in sewing and housework, and aid in obtaining situations.

The projected Hudson county Hospital has had a donation of ten thousand dollars from Mrs. E. A. Stevens, which makes the total amount subscribed thirty thousand dollars. The committee are endeavoring to secure as a site for the institution the lot occupied by the old United States Arsenal, in Hudson City. A new hospital is also being erected in Jersey City, and in the neigboring city of Newark several hospitals, principally denominational, have recently been started on a small scale.

The number of emigrants landing upon our shores, for the past few months, has been truly immense. Formerly the Irish were in large excess, but now the number of Germans arriving is far the greater. Last year the Irish numbered sixty-five thousand one hundred and thirty-four; while the Germans were one hundred and seventeen thousand five hundred and ninty-one. The immense numbers of Germans arriving in this country are accounted for by the great increase of taxation in their country, and the dissatisfaction with Prussian rule.

The *New York Medical Journal* for May says, "at the New York Hospital *oxygen* has recently been administered to tubercular patients, and the results thus far have been somewhat extraordinary. The immediate effect of the inhalation of the gas is a marked improvement in the appetite and increase in weight of body. The gain in weight in some of the patients has been almost marvelous. We shall endeavor to present fresher and fuller accounts of this plan of treatment. Dr. A. H. Smith, to whom we are largely indebted for the utilizing and making known the administration of oxygen, has also used it in these cases, and with decided success. We hope to hear farther from him in this matter, to which he has paid especial attention."

Various new drinking fountains are to be erected in different parts of the city, under the direction of the Board of Health. These have proved to be a great success wherever tried, and a great convenience and comfort to both man and beast.

The University Medical College is erecting an elegant edifice in Twenty-Sixth street, opposite Bellevue Hospital. Dr. Louis Elsberg

has been appointed Professor of Diseases of the Throat in this institution.

The *Medical Gazette* says, "The editors of the *American Journal of Obstetrics and Diseases of Women and Children* offer the following prizes (in gold) for essays: Fifty dollars for the best essay on "catarrh of the uterus, its etiology and treatment;" One hundred dollars for the best essay on "the morbid anatomy of the placenta;" Fifty dollars for the best essay on "electricity in the treatment of the diseases of infants and children;" One hundred dollars for the best essay on "congenital deformities and diseases depending on maladies of the uterus or membranes." The first and third are to be sent to the publishers on or before March 15th, 1870. They may be written in English, French, or German.

The Commissioners of Public Charities and Correction will to-day open a City Labor Office on the ground floor of Plympton buildings, at the junction of Stuyvesant and Ninth streets. The object will be to take a list of all persons desiring help, either domestic, agricultural, mechanical, or clerical, and providing for those needing work without charging a commission. Much deception is often practiced at private intelligence offices, and poor persons of both sexes are swindled out of both time and money by the dishonest men in the business.

Yours very truly,

JAMES B. BURNET, M. D.

VIENNA CLINICS AND CLINICIANS—No. 3.

VIENNA, JUNE 1, 1869.

On a quiet street in a retired part of the city, perhaps half a dozen squares from the general hospital, there stands a modest little building of two stories, dedicated, as its inscription informs us, to the holy Saint Anna, and devoted to the care and treatment of sick children. A row of benches around the hall is filled with patients, as we enter at eleven o'clock, awaiting the arrival of the professor; these are the cases of the polyclinic, out door cases. As we ascend the stairs and reach the second floor, we are everywhere agreeably struck at the general tidiness of apartment and attendant, and we are not surprised at finding the wards, with their little patients, models of neatness and cleanliness throughout. The beds are small cribs, arranged with open

side boards, or rails, and we notice that nearly every one of the thirty or forty in the medical department, and half as many in the surgical, is tenanted. Besides these rooms, there are all the necessary appointments of a regular hospital, with post mortem rooms, quite a handsome little pathological museum, &c., &c.

We find a seat then, in one of the wards mentioned, used at this hour as the clinic room, and near the small semi-circular railed table with some twenty or thirty surrounders, and become here, as everywhere in Vienna, involuntary auditors or students in sundry branches of philology; all varieties of language, from the most grating Sclavonic to the most mellifluous Italian, being recognized even in so small a collection of students as this. One and all, barbarian and civilized, we rise to salute the Professor, on entry, who tenders us his gracious nod of recognition when we are seated for the hour; that highly respectable and exceedingly respectful method of tendering honor or applause by a crash of heavy boots on a hospital floor not even being indulged in by the Bohemians.

Case after case is now exhibited, with short practical remarks, until the polyclinic is exhausted, which generally requires about three quarters of the time, when some topic suggested by some well marked case, concludes the hour; then follows the rounds of the wards.

The rapidity and apparent facility of diagnosis which is based on one or two prominent symptoms, of course nearly always objective, and the simplicity of treatment are the chief features of excellence in this, perhaps the finest children's clinic in Germany. Wiederhofer possesses too, in a marked degree, that peculiar affable manner which is requisite to elicit symptoms from a child, as well as a certain precision and decision, we might call it, in his manner of question and examination, which prevents much loss of time, the natural consequences of his long residence as assistant in the Foundling hospital, which is fed to repletion with all the cases from the whole obstetrical department. His position as physician to the Imperial family often calls him away, however, in the middle of his course, which would prove a serious interruption, were it not that his place is so ably filled by Monte, his first assistant, a young Italian of most brilliant promise in this field, who has been connected with the institution many years.

During one of these six to eight weeks course, an opportunity is presented for observing almost every form of disease, and even a few rare and curious cases. We extract then here and there a point or two

from our notes of the past course, limiting them to practical observations on the diseases of more frequent occurrence.

Of which rachitis, the English disease, as they are pleased to call it, is evidently one, for scarcely a child is presented which is not more or less afflicted. Rachitis is hereditary in certain families, and is hence sometimes cogenital; should both parents be afflicted, the offspring is almost certainly a victim. Syphilis is a positive predisposer; scarcely ever indeed does a child cured of syphilis escape an ensuing rachitis, and the same effect is observed on the child after syphilis of either parent. Next to syphilis ranks tuberculosis, and especially among the diseases of children, chronic intestinal catarrh. Every disease of long duration may prove a cause, any interference with proper nutrition, and in this class particularly, artificial support.

Among the earlier symptoms may be noticed a shortening of the hairs of the scalp, with here and there a point of softening in the cranial bones, which become in general thinner and more yielding. The bruit of the brain may be heard through the anterior fontanelle, an evidence only of anæmia, and as observed in all diseases with this effect, not of much diagnostic value. Laryngo spasmus is a frequent attendant. Should the disease develop before dentition, this progress is delayed; whereas, if the disease occur while dentition is in progress, the further development of the teeth ceases, and those already present become carious, this in contradistinction to tuberculosis, wherein the development of the teeth as the rule is premature. It may be that the head escapes entirely, however, and the bones of the thorax only are affected; sooner or later the thorax is affected, when the cartilage of the ribs enlarge, protuberances may be felt anteriorly, or are even apparent. The deformities of the feet and long bones, some most extreme distortions are exhibited, are not the direct effect of the disease, but are due to neglect of position, whereby pressure is exerted on bones more or less softened in the peculiar process of the disease. Congenital deformities, which are not seldom shown in a marked degree, are the effects of intra-uterine habitus. The only disease with which rachitis might be confounded is chronic hydrocephalus, and the following points are given as sufficient indices of difference. R. Dilatation of fontanelles moderate, sutures normal. H. Fontanelles extremely dilated, sutures also more or less. R. Head normal in size, but angular or cornered, presenting angles particularly at the frontal and occipital protuberances, giving it a triangular shape. H. Head larger and nearly round. R. disease in other parts of the body, which is other-

wise generally in fair condition. H. Body emaciated. R. Laryngo spasms. H. Chronic convulsions. R. Pupil contracted, eye in situ. H. Pupil dilated, eye protruded. The fact that rachitis is generally amenable to treatment, and hydrocephalus is not, renders a diffirential diagnosis of more than mere scientific value. The chief point in therapy is proper nutrition. Salt should be tolerably early administered, even more than for adults. Meat soups may be commenced as early as the second month, at first once daily, then twice, then three times, when raw cooked beefsteak may be added, amylaceous food to be in all cases avoided. Baths, simple or medicated with various salts. Great attention should always be paid to position, constant decubitus, dorsal or lateral, will flatten the cranium correspondingly, no one posture to be observed for any length of time, sitting or standing to be forbidden, and cod liver oil to be administered early and in large doses, even to sucklings of three or four weeks. The following is the favorite recipe:

℞. Ol. Jecoris Aselli Flav., ℈ i.
Mucilaginis.
Aqua Font., aa q-s ut. ft., mist ℥ ii.

Begin with ℈ss doses, and gradually increase to ℥ss per day. With this is gradually given a preparation of iron and some bitter vegetable tonic. During an attack of laryngo spasms relief may often be afforded by simply drawing the tongue outwards.

Scarcely a week passes without its victim of tubercular meningitis, and there are few diseases which more sadly impress the beholder with their insidious ravages than this same affection of the brain, before which science with all her progress, must still stand with folded hands. Did but our knowledge of therapy increase in the same ratio with pathology and diagnosis!

These are the prodromata course and termination. Disturbance of disposition, loss of playfulness, occasional vomiting, emaciation without evident cause for two weeks, then a peculiar pale color fluctuating to a hyperæmia, specially marked on the face, vomiting without effort, a regurgitation, the "red stripe" of Trousseau, which, however, is only corroborative and not pathognomonic, as it is observed in other diseases too, in this disease the stripe brings them out of soper, a peculiar expression of constant pain, head supported by the hand, sunken hod-shaped abdomen, obstipation, gnashing of the teeth from cramp of the masseters, pulse at first regular, then slower and more irregular, an evidence of commencing dilatation of the ventricles, when the respira-

tion, before normal, becomes irregular, sighing, convulsions from ten to fifteen days after vomiting has commenced, death generally in fifteen or seventeen days, occasionally however lingering to three or four or even six weeks. The disease generally occurs between the second and sixth year.

Of every twelve hundred cases sixty are cases of croup. Statistics prove that this disease is everywhere increasing in extent and virulence from day to day. Although far more frequently observed at a more advanced age, croup undoubtedly attacks sucklings too. That it occurs epidemically is a fact of general acceptance, but that it is contagious is here firmly denied. The cases of croup in the house are not at all isolated, and in no single instance in six years has the disease attacked the rest. The professor himself has time and again received the membrane in his eye, and even in his throat, as also his assistant, and they have never experienced bad effects; he regards these cases of reported deaths of physicians from a croup or diptheria induced in this manner as cases of peculiar predisposition; he does not hesitate on all occasion to suck out the tracheal tube when symptoms of suffocation present. The period of epidemic is that of cold, wet weather, spring and autumn or a thaw in winter; a north-east wind in general, with a low barometer. Croup occurs but once. Of eleven cases of croup trachetomized and recovered, no one has been presented for the second time, and these of all cases would present at once on a return of the disease. It presents three stages: 1. Stadium prodromorum. 2. Exudationum. 3. Asphyxiae. The prodromative stage always exists; chill, fever, coryza, pharyngeal catarrh, pain, anorexia. In the second stage the cough becomes paroxysmal, with suffocatory symptoms, audible respiration, rough inspiration, which is longer than the expiration, and between the two a short pause. If localised to larynx the respirations never rise above thirty-two; if the bronchi be affected, it rapidly ascends forty, fifty, sixty, even eighty. This is a positive evidence of the extent of the disease, and should always be carefully watched. As the disease becomes more marked the epigastrium sinks deeply in inspiration from one to even two inches, the supra-clavicular fossae half an inch. Cyanosis announces the commencing third stage of asphyxia, pupils contracted, pulse very rapid, skin cool, anaesthesia, emetics powerless.

Duration of the disease from five to ten days. Prognosis very unfavorable, it ranks next to meningitis, without tracheotomy ninety per centum fatal, with it eighty per centum. Croup is amenable to treat-

ment only in the first two stages; in the stage of asphyxia no medication is of avail, though here and there a case is rescued by tracheotomy. Leeches are of no avail whatever, in whatever stage, likewise vesicatories; both long since discarded; warm applications placed in the same category. Bromine, iodine, iron, &c., receive the same denunciation. The treatment is the diligent application of ice, ice dressings externally, quickly changed, and ice pills to be swallowed. The only internal application of value is the inhalation of aqua calcis by means of an inhaler, Sigmunds here used, as aqua calcis has been found to dissolve the membrane out of the body. Emetics only of value when the cough is loose, as evidenced by the rales, the stomach always to be filled with fluid a half hour before their administration; antim. tart. preferred. In the first stage all emetics of evil effect, and in the stage of asphyxia, they should be carefully avoided. Quinine is given in large doses, one to eight grains from the first; its use should however be discontinued after the second or third day. There are no means of preventing the re-deposit of membranes once removed.

Trachetomy always indicated when the deposit is limited to the larynx, and suffocatory symptoms occur, it may be performed to prolong life when the membrane exists in the bronchi. Under one year the operation is always fatal, as Trousseau taught, and it is not indicated when croup follows measles or scarlet fever, because of the coexisting lung trouble. Trachetomy then is not to be performed at either the beginning or end of the disease, in the first case unnecessary and in the second useless; the prime indication is the stage of stenosis, as evidenced by commencing suffocation and cyanosis. Laryngotomy presents more advantages than trachetomy, as from the laryngeal wound no pus can fall into the mediastinum, and cause trouble there, as has already several times occurred. Mention is also made of the death of two children from inflammation of the thymus gland, which sometimes exists to the tenth year. Should respiration cease during the operation, catheterisation to be performed from the mouth, and artificial respiration sustained. Catheterisation is often of great value, even where an operation is not performed, and is never to be neglected until the indicatio vitalis calls imperatively for trachetory. The canula may generally be removed in eight or ten days. The treatment of diptheria is exactly the same as the above, the difference between the diseases being only the pathological one that the membrane which is deposited on the surface in croup, infiltrates and per-

meates the ensire mucous tissue with its substratum, so as to leave an ulcer where removed by force.

In no diseases to which children are subject is a proper investigagion of the cause more essential than in the affections of the gastro-intestinal tract, and this may generally be found in a faulty condition of the nutrition. The milk during menstruation contains less sugar and serum, and is not an unfrequent cause of infantile dyspepsia. Coition affects the condition of the milk, and a re-impregnation almost always acts prejudicially, so much so that the first of a family of rapidly following children will have been sometimes the only healthy and well nourished individual. All kinds of artificial support need most careful attention. A wet nurse should not be more than two months older or younger in her own lactation than the mother herself, and extreme care should always be employed in her selection; many a syphilis, rachitis, &c., follows a neglect of this injunction. Artificially nourished infants should always be returned to the breast on the supervention of dyspepsia or diarrhœa. Medicines play but a secondary role then in the treatment. Muriatic acid gtt. ii–iv. in gummy or aqueous solution or rheum, grain one-sixth, or again, cascarilla is of occasional benefit. Where the milk in the stools and vomit is coagulated, alkalies are of special benefit. ℞. aq. calcis, aquae dist., aa. p. ae. M. Dose ʒi–ʒiii once, twice or thrice daily. In the colic of flatulence, wherein the pain may be so severe as to induce convulsions, the great accumulation of gas may often be removed by the simple mechanical introduction of a tube, syringe nozzle for instance, to the depth of one and a half inches. A large number of stools daily without water, and without the sour smell or relics of undigested milk, evidences an enteritis follicularis. Treatment—soups, clyster of starch after each stool and rheum, internally.

Trousseau's treatment of cholera infantum, the calomel and mustard, is highly lauded, if applied early. The calomel is given in doses of a grain per day, and the mustard is applied by adding a handful to a bath. If the calomel produce no effect in two days its further use should be omitted. Should sclerema exist, the mustard has no effect whatever on the skin. In the latter stages ether, musk and wine are administered, but nearly all remedies are powerless.

Typhoid fever is not a rare disease among children; its nervous symptoms are the same as in adults, weariness, somnolence, sopor, but the delirium is generally mild. The papules over the chest or abdomen, to the number of twelve or twenty, remain for two or three days.

In children, catarrh of the lungs is one the most important symptoms of this disease, begins generally at the end of the first week, and gradually increases. Cases of typhoid occur where the only evidence is an inexplicable pulse frequency, of long duration. Therapeutics purely dietetic. The great majority recover.

The pale yellow color of the face often characterizes a case of syphilis, as far as it can be seen. The most frequent form exhibited is the pemphigus on the volar surface of the hands and feet, though general eruptions are frequent enough. The treatment is the hypodermic injection of hydrarg. bichlor. grains one twenty-fourth every other day. Several cases have been shown wherein a cure has been effected by a total of one half grain. In very young infants the mother is often medicated; condylomata are treated by sprinkling their surfaces with calomel, and then penciling with aqua chlorin; the pain ensues on the following day. The symmetrical patches of yellow deposit on each side of tha palate are not to be regarded as syphilitic, rather apthous. Stomatitis aptherosa is treated with potass, chlor., or aqua calcis pencillings.

The inspiratory sound is not a necessity of pertussis, the staccato cough and color of the face, with rales in the chest, are sufficient to establish it. Belladonna and its preparations have been found of but little value; ordinary expectorants are better.

It is better to awaken a child with laryngo-catarrh a half hour or hour before the attack occurs, which is generaliy between twelve and two, and administer warm drinks freely. During the attack an emetic is often of value.

Should the temperature not fall in twenty-four hours after the eruption of measles, some complication may always be suspected. Pneumonia, &c.

Among the varieties might be mentioned a few interesting cases: Case of persistence of the omphalo mesenter in canal, communicating from the umbilicus with the intestine; no similar case on record; fæces escape at the naval. Mention was made at the time of a case of last year with persistence of the urachus, which however is not so extremely rare; this case died; of the former we have since heard nothing more than that a consultation was to have been called.

Case of hyperæmia of the meninges from a premature closure of the fontanelles; head droops powerless; convulsions of daily occurrence; hopeless.

Case of hyperplasia of the bronchial glands, inducing a cough exactly simulating croup. Ordered syr. ferri, iod.

Case of stomatitis exudativa, most exquisite. Ordered a penciling every two hours with aq. calcis and constant application of cloth moistened with the same, to the tongue. Case of cephalatoma; this affection generally occurs over the right parietal bone, from traumatic cause, though it may of course occur anywhere on the cranium; best treatment is the subcutaneous incision; such a thrombus occurs sometimes in connection with a corresponding tumor within the cranium, without the least symptom of brain disease, explicable by the flexibility of the bone, the softness of the brain tissue, and the predominance of connective tissue in its composition at this age.

WHITTAKER.

PROCEEDINGS OF MEDICAL SOCIETIES.

THE INDIANA STATE MEDICAL ASSOCIATION—TWENTY-NINTH ANNUAL MEETING—MAY.

President—N. Field, M. D., Jeffersonville.
Vice-President—R. N. Todd, M. D., Indianapolis.
Secretary—G. V. Woolen, M. D., Indianapolis.
Assistant-Secretary—W. J. Elstun, M. D., Indianapolis.
Treasurer—W. B. Lyons, M. D., Huntington.
Librarian—William Wands, M. D., Indianapolis.

REPORTS OF OFFICERS AND COMMITTEES RECEIVED AND READ.

Treasurer reported no indebtedness, and a surplus of twenty-six dollars in treasury.

After considerable discussion, the annual assessment was reduced from two dollars to one dollar.

Dr. L. D. Waterman, of this city, introduced an amendment to the constitution, which was adopted, admitting to membership delegates from all the hospitals in the State.

After transacting other general business, Dr. Kersey, of Richmond, then presented an essay on "Why Doctors Disagree," which, after being discussed by Dr. Moffet, was referred to the publication committee.

PERMANENT MEMBERS IN ATTENDANCE.

W. F. S. Cornett, Madison; J. W. Bonnell, Lebanon; M. H. Bonnell, Lebanon; M. H. Field, Tampico; J. K. Bigelow, Indianapolis; H. F. Barnes, Indianapolis; L. D. Waterman, Indianapolis; F. J. Van Vorhis, Stockwell; C. E. Wright, Indianapolis; V. Kersey, Richmond; J. V. Hoss, Normandy; N. H. Canaday, Knightstown; M. L. Martin, Middle Fork, Clinton county; N. P. Howard, Greenfield; F. W. Beard, Harrodsburg; Dougan Clark, Richmond; F. J. C. Rawlins, Elizabeth City; Wesley Allen, West Newton; W. B. Lyon, Huntington; H. V. Passage, Peru; John Lewis, Ogden; J. H. Stewart, Spiceland; Lewis Williams, Marion; J. J. Wright, Indianapolis; William Scott, Kokomo; L. Kern, Alto; N. Field, Jeffersonville; J. H. Woodburn, Indianapolis; A. L. Underwood, St. Paul; W. F. Hawey, Plainfield; R. N. Todd, Indianapolis; T. H. Lane, Northfield, Boone county; A. M. Vickery, Tipton; William A. Pugh, Rushville; A. C. Dillon, Knightstown; S. C. Thomas, Milroy; J. T. Jones, Franklin; F. H. Sale, Dillsboro; G. V. Woolen, Indianapolis; William B. Fletcher, Indianapolis; R. A. Curran, Huntington; Theophilus Parvin, Indianapolis; J. Cochran, Spiceland; W. P. Parr, Indianapolis; J. N. Parr, Zionsville; J. I. Rooker, Castleton; John Moffit, Rushville; J. P. Avery, Indianapolis; J. R. Weist, Richmond; Daniel Morgan, Evansville; W. H. Wishard, Southport; W. N. Duzan, Indianapolis; N. Mendenhall, Thorntown; C. Richmond, Kokomo; William R. Marity, Kokomo; J. E. Lyon, Knightstown; J. L. Athon, Indianapolis; W. J. Elston, Indianapolis; T. H. Lane, Lebanon.

DELEGATES FOR 1869.

H. J. Boggart, Charlottesville; Wilson Hobbs, Knightstown; M. H. Harding, Lawrenceburg; C. B. Miller, Lawrenceburg; T. H. Sales, Dillsboro; W. H. Vance, New Corydon; D. C. Scull, Moscow; William W. Arnold, Rushville; A. B. Casterlin, Beech Grove; L. C. Miller, Alto; W. Lomax, Marion; Lewis Williams, Marion; S. K. Hardy, Northfield; L. H. Harrison, Lebanon; D. B. Davis, Zionsville; J. L. F. Garrison, Dover; R. A. Curran, Huntington; W. B. Fletcher, Indianapolis; W. W. Foley, Indianapolis; J. S. Bobbs, Indianapolis; G. W. Mears, Indianapolis; J. H. Woodburn, Indianapolis; J. K. Bigelow, Indianapolis, N. Mendenhall, Thorntown; A. B. Pilzor, Marion; D. L. Field, Jeffersonville.

The President, Dr. Field, of Jeffersonville, read his annual address, the subject being "The Troubles and Responsibilities of the Medical Profession."

The President appointed the following committees for the ensuing year:

On Prize Essays—Drs. Bobbs, Curran and Harvey.

On Ethics—Drs. Curran, Morgan, Moffit, Rooker and Weist.

On Arrangements—Drs. Wright, Todd, Charles E. Wright, Avery and Gaston.

On Finance—Drs. Athon, Oliver, Harding, Hobbs and Pugh.

On Publications—Drs. Waterman, Harvey, Woodburn, and the Secretary and Treasurer of the Society.

The President made the following appointments for essays, to be read at the next annual meeting:

Dr. Bobbs, essay on diseases of the prostrate gland.

Dr. J. H. Woodburn, essay on the symptoms and treatment of incipient insanity.

Dr. Morgan, of Evansville, essay on the operation of resection.

Dr. G. V. Woolen, essay on syphilis.

Dr. Curran, of Jeffersonville, essay on any subject he may select.

Dr. W. Wishard, of Southport, essay on the best treatment of scarlatina.

Dr. Commingor, essay on the pathognomonic signs of nephritis.

Dr. Curran, of Huntington, essay on a subject of his own choosing.

Dr. Parvin, essay on medical education.

Dr. J. S. Athon, essay on ovarian diseases.

Dr. Mears, essay on the most effective remedies for arresting alarming uterine hemorrhage.

Dr. W. Lomax, on the asculatory signs of valvular and ventricular diseases of the heart.

Dr. L. M. Martin, on any subject of his own choosing.

Dr. H. V. Passage, on the influence of malaria in the production of diseases.

An essay upon the symptoms and treatment of dropsy was read by Dr. Moffit, and referred to the committee an publication.

The following resolutions, introduced by Dr. Waterman, were adopted:

Resolved, That hereafter the officers of this society shall hold their official positions until the transactions are issued for each year.

Resolved, That the Secretary be instructed to issue certificates as delegates to any members of this Society in good standing, wishing to attend the meetings of other State Medical Societies.

The committee on credentials reported in favor of the following named applicants for membership: Dr. J. B. Sparks, Union Medical Society, Knightstown; Dr. John Medaris, White County Medical Society; H. D. Reasonor, Grant County Medical Society.

An essay on the "Digestive Assimilations of Medicines," by Dr. W. J. Elstun, of Indianapolis, was read by Dr. J. K. Bigelow, and was referred to the committee on publication.

Dr. G. V. Woolen, of the City Hospital, was received as a delegate.

The report of the Committee on Hospitals, by Dr. Bobbs, chairman of the committee, was read.

The report embodied a form of application or petition to the General Assembly to provide for the building and maintenance of a general hospital for the indigent of the State. Debate upon the report was made the special order for the afternoon session.

Professor B. C. Hobbs, Superintendent of Public Instruction, de-

livered a short address upon the importance of introducing the studies of anatomy, physiology, and hygiene in the schools, throughout the State. He thought the medical profession should give their aid by lectures and lessons in experimental chemistry.

Dr. Lyons, of Huntington, submitted the report of the Committee on Ethics, which was read and concurred in. Their report denounced the practice of members of county societies publishing reports of surgical operations and remarkable cures, together with their proceedings, in the newspapers, as violation of the Code of Ethics. They also denounced as unprofessional, the handbill published by Dr. J. B. Doolittle, setting forth his qualifications as a physician.

The Committee on nominations reported the following names for the ensuing year:

President—George Sutton, of Aurora.
Vice-President—H. P. Ayres, of Fort Wayne.
Secretary—G. V. Woollen, of Indianapolis.
Assistant-Secretary—W. J. Elstun, of Indianapolis.
Treasurer—W. B. Lyons, of Huntington.
Librarian—H. F. Barnes, of Indianapolis.

The report was unanimously adopted.

Drs. Moffit and Hobbs made short addresses, favorably commenting upon the suggestions made in the address of Professor Hobbs.

Dr. Bobbs offered the following resolution, which was adopted:

Resolved, That the thanks of the Society are due and are freely tendered to Professor Hobbs for his address, and that his suggestion of the manner in which physicians might aid the efforts of teachers in our common schools, on enlarging and diffusing a more general knowledge on scientific and philosophical subjects among the mass of the people should receive the approval of the profession, and so far as practicable be acted upon by its members.

The President announced that Dr. F. J. Van Voorhees, of Stockwell, was appointed to deliver an essay on "Mental Influence in Diseases."

An invitation from Dr. Jameson to visit the insane hospital at three P. M., was accepted.

The following resolutions were offered and adopted:

By Dr. Waterman:

Resolved, That the Secretary be instructed to issue certificates as delegates to all members in good standing who desire to attend the next meeting of the American Medical Association.

By Dr. Kersey:

Most of the drugs consumed by the people of our State are taken without medical advice, and without the knowledge of the disease or means of cure. This needless use of medicine is always hazardous, generally injurious, and sometimes directly destructive of life. The practice has grown into an evil of great magnitude, reaching almost every family in the land. Most proprietary medicines are used in this reckless way, and are advertised for the purpose of increasing their sale and consumption by the people. In view of these facts, be it

Resolved, That in the judgment of the Society, the practice of advertising proprietary medicines is fit only for wholly mercenary publications; that it is essentially out of place, and degrading for all periodicals designed to promote the public good; and, above all, for enlightened medical journals.

By Dr. Waterman:

Resolved, That auxillary societies may refer any papers they may deem worthy of publication to this Society for its consideration, and publication in the transactions, if approved.

By Dr. Weist:

Resolved, That a committee of three be appointed by the President for the purpose of taking into consideration the propriety of petitioning the State legislature to provide by law for the appointment, by the Governor of the State, of a Board of State Charities, whose duty it shall be to investigate the whole system of the public charitable and correctional institutions of the State, and recommend such changes and additional provisions as they may deem necessary, in order to secure the inmates of these institutions more efficient, humane and hygenic influences than in many cases now obtained.

The President then announced the following committee on Dr. Weist's resolution: Drs. Weist, Stewart and Scott.

It was then on motion, resolved that this Society recommend the profession of the State to subscribe for and contribute papers to the *Western Journal of Medicine*.

Dr. Wishard offered the following:

Resolved, That the report of the Chairman of the Committee, Dr. Bobbs, on the necessity and utility of a State Hospital be adopted as the memorial of the Indiana State Medical Society, and as such be presented to the General Assembly of Indiana at their next meeting, and that every member of the profession be earnestly solicited to labor for the establishment of a State Hospital at Indianapolis separately, or in conjunction with the present City Hospital.

Dr. Woolen remarked that our city hospital was already put under contribution to support cases from abroad. Patients were sent from all parts of the State, who were furnished with just money enough to admit of their being set down at the front door, and if they were refused admittance a great outcry of inhumanity was raised. Instances were on record where young girls from neighboring towns, after being

seduced, had been sent to the Indianapolis city hospital for treatment, and on being refused admittance would threaten to have abortion produced upon them by some of the numerous unscrupulous quacks in the city. Indianapolis was a great central point, and the facilities for reaching it were great inducements for persons to send their afflicted friends here for treatment. Many of the worst cases brought under treatment were State cases, and the majority of patients offering themselves were from abroad.

After some further remarks by Drs. Bobbs, Kersey and Curran, all favoring the report of the committee, and the location of the hospital at Indianapolis, as proposed, the resolution was adopted.

Dr. Woodburn moved that this Society give its influence and support to the Indiana Medical College, and request the physicians of the State to co-operate in the enterprise to the extent of their ability. Adopted.

The Society then adjourned, to meet at the Chapel of the Hospital for the Insane.

About fifty members went out to the Asylum, and after organizing in the Chapel, a room devoted alike to religious and secular exercises, for the benefit of the inmates of the institution, the essay prepared by Dr. Sexton was read by Dr. Harvey. The subject of the essay, "Coxo-Iliac Dislocation of Femur, Reduced by Manipulation," was earnestly discussed by a number of the members, who related their several experiences in treating dislocations of the hips, shoulders, etc. The paper was then referred to the committee on publication.

After adopting a report from the committee on credentials, appointing Dr. O. Evarts, Superintendent of the Asylum, a delegate, the Society adjourned, to meet at half past seven o'clock, P. M., at the Hall of Representatives.

EVENING SESSION.

The President, Dr. Field, in the Chair, and about thirty members present.

A motion, made by Dr. Weist, fixing the date and place of the next annual meeting was adopted.

Dr. W. F. Harvey introduced the subject of puerperal convulsions, which was most ably discussed by Drs. Bigelow, Kersey, T. B. Harvey, Comingor and others.

On their several motions, the thanks of the Society were voted to Dr. Field for the able manner in which he had presided over their

meetings, to the Secretaries, to the officers of the Hospital of the Insane for their courteous treatment, and to the press of the city for their liberal reports of their proceedings.

By consent it was then deemed inexpedient to make any offerings for prize essays, and, on motion, the Society then adjourned, to meet in this city, at nine o'clock A. M., on the third Tuesday in May. 1870.

NEW CASTLE, JUNE 14, 1869.

The New Castle Medical Society met pursuant to adjournment. Present, Drs. Isaac Mendenhall, H. M. Minesinger, S. Ferris, G. W. Zimmerman, John Rea, G. W. Burke and W. F. Boor.

The minutes of the previous meeting were read and approved.

The election for officers for the ensuing year resulted in the election of Dr. H. M. Minesinger, President, and John Rea, Treasurer and Secretary, and Drs. Boor, Ferris and Mendenhall, Censors.

The retiring President (Dr. Mendenhall,) not being prepared, was excused from the accustomed valedictory address.

Dr. Mendenhall related a case of laryngitis in a girl of thirteen years, of a scrofulous diathesis, which did not yield to the usual remedies, and had been on treatment for several weeks. Dr. Ferris suggested the curved probang with nitrate silver, as the case at the present had assumed the chronic form, and further suggested tonics and cod liver oil.

Dr. Burke presented a child ten months old, which had been afflicted with convulsions since it was five days old; has short intervals of an immunity from them; three weeks the longest interval. The child habitually costive, the eyes distorted, but the pupil not much changed from normal size; quite indifferent to surrounding objects, nurses well between the convulsions. The child was examined by the members present, and diagnosed the cause as centric, and of course the treatment would only be paliative, alteratives and bromide potass.

Also, male twenty-one years old, scrofulous diathesis, anæmic, with enlargement of the glands of the right side of the neck. The enlargement commenced in March, and increased very rapidly. They appear to be in sections, lobulated and so large as to throw his head to one side.

Examined by the members present; diagnosed scrofulous enlargement of the lymphatic glands; treatment suggested, syrup, iodide,

ferri, quinine, cod liver oil, and open air exercise. His mother died with consumption.

Dr. Burke read a report of the case of an operation on McCorkle, at Sulphur Springs, which has been reported in the *Western Journal of Medicine*, for strictura urethra.

Boy aged twelve years, scrofulous temperment; his parents died with consumption, and a brother with diabetes melites; fell on the ice about two years ago and hurt his right shoulder so that he was unable to use it for some time; and about a year ago fell again on his shoulder from a hay mow, on a barn floor, and hurt the same shoulder very much, so that he carried it in a sling for several weeks, and when discovered the shoulder joint was anchilosed, some four or five months ago. After these injuries he had no medical attention or advice, nor until the discovery that the joint was entirely anchilosed, when Drs. Boor and Mendenhall were consulted and recommended to apply stimulating embrocations, and to make as much motion as the boy will bear, daily. Until the present no improvement in the motion of the joint. After thoroughly examining the case, Dr. Burke said the adhesions should be broken up. Dr. Mendenhall was of the same opinion. Dr. Boor said it would be very hazardous to operate, not being any reliable statistics on the shoulder joint, where adhesions had been broken up successfully; therefore would not favor an operation without first notifying the family of all the dangers, and if they would take the risk, he would not hesitate to operate, but the operation was a dangerous one.

Dr. Ferris said he would like some reflection on the case before deciding upon an operation.

Dr. Rea said he was opposed to an operation under the circumstances. He has pretty good use of the arm, can feed himself, saw wood, harness horses, and do most anything that others do, and some of them with facility. The dangers that would attend this operation would not be compensated by the promised benefits, having a pretty useful limb now.

On motion, the secretary was ordered to prepare and furnish a copy of the proceedings for publication in the *Western Journal of Medicine.*

Adjourned to meet on the 19th of July next, at Sulphur Springs.

JOHN REA, M. D., *Secretary.*

MEDICAL SOCIETY OF THE STATE OF WEST VIRGINIA—PROCEEDINGS OF THE SECOND ANNUAL MEETING.

CLARKSBURG, JUNE 2, 1869.

The Medical Society of the State of West Virginia met in the Southern Methodist Church, at three P. M.

The President, Dr. H. W. Brock, of Morgantown, occupied the Chair.

The Secretary, Dr. A. H. Thayer, of Grafton, was present.

The session was opened with prayer by the Rev. Mr. Way, of Clarksburg.

Dr. J. W. Ramsey, of Clarksburg, chairman of the Committee of Arrangements, welcomed the members to the city.

The roll being called by Dr. Thayer, Secretary, the following members answered:

A. S. Warder, Pruntytown; J. M. Lee, Clarksburg; A. K. Kunst, Pruntytown; M. Campbell, Parkersburg; H. W. Brock, (President) Morgantown; Elias S. Brown, Buckhannon; J. E. Kendall, Wirt Court House; Jas. M. Lazzell, Fairmont; J. K. Berkabile, Fairmont; A. S. Todd, Wheeling; E. A. Hildreth, Wheeling; G. Baird, Wheeling; H. J. Weisel, Wheeling; B. W. Allen, Wheeling; John C. Hupp, (Treasurer) Wheeling; J. M. Cooper, Wellsburg; Wm. M. Dent, Newburg; J. W. Nye, Moundsville; J. W. Ramsey, Clarksburg; A. H. Thayer, (Secretary) Grafton; J. H. Legge, German Settlement; E. D. Safford, Parkersburg.

Dr. Brock, the President, then delivered his address, which was mainly devoted to a discussion of the following reasons why the medical practitioner should devote all his time and energies to the pursuit of his profession:

First—The extent and intricacy of the subjects claiming his investigation.

Secondly—The magnitude of the interests involved.

Thirdly—The reward consequent upon the performance of the duty indicated.

The following applicants for membership having been reported on favorably by the Board of Censors, were unanimously elected to membership, viz: Drs. Wm. Hukill, West Liberty, J. M. Bowcock, Clarksburg, Wm. M. Late, Bridgeport.

Dr. A. S. Todd, of Wheeling, Chairman of the Committee on Medical Botany, read a lengthy and instructive report, which, on motion of Dr. Bowcock, was referred to the Publication Committee with instructions that it be printed with the transactions.

Dr. Sharp's report on New Remedies, was read by Dr. Thayer, Secretary, which, on motion, was ordered to be filed. Dr. Safford, of Parkersburg, spoke at length on the therapeutic uses of Bromide of Ammonia, and especially as to its efficacy in the treatment of acute rheumatism. On motion of Dr. Hupp, the interesting and satisfactory report of Dr. Hildreth, on climatology and epidemics was read, which, on motion of Dr. Ramsay, was ordered to be published with the proceedings.

Dr. Ramsay read his essay on Medical Fraternity, which, on motion, was placed on file.

SECOND DAY'S PROCEEDINGS.

Essays called for. Dr. Baird, not being prepared, was allowed till next meeting to prepare an essay.

On motion of Dr. Todd, the same privilege was granted Dr. Storer, who was not present.

Dr. Brock (Dr. Campbell in the chair,) read his report on the expediency of petitioning the Legislature to enact a law for the compulsory registration of births, deaths and marriages.

Dr. Hupp remarked that the *report* did not include compulsory vaccination, as was required by the resolution creating the Committee.

The report was received on motion.

Dr. Ramsay, Chairman of Special Committee on Fee Bills, made a report, which after much discussion was, on motion, re-committed, and Dr. Hildreth added to the Committee.

Dr. M. Campbell, of Parkersburg, expressed his views as to the disease called Progressive Locomotor Ataxia.

Dr. Hupp, Treasurer of the Society, submitted a report showing a total of last balance and receipts, one hundred and twenty-four dollars, and a balance in the treasury of fifty-two dollars. Referred under the Constitution for examination and report. The committee subsequently reported the report and vouchers to be correct. Adopted.

Dr. Ramsay reported a case of Amaurosis.

Dr. Todd formally presented the Society with a copy of the Constitution and By-laws of the "Medical Society of the City of Wheeling and county of Ohio," at Wheeling.

The Society then proceeded to the election of officers for the ensuing year, and the balloting resulted in the choice of the following gentlemen:

President—J. W. Ramsay, Clarksburg.

Vice-Presidents—E. A. Hildreth, Wheeling; J. M. Cooper, Wellsburg; Elias S. Bronson, Buckhannon.

Secretary—James M. Lazzell, Fairmont.

Treasurer—John C. Hupp, Wheeling.

Censors—H. W. Brock, Chairman, I. K. Berkabile, M. Campbell, J. H. Legge, G. Baird, B. W. Allen, W. J. Bates.

Dr. Hildreth introduced resolutions creating a committee (Messrs. Lazzell, Stafford and Thayer,) to invite the *regular* practitioners of the State to co-operate with the Society in the advancement of Medical Science. Adopted.

Dr. Todd presented a resolution creating three districts in the State, and in each a committee to report on Medical Botany. Adopted.

Parkersburg was chosen as the next place of meeting, and Drs. Safford, Campbell and Clark appointed a Committee of Arrangements.

Drs. Frissell and Campbell were appointed essayists, to report at next meeting.

The President announced the appointment of the following Committees:

Climatology and Epidemics—Dr. Hildreth, Chairman, with Drs. Allison, Lazzell, Cooper, Kendall, Thayer, Nicklin, Putney, Safford, Legge, Charter, M'Lane, Wilson, Bowcock, Kunst, Schumaker and Wilson, J. G.

On Necrology—Drs. Berkabile, Young, Campbell, Reeves and Dougherty.

On Publication—Drs. Bates, Hupp, Lazzell, Thayer and Campbell.

On motion of Dr. Cooper,

Resolved, That a committee of three be appointed to report at next meeting on New Remedies. Adopted.

Committee—Drs. Cooper, Sharp and Dent, W. M.

Dr. Todd moved that a committee be appointed to memorialize the Legislature on the subject of the appointment of a State Geologist. Adopted. The President appointed the following: Drs. Hupp, Hildreth and Kendall.

The committee on recent medical and surgical appliances was constituted by the appointment of Drs. Berkabile, Ramsay and Wiesel.

Dr. Hupp offered resolutions of thanks to the Baltimore & Ohio Railroad for commutation of fare; to the Trustees of the Methodist Church South for the use of their building, and to the citizens of Clarksburg for characteristic hospitality. Adopted.

Dr. Campbell offered a resolution which was adopted, tendering thanks to the officers of the Society for their efficient and courteous discharge of duty.

On motion of Dr. Lee, the Treasurer was instructed to pay the Sexton ten dollars for putting in order the church.

Question for discussion at next meeting was offered by Dr. Stafford, and adopted—*Is child bed fever an inflammatory disease?*

On motion of Dr. Todd the Society adjourned to meet at Parkersburg, at two o'clock P. M., on the first Wednesday in June, 1870.

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PRACTICAL OBSERVATIONS ON THE ÆTIOLOGY, PATHOLOGY, DIAGNOSIS AND TREATMENT OF ANAL FISSURE.

BY WILLIAM BODENHAMER, A. M., M. D.,

*Professor of the Diseases, Injuries and Malformations of the Rectum, Anus and Genito-Urinary Organs. Illustrated by numerous cases and drawings, New York: William Wood & Co., 61 Walker Street. 1868. Pp. 199.

Few diseases, apparently so trivial in character, are productive of the amount of pain and discomfort that attend fissures of the anus. And notwithstanding the attention given the disease by eminent surgeons, the diagnosis and the treatment, are probably not well understood by many of the profession. A complete and systematic treatise on the subject, consequently, must supply a want in surgical literature, and be of great practical importance.

To supply such a treatise, was the object of Dr. Bodenhamer in the preparation of the work whose title is given above, and we feel sure that the profession will award to him the praise due to one who is successful in so laudable an enterprise. Chapter I is devoted to the history of anal fissure and the views that have been held in relation to the disease, together with an extended notice of the disease known as "spasmodic contraction of the anus." Chapter II, to a notice of the physiology of the parts involved in the disease and defines the meaning of the term "fissure of the anus." Chapter III presents the ætiology of the disease, while chapter IV gives a classification and description of the same, with symptoms and mode of

*The Editor would like to know by what right this Dr. Bodenhamer, "A. M," gives himself he above title.

examination of the patient. Chapter V presents the details of treatment; that of the author "consists of topical medication combined with dilatation, and sometimes scarification or incision of the mucous membrane." "The chief indication is to modify the surface of the ulcer and transform it into a simple or common sore." In spasmodic contraction of the anus, distention of the sphincters by either the bougie, the fingers or tents made of lint, is depended on, as being milder, safer and equally as certain, as section of the sphincter muscles, first practiced in modern times by M. Boyer and still in favor with many surgeons. For the same reasons, *forcible dilatation* of the sphincter and by means of the thumbs—a method of cure advocated by Prof. Van Buren—is objected to. Besides his own plan of treatment, the author describes the other methods of treatment that have found most favor with the profession.

Chapter VI is made up of illustrative cases. Twenty-nine cases are reported in detail; some of them of much interest. The bibliography of the subject concludes the volume.

We are satisfied that while the profession will accord to Dr. Bodenhamer's book much merit, all his conclusions will not be endorsed as correct. One example must serve as an illustration: In speaking of fissures other than of the anus, Dr. B. says that he has for a number of years adopted the idea that "the disease which is improperly denominated *dysmenorrhœa*, is in reality nothing more nor less than *fissure of the os tinca;* and I have so treated it with remarkable success, namely: By application of a strong solution of the nitrate of silver three times a week, and gentle and gradual dilatation with an elastic bougie, once or twice a week. "That dilatation exerts a powerful influence in curing dysmenorrhœa, is evidenced by the known fact that if the patient could become pregnant and give birth to a child, the disease would be cured." We question the statement in relation to the cause of dysmenorrhœa, as well as that in regard to the cure effected by childbirth. We think the incorporation of entire pages of untranslated French quotations into the body of the book, as well as the great display made of Latin in the prescriptions, not in very good taste, as an air of pedantry is thus given to the book, that was not intended by its author.

J. R. W.

MISCELLANY.

PHYSIOLOGICAL RELATIONS OF TOBACCO.

(This is the concluding portion of a very interesting article having the above title, by Prof. Hammond, which we find in the last number of the *American Review*.)

During the series of experiments immediately preceding,* when the food was insufficient to maintain the weight of the body, there had been an almost constant sensation of hunger, and a marked degree of debility. Neither of these conditions existed before the use of tobacco was begun.

From the whole of the experiments I conclude: *First*—That tobacco does not materially affect the excretion of carbonic acid through the lungs. *Second*—That it lessens the amount of aqueous vapor given off in respiration. *Third*—That it diminishes the amount of the intestine excretion. *Fourth*—That it lessens the quantity of the excretion, and the amount of its urea and chlorides. *Fifth*—That it increases the amount of free acid, uric acid, and sulphuric and phosphoric acids eliminated through the kidneys. The general purport of the experiments, therefore, is, that tobacco retards the waste of the tissues, though the fact that it increases the amount of phosphoric acid would seem to show that the destructive metamorphosis of the nervous tissue was increased.

It must be remembered that the amount of tobacco used was large—amounting, as it did, to six cigars a day. Subsequent experiments which I made, smoking only three cigars daily, one after each meal, showed that the effect of this moderate amount was to decrease the quantity of phosphoric acid excreted from the system. The question, therefore, scarcely admits of a doubt, that, other things being equal, a person can do more mental and physical labor, and with less fatigue, under the moderate use of tobacco than without it. The excessive use may be injurious, just as may be the excessive use of almost any substance taken as food or drink.

Another important physiological effect of tobacco is seen in its action upon the stomach, as increasing the excretion, gastric juice, and thus promoting digestion. It is a well recognized physiological fact, that a very intimate sympathetic connection exists between the stomach and the salivary glands. A mild sensation of hunger makes the "mouth water," and an increase in the quantity of saliva created is

*These experiments were, first, to ascertain the effect of tobacco, when a sufficient quantity of food was digested to maintain the weight of the body. Second, to determine the influence of tobacco, when the food was insufficient, and when, consequently, the body was losing weight.

almost invariably attended by an increase in the quantity of gastric juice. This is shown by making a fistula in the stomach of a dog, so that the gastric juice can be collected as soon as it is formed. Now if any strongly sapid substance—as a piece of tobacco for instance—be put into the dog's mouth, an increased secretion of saliva takes place, and at the same time gastric juice is formed in large quantity, and pours through the fistula into a vessel placed to receive it. A cigar acts in the same way upon the salivary glands and stomach of a smoker. To smoke after meals is, therefore, a perfectly orthodox physiological act, and is another example of coincidence between instinct and science. Many cases of dyspepsia are cured by this simple means. Tobacco, by diminishing the destructive metamorphosis of the tissues, enables mankind to support the effects of hunger with less loss of strength, and less bodily and mental fatigue, than would otherwise result. The experience of soldiers and travellers suffices to establish this fact, and is a matter of such popular notoriety that it is scarcely necessary to cite examples. I have frequently noticed the phenomena in my own person. But the chief influence of tobacco is exerted upon the brain, and other parts of the nervous system, and it is mainly to secure this effect that man uses the substance at all. The tendency of civilization is to increase the wear and tear of nerve tissue. New pursuits, new duties, the spread of learning, the discoveries of science, the struggle for wealth and position, the turning of the night into day, and hundreds of other factors, act with a power under which many minds go down into darkness, and others are more or less shattered. To avoid the action of these causes is impossible, without a thorough change in the condition of society, and an arrest of the mental development of mankind. Even if we could accomplish either of these ends, it would certainly be undesirable to make the attempt. But it is assuredly proper for us to look for some means capable of lessening the ill effects which are produced by the labors, the anxieties, the sorrows, the troubles, of which every man who keeps up with the world must expect to bear a large share, and which can not be altogether avoided by persons of the most quiet pursuits.

Among the substances which man has been led to use in order to bring about this result, tobacco is one of the most efficacious, as it is the least harmful. As a soother of the nervous system, and a promoter of reflection, it acts with a degree of certainty and yet of mildness, which places it far above all its cogeners. Under its influence the nervous substance, especially that of the brain and sympathetic system, is preserved from the inroads to which it would otherwise be subjected. The ability to comprehend is increased, the judgment is rendered clearer, the power of the will is augmented, and all this without the degree of exhaustion which otherwise follows every prolonged mental effort. The greatest men the world has ever seen used tobacco, and men both great and commonplace will continue to use it till they get something better. But tobacco, to be most advantageous to mankind, should be used with moderation. Like every other good thing it is a two-edged sword, and, when employed to excess, it often causes neuralgia, indigestion and more or less derangement of the

whole organization. It is wonderful, however, to see how many persons can endure the abuse of tobacco without apparent inconvenience. Those most liable to suffer are youths whose nervous systems are undeveloped, and to whom it is no more suited than pork and beans for an infant's stomach. Whether therefore, we regard the use of tobacco in moderation from a sanitary or physiological point of view, we find no grounds for the apprehensions which have been expressed relative to its deleterious influence. On the contrary, it is very certain that the moderate habitual use of the substance in question is often decidedly beneficial, and that many persons become so accustomed to excess, or are so constituted that they are not injured, even though they smoke, chew, snuff, and pass the greater part of their lives in an atmosphere saturated with tobacco and its exhalations.

SYDENHAM'S ADMONITION TO DOCTORS.—Few once reading can readily forget these golden words of Sydenham; nevertheless, we will all be better for being reminded of them:

"He who gives himself to the study and work of medicine ought seriously to ponder these four things—*First*, That he must, one day, give an account to the Supreme Judge of the lives of the sick committed to his care. *Secondly*, That whatsoever of art, or of science, he has by the divine goodness attained, is to be directed mainly to the glory of the Almighty, and the safety of mankind, and that it is a dishonor to himself and them, to make these celestial gifts subservient to the vile lusts of avarice and ambition. Moreover, *Thirdly*, that he has undertaken the charge of no mean or ignoble creature, and that in order to his appreciating the true worth of the human race, he should not forget that the only begotten Son of God became a man, and thus far ennobled, by his own dignity, the nature he assumed. And *lastly*, that as he is himself not exempted from the common lot, and is liable and exposed to the same laws of mortality, the same miseries and pains, as are all the rest; so he may endeavor the more diligently, and with a more tender affection, as being himself a fellow sufferer, to help them who are sick."

INGRATITUDE.—If thou hast the brow to endure the name of traitor, perjured or oppressor, yet cover thy face when ingratitude is thrown at thee. If that degenerate vice possess thee, hide thyself in the shadow of thy shame, and pollute not noble society. Grateful ingenuities are content to be obliged within some compass of retribution; and being depressed by the weight of iterated favours, may so labor under their inabilities of requital, as to abate the content from kindness. But narrow self-ended souls make prescription of good offices, and obliged by often favours think others still due unto them: whereas, if they but once fail, they prove so perversely ungrateful, as to make nothing of former courtesies, and to bury all that's past. Such tempers pervert the generous course of things; for they discourage the inclinations of noble minds, and make beneficency cool unto acts of obligation, whereby the grateful world should subsist, and have their consolation. Common gratitude must be kept alive by the additionary fuel of new courtesies: but generous gratitudes, though but once well obliged, without quickening repetitions or expectation of new favours, have thankful minds for ever; for they write not their obligations in sandy but marble memories, which wear not out but with themselves.—*From Sir Thos. Browne's Christian Morals.*

METEOROLOGICAL REPORT FROM THE INDIANAPOLIS ACADEMY OF MEDICINE,

BY G. V. WOOLEN, M. D., COMMITTEE.

SUMMARY OF ALL OBSERVATIONS FOR QUARTER ENDING FEBRUARY, 1869.

WINTER, 1868-9.		DECEMBER.							JANUARY.							FEBRUARY.							Means and Totals, Season 1868-9.	Means and Totals, Season 1867-8.
		Day.	7 A. M.	Day.	2 P. M.	Day.	9 P. M.	Day.	Means and Totals.	Day.	7 A. M.	Day.	2 P. M.	Day.	9 P. M.	Day.	Means and Totals.	Day.	7 A. M.	Day.	2 P. M.	Day.	9 P. M.	Day.	Means and Totals.		
Barometer, reduced to freezing point	Max...	12	29.67	12	29.65	12	29.68	12	29.66	14	29.67	31	29.50	31	29.55	31	29.52	28	29.66	28	29.64	24	29 66	28	29.63	.....	.....
Barometer, reduced to freezing point	Min...	7	28.78	7	28.82	6	28.98	7	28.91	4	28.98	29	28.78	8	28.90	29	28.94	27	28.86	3	28.56	11	28.70	3	28.64	.....	.....
Barometer, reduced to freezing point	Mean..	..	29.34	..	29.31	...	29.35	...	29.33	...	29.29	...	29.25	...	29.25	...	29.25	...	29.25	...	29.20	...	29.22	...	29.22	29.26	29 33
Thermometer	Max...	20	40	19	49	19	54.5	19	45.5	4	55.5	7	38.5	8	55.5	7	53	14	52	13	65	13	57	13	57	.....	.....
Thermometer	Min...	17	8.5	11	3	11	2	11	2.5	10	20.5	9	20	5	22.5	5	25	28	9	27	17	23	8.5	27	13	.....	.....
Thermometer	Mean..	..	24 8	..	30.7	...	25.6	...	26.8	...	32.5	...	38.5	...	33.5	...	36 5	...	31.1	...	39.1	...	31.5	...	34	32.4	26.1
Force or Pressure of Vapor	Mean..	..	0.117	..	0 143	...	0.125	...	0.128	...	0.149	...	0.200	...	0.170	...	0.173	...	0.155	...	0.196	...	0.160	...	0.172	0.157	0,124
Relative Humidity, (100 being saturation)	Mean .	...	83	..	72.1	...	81.6	...	79.7	...	66	...	76.2	...	83.7	...	75.3	...	85.0	...	74.8	...	81.8	...	89.1	81.3	78 2
Clouds—No. of times invisible	.....	...	5	..	3	...	9	...	17	...	5	...	3	...	13	...	21	...	4	...	3	...	8	...	15	53	64
No. of times partially cloudy	.....	..	8	..	17	...	9	...	34	...	12	...	16	...	7	...	35	...	12	...	14	...	6	...	32	101	94
No. of times entirely cloudy	.....	..	18	..	11	...	13	...	42	...	14	...	12	...	10	...	36	..	12	...	11	...	14	...	37	115	125
Whole days without cloudiness	.....	...		...		...		...	1	...		...		...		...	1	...		...		...		...	1	3	6
Mean amount of cloudiness (scale 10)	.....	..	7.35	..	6.58	..	5.58	...	6.49	...	5.93	...	5.65	...	3.90	...	4.96	...	6.40	...	6.14	...	5.87	...	6.13	5.86	5.69
No. of times rain fell	.....	...		...		...		...	2	...		...		...		...	7	...		...		...		...	7	16	10
No. of times snow fell	.....	...		...		...		...	5	...		...		...		...	1	...		...		...		...	5	11	15
Amount of rain and melted snow in inches	.....	...		...		...		...	1.62	...		...		...		...	3.35	...		...		...		...	3.70	11.67	6.89
Amount of snow in inches	.....	...		...		...		...	7.75	...		...		...		...	1.5	...		...		...		...	7.30	12.27	25.00
Winds—No. of times from	W.....	..	0	..	0	..	0	...	0	...	8	...	9	...	8	...	25	...	2	...	2	...	5	...	9	34	6
No. of times from	N. W...	..	11	..	8	..	10	...	28	...	4	...	3	...	3	...	10	...	6	...	5	...	3	...	14	53	85
No. of times from	S. W...	..	15	..	15	..	13	...	38	...	4	...	5	...	2	...	11	...	7	...	9	...	3	...	19	68	90
No. of times from	E.....	..	0	..	0	..	0	...	0	...	1	...	1	...	1	...	3	...	0	...	0	...	0	...	0	3	0
No. of times from	N. E...	..	8	..	4	..	5	...	17	...	1	...	2	...	1	...	4	...	4	...	2	...	1	...	7	28	43
No. of times from	S. E...	..	2	..	3	..	3	...	8	...	1	...	1	...	2	...	4	...	0	...	0	...	0	...	0	12	46
No. of times from	N	..	0	..	0	..	0	...	0	...	5	...	2	...	2	...	9	...	2	...	4	...	4	...	10	19	2
No. of times from	S	..	0	..	1	..	0	...	1	...	6	...	6	...	2	...	14	...	2	...	0	...	1	...	3	18	1
No. of times from	O.....	..	0	..	0	..	0	...	0	...	1	...	1	...	10	...	12	...	5	...	6	...	11	...	22	34	0

SUMMARY OF ALL OBSERVATIONS FOR QUARTER ENDING MAY 31st, 1869.

SPRING, 1869.		MARCH.							APRIL.							MAY.							Means and Totals for the Season.	Means and Totals for the Season.
		Day.	7 A. M.	Day.	2 P. M.	Day.	9 P. M.	Day.	Means and Totals.	Day.	7 A. M.	Day.	2 P. M.	Day.	9 P. M.	Day.	Means and Totals.	Day.	7 A. M.	Day.	2 P. M.	Day.	9 P. M.	Day.	Means and Totals.		
Barometer, reduced to freezing point	Max.	7	29.73	6	29.66	6	29.87	6	29 68	25	29.61	25	29.53	24	29.52	25	29.52	8	29.46	8	29.40	7	29.42	8	29.40	.....	.....
Barometer, reduced to freezing point	Min.	10	28 79	28	28.91	19	28.93	28	28.98	20	28.54	1	28.70	19	28.71	20	28.72	13	28.76	13	28,71	13	28.68	13	28.71	.....	.....
Barometer, reduced to freezing point	Mean.	...	29 37	...	29.29	...	29.30	...	29 30	...	29.22	...	29.18	...	29.20	..	29 21	..	29.15	..	29.12	..	29.15	..	29.13	29.21	29.20
Thermometer	Max.	28	55 5	28	65.5	27	57	28	56.6	23	65	23	76	18	72	23	68.5	26	74.5	26	82.5	25	71	26	75 8	.....	.....
Thermometer	Min.	6	0	6	11.5	6	7	6	6	3	28	2	31	2	29	2	29.6	1	43.5	1	44	2	41.5	1	43.5	.....	.....
Thermometer	Mean.	...	29 3	...	38.4	...	32.9	...	33.2	...	44.3	...	49.3	...	47.6	..	48.9	..	57.4	..	64.4	..	58	..	59.7	47.2	50.6
Pressure of Vapor	Mean.	...	0.138	...	0.142	...	0 149	...	0.143	...	0.213	...	0.310	...	0.016	..	0 246	..	0.354	..	0.368	..	0.366	..	0 362	0.250	0.278
Relative Humidity (100 being saturation)	Mean.	...	75 5	...	60.7	...	70.9	...	69.0	...	69.7	...	54.2	...	62	..	61.9	..	70.1	..	56.5	..	72 5	..	66.3	65.7	66
CLOUDS—No. of times invisible	.....	...	2	...	0	...	10	...	12	...	2	...	2	...	10	..	14	..	9	..	10	..	8	..	27	53	66
No. of times partially cloudy	.....	...	16	...	18	...	6	...	40	...	21	...	20	...	13	..	54	..	19	..	15	..	12	..	46	140	115
No. of times entirely cloudy	.....	...	13	...	13	...	15	...	41	...	7	...	8	...	7	..	22	..	3	..	5	..	10	..	18	81	95
Whole days without cloudiness	.....	...	.....	...	.....	...	.....	...	0	...	.....	...	.....	...	.....	..	2	..	.....	..	.....	..	.....	..	0	2	5
Mean amount of cloudiness (scale 10)	.....	...	6.7	...	3.6	...	5.7	...	5.3	...	5.6	...	6.2	...	4.4	..	5.4	..	5.3	..	5.7	..	4.6	..	5.2	5.3	5.39
No. of times rain fell	.....	...	.....	...	.....	...	.....	...	7	...	.....	...	.....	...	.....	..	13	..	.....	..	.....	..	.....	..	11	31	38
No. of times snow fell	.....	..	.....	..	.....	..	.....	..	4	...	.....	...	.....	...	.....	..	4	..	.....	..	.....	..	.....	..	0	8	2
Amount of rain and melted snow in inches	.....	...	.....	...	.....	...	.....	...	4.57	...	.....	...	.....	...	.....	..	4.46	..	.....	..	.....	..	.....	..	5.49	14.52	20.29
Amount of snow in inches	.....	...	.....	...	.....	...	.....	...	8.5	...	.....	...	.....	...	.....	..	3	..	.....	..	.....	..	.....	..	0	11.5	5
WINDS—No. of times from	W.	...	2	...	0	...	4	...	6	...	2	...	6	...	4	..	12	..	1	..	5	..	3	..	9	25	0
No. of times from	N. W.	...	9	...	10	...	7	...	26	...	6	...	5	...	8	..	19	..	2	..	3	..	3	..	8	53	65
No. of times from	S. W.	...	6	...	9	...	2	...	17	...	6	...	5	...	4	..	15	..	12	..	9	..	1	..	22	54	90
No. of times from	E.	...	0	...	2	...	3	...	5	...	1	...	2	...	0	..	3	..	0	..	0	..	0	..	0	8	0
No. of times from	N. E.	...	5	...	3	...	3	...	11	...	6	...	6	...	2	..	14	..	1	..	2	..	0	..	3	28	69
No. of times from	S. E.	...	1	...	0	...	0	...	1	...	0	...	0	...	2	..	2	..	2	..	2	..	0	..	4	7	46
No. of times from	N.	...	2	...	2	...	2	...	6	...	0	...	1	...	2	..	3	..	5	..	3	..	5	..	13	22	2
No. of times from	S.	...	2	...	3	...	1	...	6	...	5	...	2	...	1	..	8	..	1	..	4	..	3	..	4	18	1
No. of times from	O.	...	4	...	2	...	9	...	15	...	0	...	2	...	6	..	8	..	7	..	2	..	15	..	24	48	3

EDITORIAL AND MEDICAL NEWS.

THE RELATIONS between life insurance companies and physicians, have come to be, within the last few years, of great importance, and involve no trifling interests. These relations involve rights and duties on the part of each. The physician who acts as an examiner for such a company, is under obligations to furnish that company an intelligent, scientific, conscientious and careful investigation, in the case of every applicant for insurance. His is purely a judicial office in the single matters of health and probability of longevity, and personal feeling, or the opinions and wishes of others should not have the slightest influence in determining his judgment. Above all, the examiner should never degrade himself into an assistant to the agent—lauding this company and disparaging that—such conduct is gratuitous and impertinent, and really is one great hindrance to professional interests.

On the other hand, the companies owe it to their interests, to the interests of those insured by them, and to the dignity and value of true medicine, to appoint none but well qualified examiners. And still farther, they owe a just compensation to these examiners. What that compensation shall be, is a question which is just now vexing the profession in some parts of the country, and we propose devoting a brief space to its consideration, and to that of some of the topics which grow out of it.

In regard to the amount now paid, we find it differs in different parts of the country. Thus, in the Southern States, it is five dollars; the same in New York City, and also, we presume, in Philadelphia and Boston; in Cincinnati and St. Louis, and generally in the larger cities of the west, it is three dollars—a few years ago it was but two—while in Chicago, which has some fifty-two companies now represented in it, and soon to have some half-dozen more, the fee in most cases is two dollars, though some companies make this sum the rule when the examination is made at the office, and three dollars if made away from it. It can not be doubted, that a fee of three dollars in Cincinnati or in St. Louis, is quite as much, considering the relative expenses of living, as five dollars in New York City, or in New Orleans. Nor will it be disputed that the difference in fees in these localities is in at least an approxi-

mate correspondence with the difference in the usual charges for professional services: it is likewise probable that no great increase in the former will be made without a proportionate advance in the latter—in other words, as long as doctors are content to make professional visits for a dollar and a half or two dollars, these visits frequently taking as much time and involving as patient investigation as a life insurance examination, such an examination will be made for two or three dollars. Another point to be remembered is, that all the physician charges against a life insurance company, he is certain to receive promptly and with little delay, while his practice is remarkably good if he does not lose twenty per cent., either from long delay on the part of the debtors, or from their poverty or from their dishonesty.

Nevertheless, admitting the fee too low, as it undoubtedly is in some localities, for such an examination as companies need and ought to have, how can it be increased to a just standard? The mode generally proposed is, for all the physicians, regular, irregular and defective, in a given place, to combine together and pledge themselves to make no examinations for less than the increased fee. Supposing this much accomplished, a supposition which is quite liberal, there are inherent defects in the plan, at some of which we shall glance. The history of such movements, so far as we know, has no record of success.

In the first place, every educated physician who enters such a combination, says to everyone else in it who is called doctor, whether he be *doctus* or *indoctus*, no matter what his medical creed, character, conduct and practice, "You and I are upon a level, whether I am dragged down or you brought up; your professional services are worth just as much as mine, and you shall receive just as much for them."

But again, such an organization will contain some who enter it without properly understanding its conditions, or under previous pledges to, or contract with some individual company as to the amount of fees; possibly others, having facile consciences or fickle minds; one or another soon withdraws, and no chain is stronger than its weakest link.

Such combinations, trade-unions, labor-strikes, etc., belong to artizans, not to professional gentlemen. When, as sometimes happens in manufacturing towns or in mining regions, a conflict occurs between labor and capital, labor makes its demands, and not only will not work itself, but will prevent, if it can, even by most desperate violence, any workmen coming from other places; sometimes it gains its demands, often

there is but a temporary accession to them, and sometimes hunger, or the law coerces labor instead of labor coercing capital.

Suppose the life insurance companies should combine together and say, when the medical men of a given locality combine in a demand for increased pay for examinations, "We will do no business, we will close our agencies in your city or town as long as this demand is made," the people, so fast a hold as life insurance upon popular sympathy and upon popular interest, would condemn the action of the physicians in no equivocal way; and their life insurance business would be transacted elsewhere. Or, instead of suspending the business in such a locality, the companies could readily employ competent men from other places to go in and make examinations. Even if the new-comers were to become permanent residents, the combination couldn't and wouldn't throw brick-bats at them, or burn down their houses—a few in it might resort to that lowest refuge of ignoble minds and corrupt hearts, petty professional persecutions, coarse slanders and back-bitings, but these weapons are oftener like the *boomerang*, damaging the sender worse than those that they are aimed at, and the brave warriors repeat the history given in Goldsmith's *Elegy on the Death of a Mad-Dog*—

"The man recovered of the bite,
The dog it was that died."

We have little faith then, in combinations on the part of physicians to advance these fees; such means are two-edged swords, and may be used against, quite as much as for, professional interests. In labor-strikes, abrupt, or unexpected and threatening demands, invite obstinate refusal, rather than conciliation and concession. At any rate, such a course ought to be regarded as the last step rather than the first, just as cannon are spoken of as the *ultima ratio regum*.

Low fees partly result from the crowded state of the profession, partly from the multiplication, needless and injurious as we think, of life insurance companies, with their multiplicity of examiners, and from the loose way in which many of these examiners are appointed, and the frequently low attainments and abilities of such appointees. In many a town where half a dozen companies ought to have but a single examiner, one company may have two or three. The agent, with an eye single to his own profits, wants names to help him along, or actually expects, and sometimes, we regret to say, he is not disappointed, the examiners to electioneer for the company, and selections are sometimes made with reference to these very points, and not from high professional and moral qualification; or several are selected to gratify the

whims and caprices as to physicians or schools, of individual applicants; or, the agent, in the multiplicity of examiners, may find one who will pass an applicant that has been rejected by another. Pudding and praise are the two great objects of human endeavor, according to Carlyle, we believe; but good physicians don't care about taking these in such infinitesimal doses as some companies are in the habit of giving them. If the best brains and knowledge are wanted, they ought to be well rewarded both in honor and emolument. Probably the tendencies of the times are too much towards *leveling*. In medicine, in this country, we have few prizes to stimulate the endeavors of the ambitious; we multiply appointments and positions, so that almost every physician shall have one or two, and of course the level can't be a high one—it is terribly like dead mediocrity.

Let the life insurance companies make the attainment of a position as medical examiner, more difficult; they will then have the best ability, and can afford to pay liberally for it, and this they will cheerfully do. But they can not get this ability, if leaving the appointment to an agent, who of course will immediately say his own family physician is the very best man for it; they can not do it, resting the evidence of qualifications upon a college diploma—this test the American Medical Association at its last meeting very justly ignored; they can not do it, trusting to the responses made by references whom they don't know. But they can do it, by having in every State where they transact business, a central board of physicians to examine every applicant for a medical examinership, the examination being especially rigid in *physical diagnosis*. They would have much fewer examiners, but these would be better, and they would be liberally paid, while successfully passing such an ordeal and holding such a position, would be an honor worth any man's striving for. We believe that thus the interests of the companies would be greatly promoted, and at the same time Medicine itself would derive much advantage.

DISCOVERIES *in Science by the Medical Philosopher*, an oration delivered at the ninety-sixth anniversary of the Medical Society of London, Monday, March 8th, 1869, by Sir G. Duncan Gibb, Bart., of Falkland, M. A., M. D., LL. D., F. G. S., &c., has been received from its author. Commencing with Dr. John Fothergill, Dr. Gibb presents a long list of famous names in medicine, fellows of the society, who have also been eminent contributors to science, among these are Letsom, John Mason

Good, Edward Jenner, Crisp, Gaunt, Hassall, and Richardson, and briefly refers to the scientific discoveries of each.

In his exordium, Dr. Gibb thus speaks in general of the advance of science, and the relation of physicians to it:

"The present century, gentlemen, has been a fruitful one; steadily from year to year, has science advanced onwards in all her various aspects; never ceasing discoveries have been made, which have not only added greatly to our knowledge, but have afforded a clue to the solution of the mystery of the creation of our globe, its present condition, and the approximate calculation of the first dawn of life. Indeed, it is only within the last few years that so much has been done, relatively to the last mentioned subjects. We shall see how far the medical philosopher has lent his aid in furtherance thereof. The medical philosopher is peculiarly constituted for the observance of phenomena having a bearing upon any of the branches of natural science; his training eminently fits him to note and to observe the appearance presented by nature in all her forms; and he who in the beginning of his career has paid some attention to natural history and comparative anatomy—branches that are decried by many as encroaching upon that time exclusively devoted to strictly medical studies—is in a position, if favorably placed, to discover matters of the highest importance in their bearings in all branches of science. Most of our great physicians were either good naturalists and comparative anatomists; or had a fair knowledge of both. At the present day, unfortunately, many a man only begins to make their acquaintance some time after he has been in the profession, too late, indeed, ever to take a distinguished part in his generation as a medical philosopher. The importance of natural science is now recognized in our great public schools and universities, and it is becoming regularly taught as a branch of general education.

"The discoveries in science by the medical philosopher, are so numerous and so important, that we may point with pride to their publication in the transactions of all the learned bodies throughout the world. Of the multitude of honest workers who annually bring the results of their labors before the British Association for the advancement of science, one-fifth, and sometimes one-fourth of the total amount of work done, is by the medical philosopher. Those who lay their contributions before this learned body, form a fractional part only of the number who labor independently of its fostering influence. There is something peculiar in the character of the medical philosopher, depending upon the training he undergoes to qualify himself to practice his profession which makes him superior in mind and thought to all classes of mankind. His profession is the first in rank, and his vocation is the noblest; in the conscientious physician we have an illustration of the true christian, who goes about doing good without parading it before the world."

THE DUBLIN QUARTERLY for May contains brief "*Opinions from Irish physicians on the treatment of acute rheumatism.*" We select two of these for republication; the first being from Dr. Thos. E. Beatty,

and the second from Dr. William Stokes, two names well known by every intelligent American physician.

"Having had the misfortune to have ample opportunity of studying rheumatic fever in my own person, I think I am in a position to offer some observations upon it. My first attack was in the year 1823, the next in 1826, another in 1828, then in 1836, the next in 1841, followed by another in 1848, after which came one in 1851, and the last was in 1864. These were all great and serious attacks, besides which numerous minor ones and threatenings occurred in the intervals. The earlier attacks were all acute rheumatism, and as years crept on they assumed the nature of rheumatic gout. During these attacks I had the kind care and attendance of the most eminent physicians in Dublin, and once, in 1826, Dr. Stock, of Clifton, took charge of me. It can be imagined that in such a long range of years and passing through so many able hands, a variety of treatment was adopted, but sad experience compels me to say that in no instance did medicine appear to have any effect in controlling or shortening the disease. I was never less than a month, often two months, in bed, and another month was required to enable me to go to work, and in 1836 and 1864 I was six months disabled by each attack. I had the good fortune to escape any threatening of cardiac disease. When the attacks were over I was perfectly free from all disease or stiff joints, and I am now, thank God, as well as any man alive. The treatment was, of course of various kinds. Alkalies and colchicum were given, but I don't think in large amount, and the alkalies certainly not as largely as is now recommended. I have a lively horror of the nights passed in the beginning of each attack. A state of semi-delirium when awake, and frightful dreams in broken sleep, to be succeeded by profuse acid perspiration, which caused an indescribable exhaustion, and was abominable in smell, made the advent of night be regarded with dread, and I eagerly watched the first dawn of daylight to have the window shutters thrown open, and thus put an end to what had been a long state of suffering through the weary hours of darkness. As joint after joint became affected, I found the greatest relief in having the joint enveloped in a thick layer of raw cotton, completely covered by oiled silk. This at once gave ease to acute pain, and generally in forty-eight hours that joint was well, but it often happened that the pain returned two or three times to the same joint. I have had at the same moment every joint of my body, including the joints of my neck, in a state of acute suffering. I constantly observed, when any of the large joints were affected, such as the knee, shoulder, or elbow, that I could localize the disease to one of the small articulations connected with it. Thus in the knee I could distinctly discern that the seat of the disease was the articulation of the fibula with the tibia, and I could cover the whole of the part from which the pain proceeded with the point of my finger. And in the shoulder, where the whole joint appeared to be suffering, I could localize the entire mischief to the junction of the clavicle with the acromion process; and in the elbow the joint of the radius with the ulna was the seat of the disease. Opiates at night to procure sleep, and the cotton and oiled silk were what I derived most benefit from. In my own practice the most rapid recoveries I have seen in young persons have been from the free use

of lemon juice, from one to two ounces of which were given every third or fourth hour."

Dr. Stokes writes as follows:

"I do not know of any disease that more unmistakeably shows the change of type than rheumatic fever. It was a very different disease thirty or thirty-five years ago than what it is now. It was marked by a high inflammatory fever, a burning skin, a bounding and resisting pulse, "inviting the lancet," strong action of the heart, intense local irritation, and extreme pain. Our practice never was bleeding on the *coup sur coup* system of Bouillaud, but we found that one bleeding in the early periods was well borne, and that patients so treated made better and more speedy convalescences than those who were not bled. The blood was always buffed and cupped in a high degree. Local bleeding by leeches was practiced, following the arthritis from joint to joint with a moderate number of leeches. When the internal organs were attacked the inflammation was most acute. We have had nothing like it for years.

"The whole character of rheumatic fever in Dublin for many years has been changed, and, as regards the constitutional and the local symptoms, it is mainly of an asthenic type. Some of the cases, at an early period, have a tendency to pyemia. They show purulent sudamina, feebleness of circulation, bed sores, and commonly exhibit various forms of anemic murmur in the heart and arteries in the advanced stages. The convalescence is slow and unsatisfactory, and in many of them, even with pericarditis, such was the debility of the heart, that wine had to be used with freedom. It often removed the irregularity of the pulse.

"I have long disbelieved in the efficacy of any of the proposed specific treatments for acute rheumatism or rheumatic fever, including mercury, opium in large doses, bark, colchicum, alkalies and acids. The disease, like continued fever, will run its course, and the principles of treatment are the same in both cases. We are to support the strength and alleviate pain, and employ tonics in the advanced stages.

"Some of the most protracted convalescences I have ever seen were in cases in which, as was the practice long ago, the patients were, at an early period, brought under the influence of mercury. I conceive that Dr. Gull and his colleague have done good service to practical medicine in bringing forward observations on this subject."

Dr. Charles A. Cameron, in the same journal, speaks highly of the *ferric iodate* as a substitute for iodide of iron, the objections to the latter being its instability and its intensely disagreeable taste, while the iodate is stable, nearly tasteless and does not stain the teeth, and contains a large quantity of "condensed" oxygen.

M. ALPHONSE GUERIN reported to the Academy a case of *purulent infection cured by large doses of quinine*—two, three and four grammes a day, giving details of disease and treatment. Most of the members were doubtful as to the efficacy of the agent in such cure.—*Archives Générales*, June, 1869.

PULSE IN CAPILLARIES AND VEINS.—Dr. H. Quincke, (*Berliner Klinische Wochenschrift*, 1868, No. 34) has observed that a capillary pulse may be seen under the finger-nails of most persons. He says that the white lunula of the nail becomes smaller at every systole of the left ventricle. The phenomenon is best seen when the hand is raised above the head so as to diminish the blood pressure in the hand and thereby exaggerate the difference between the systolic congestion and diastolic anaemia which takes place in its vessels. This capillary pulse is well marked in slight forms of anaemia and chlorosis and also in cases of aortic insufficiency. Quincke observed a venous pulse in the veins on the back of his hand when they were subjected to a high temperature; he also noticed it in the victims of aortic insufficiency. It was present in the veins of the hand of a woman who had slight hypertrophy of the left ventricle, and in a man who, owing to a fracture of the vertebra and injury of the spinal cord appeared to have palsy of vaso-motor nerves.—*Journal of Anatomy and Physiology.*

M. DEPAUL presented to the *Académie de Medecine* a tumor which he had recently removed from the posterior and inferior portions f the trunk, the coccygeal region, in an infant two days old. From the characters of this tumor, in which were found bone, muscle, arteries, and a portion of intestine, he concluded that it was constituted by the rudiments of an embryo; it was then a case of pregnancy *par inclusion*, indicating an ovum primordially diseased, and destined to produce two individuals, only one of which was normally developed. M. Depaul stated that there were four or five varieties of tumors which may be found in the same situation. *First*, tumors *par inclusion; second*, *myelocytic* tumors; *third*, tumors formerd of embryoplastic tissue; *fourth*, from dropsy of the meninges of the cord; *fifth*, from hypertrophy of the coccygeal gland, or the gland of Luschka.—*Archives Générales*, June, 1869.

PROF. ALDEN MARCH, of Albany, died on the 19th of last month, in his seventy-fourth year. Those of us who met him at New Orleans last May, could not anticipate, marking his vigorous step and manly form, greeted with his generous smile and the hearty grasp of his hand, that in six weeks he would breathe his last. It is now about ten years since we had the honor of first making his acquaintance; and our first interview was in one of those cases in which his opinion was worth that of any surgeon in the world, viz: of hip-joint disease. We feel that his death is to us a personal loss; but this is a minor

matter—it is a loss to medicine, to the country and to humanity. He was, indeed, a noble man; the crown of his professional greatness and of his noble manhood being the simple faith and life of the christian.

LIBRARY MEDICAL DEPARTMENT UNIVERSITY OF LOUISVILLE,
May 27th, 1869.

At a meeting of delegates from Medical Colleges for the purpose of considering the question of fees, which was held this day, the following colleges were represented by delegate or letter, viz:

University of Nashville; Shelby Medical College, Nashville; Memphis Medical College; St. Louis Medical College; Humboldt Medical College of St. Louis; Rush Medical College of Chicago; Chicago Medical College; Indiana Medical College of Indianapolis; Miami Medical College of Cincinnati; University of Louisville.

On motion, Dr. Bowling was elected chairman, and Dr. Bayless secretary of the meeting. After a prolonged conference, the following preamble and resolutions were adopted:

WHEREAS, The call for a convention of delegates from the Medical Colleges of the West, for the purpose of arranging a uniform scale of fees. sent by the Faculty of the Medical Department of the University of Louisville to the Colleges of Nashville, Memphis, Cincinnati, Columbus, Cleveland, Detroit, Chicago, St. Louis, Indianapolis and Louisville, has met with a cordial response in person or by letter from a majority of said Colleges, and

WHEREAS, The fact that several of said Colleges have issued their announcements for the ensuing sessions makes definite action at present impossible, and

WHEREAS, The views and opinions of the various schools as given by delegates and letters differ greatly, therefore be it

Resolved, That it is the hope of this Convention that a uniform scale of charges shall be adopted by all the Medical Colleges of our country, and we do most earnestly advise such a scale shall be agreed upon; and it is our belief that the glory and usefulness of the profession would be enhanced by the adoption of the highest rate advised by the American Medical Association.

Resolved, It is not less to be hoped that all the Medical Colleges of our country would fix a higher standard of preliminary and medical education as a pre-requisite for graduation.

Resolved, That the Convention request all the Medical Colleges in the United States to send each one delegate to a meeting to be held in Washington, on Monday, May 2nd, 1870, to take efficient steps toward carrying out in good faith the recommendations of the American Medical Association in reference to medial education, and also to form a permanent association of American medical teachers.

Resolved, That a copy of these proceedings be sent to all the medical journals in the country.

GEO. W. BAYLESS, *Secretary*. WM. BOWLING, *President*.

THE editor was sick while a considerable portion of this number was passing through the press. Readers will please receive this explanation of several typographical errors, which, however much they may annoy them, annoy him ten fold more.

THE WESTERN JOURNAL OF MEDICINE,

(*Formerly*, "CINCINNATI JOURNAL OF MEDICINE.")

Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

VOL. IV. INDIANAPOLIS, AUGUST, 1869. No. VIII.

BARTON'S OPERATION FOR BONY ANCHYLOSIS OF KNEE-JOINT.

BY GEO. C. BLACKMAN, M. D.,

Professor of Surgery in the Medical College of Ohio, etc.

During a recent professional visit to Eaton, O., my friend Dr. A. H. Stevens, had the kindness to show me a young gentleman on whom I performed the above operation in April, 1861. The result has been most gratifying. The leg is very slightly flexed, and the patient walks with a gait nearly natural. In looking over the records of the old St. John's Hospital, I find a report of the case carefully drawn up by Dr. Thomas Macmillan, a well-known surgeon of the regular army, and who, at that time, was one of the resident physicians of the institution. We copy the more important details of this report:

"Benjamin F. Stark, æt. twenty, farmer, admitted April 1st, 1861. Eleven years ago cut his right knee with an axe, making a wound seven inches long and a quarter of an inch in depth, on the inner side of the knee. This was followed by great inflammation, and when it subsided the joint was stiff and the limb straight. Some months afterwards the leg began gradually to become flexed, and finally became immovably fixed at a point which left the heel about eight inches from the floor, or nearly at a right angle. On the 2d of April, the patient being fully under the influence of chloroform, Prof. B. attempted with great force, but unsuccessfully, to break up the adhesions. In this he was assisted by Drs. Tripler and Foster. On the 5th of April, assisted by the same gentlemen, Prof. B. proceeded to perform Barton's operation of exsecting a wedge-shaped piece of bone,

A semilunar incision was made over the front part of the thigh, commencing about two and one-half or three inches above the condyles. The soft parts were then detached and reflected so as to expose the bone. The saw was now applied so as to remove a wedge-shaped piece of the femur, measuring on its anterior surface about one and three-quarters of an inch in extent. At the apex of the wedge, on the posterior surface the bone was not completely divided, a few lines in thickness having been left. The patella being very prominent, the greater portion was removed. The hemhorrhage was very trifling, no vessel requiring a ligature. The flap having been replaced and secured with stitches, the limb was placed in a McIntyre's splint, the angle of which being that of the limb before the operation. The patient rallied well from the operation, and the following night was passed comfortably under the influence of a quarter of grain of sulph. morphia. The next morning he suffered considerable pain, and there was some oozing of blood from the corners of the wound, which was checked by the application of cold. From the 6th to the 13th of April he suffered at times some pain in the limb, which, however, was soon relieved by small doses of morphia and mild cathartics. On the 16th there was a profuse discharge of pus from the inner angle of the wound. This was materially diminished by the 19th, when moderate extension was made, which produced considerable uneasiness along the lower and posterior portion of the thigh. This soon subsided, and from day to day gradual extension was continued. Until the 26th of the month patient occasionally suffered from twitching of the limb, which seemed to be bent outward at the point of operation. On the 27th, the patient being under the influence of chloroform, the splint was removed while the limb was straightened, after which it was re-applied. May 17th, a piece of bone of irregular shape, and about an inch in length, was removed from the outer side of the leg, and on the 25th a second piece of about the same size was extracted. From this time the healing of the wound was rapid, and, as on the 1st of July, the openings were all closed, and the limb perfectly solid, he was discharged cured."

Dr. S. W. Gross has given in the *American Journal of the Medical Sciences* for April, 1868, a summary of the cases in which Barton's operation for osseous anchylosis of the knee has been performed since 1835, in thirteen cases, the result in two being fatal, the patients dying of hectic irritation and exhaustion. In eight cases in which Barton's operation was modified so as to remove a cuneiform piece of bone from the anchylosed joint, as practised by Dr. Gurdon Buck in 1844, two died of pyæmia. As is well known, the late Prof. Brainard was the first to propose sub-cutaneous drilling and fracture of the femur as a substitute for Barton's operation, although he was preceded one year in its execution by Prof. Pancoast, of Philadelphia. Prof. Gross has modified Brainard's operation, drilling the osseous bands until they are sufficiently weakened to yield to "forcible manual extension," and to admit of fracture of the undivided portions of the new bone.

Prof. Gross' first operation was in 1861, and the drilling was applied to break down true anchylosis. Prof. Brainard, however, did, in 1859, apply sub-cutaneous perforation to the joint itself in a case of false anchylosis, a proceeding characterized by Dr. S. W. Gross in the paper alluded to, as "bold and unwarrantable." The result of his operation was fortunate, as it was in the five cases in which it was performed by Prof. Gross.

In conclusion, we can not do better than to quote the remarks of Dr. S. W. Gross appended in his detail of cases which occurred in the practice of his father, S. D. Gross:

"In the first case, the man was able to be about on crutches at the end of three weeks, and to walk without artificial aid in three weeks more. In the second, crutches were used at precisely the same date, but the young lady was unable to move about without their assistance until the expiration of four months. In the third case, the patient was on crutches in five weeks, and walked without them in ten weeks; and in the fourth, crutches were used in a fortnight, and the lad dispensed with them entirely in seven weeks. In the case of Dr. Maury, dates upon these points are wanting. The mean duration of confinement in bed was, therefore, twenty-three days, and the average length of time at which the patient was able to walk without artificial aid, ten weeks. It will thus be perceived that the duration of treatment was no longer than that required for the cure of a simple fracture of the thigh.

"Subcutaneous perforation and disruption of angular synostosis of the knee, for the relief of the deformity arising from it, is for the following reasons, recommended as a substitute for all other operations:—

"1. Being a subcutaneous procedure, it is, on that account, far less hazardous than the operations of Barton and Buck, which are a species of compound fracture, and, therefore, liable to all the dangers and accidents which attend that injury.

"2. The shortening is far less than that resulting from any of the other methods of cure, this, indeed, being entirely dependent upon the pleasure of the surgeon. Shortening of one inch is, however advised, since it renders locomotion less awkward.

"3. It occasions no unsightly deformity at the knee itself, beyond flexion at a very slight angle. Both Brainard's and Barton's operations, more particularly the latter, are attended with an ugly deformity, from the knee being rendered unusually prominent by bending the limb at the point of fracture of the femur. Although Buck's procedure leaves a more symmetrical limb than either of these methods, this advantage is counterbalanced by the protracted sufferings, undue shortening, and greater mortality resulting from it.

"4. The duration of treatment is much shorter, thereby subjecting the patients to less inconvenience and annoyance from prolonged confinement in the recumbent posture.

"5. The object of the operation being to break down and weaken the osseous bands in such a manner as to permit them to be fractured with a moderate degree

of force, the popliteal artery is not endangered. In one of the cases by the method of Barton, the femoral artery had to be taken up the thirteenth day, on account of bleeding from the popliteal, which had been injured by a sharp point of bone.

"The reporter has thus referred to twenty-six cases, and given the details of four, of synostosis of the knee at a faulty angle, relieved by surgical interference. Four only of the entire thirty were fatal, thereby affording a mortality of 13.33 per cent., and showing, contrary to the assertions of some eminent surgeons, that such a condition is remediable without great risk to life. When it is remembered that angular osseous anchylosis is always awkward and annoying, and renders the limb useless and often so much of an encumbrance as to demand from the patient a so-called "amputation de complaisance," than which no operation is more lethal, this death-rate can not be considered excessive.

"Of these thirty operations, thirteen were performed after the method of Barton, of which two, or 13.58 per cent., were mortal; eight were practised after the method of Buck, and of these two, or twenty-five per cent., ended in death; four were of the nature devised by Brainard, all of which were successes; and five were after the method described in this paper, all of which likewise recovered. The first twenty-one, partaking, as they did, of the nature of compound fractures, alone furnished the mortality, thereby affording additional evidence of the superiority and comparative innocousness of subcutaneous operations."

ARTIFICIAL HIP-JOINT.

BY A. J. ERWIN, M. D., FORT WAYNE, INDIANA.

Reported by Dr. Renner.

The subject, Miss Murphey, of LaGro, Indiana, aged seven years, had morbus coxarius of the left hip, which commenced early in 1864. Had constantly discharged pus and bone spicula until December, 1866, at which time, under the care of Dr. Tobey, the sinus healed, leaving the limb so greatly contracted as to bring the thigh in contact with the abdomen, in which position it was firmly held by bony anchylosis of the joint.

For the correction of this distressing deformity, Dr. Erwin, of Fort Wayne, was consulted, who operated in November, 1867, Drs. Tobey and Wright assisting. The patient was ansesthetized, and extension made with considerable force, evincing a strong bony union, which could not be broken up. Two incisions were made, bringing to view the posterior surface of the great trochanter at its union with the neck and shaft of the femur, from which he excised transversely an obtuse section of the bone without severing its anterior surface,

which thin segment was retained to secure the sections in apposition until plastic union should occur. The wound having been thoroughly cleansed, the limb was easily extended to its proper position without the division of tendons. The soft parts were closed by sutures and adhesive straps, and the patient put to bed on a solid mattrass, with a weight suspended to the limb to keep it extended, without the assistance of splint or other apparatus. Cold-water dressings were freely applied, and pain relieved by means of opiates.

The wound healed mostly by first intention, and was entirely closed by the third week. On the twentieth day after the operation, antero-posterior motion of about eight inches at the knee was made and continued once daily until the patient was able to move the limb, which prevented the tendinous connection from ossifying, forming a new articulation on the plan of the original joint, which appears to equal its predecessor in strength, symmetry and adaptation. Six weeks from the operation she walked by the aid of crutches. Six months later, she abandoned crutches and cane, with fair use of the new joint, which has since so much improved that, although one inch short, no difference can be recognized in the contour or action of her limbs. She runs as fast and plays as actively as girls of her age, without pain, inconvenience or limping.

THE TRUE AND THE FALSE IN THE PROFESSION OF MEDICINE.

BY DR. WILSON HOBBS, CARTHAGE, INDIANA.

(Read before the Union Medical Society at Knightstown, Indiana, at their April session, 1869, and by their order offered for publication.)

Science is a term used to designate a collection of the general principles and leading truths relating to a subject, systematically arranged and classified.

Truth is divine, and might exist were there no human intelligence to perceive it; but it must be collected and arranged before it can be called a science. There was a period in human history when "the general principles and leading truths" relating to all knowledge were unknown—when the several sciences were unborn. God and Nature had done their work, but labor and thought had yet to begin. When our fathers began their search for knowledge, they found, as

we do, truth and error strangely mixed, and their untutored thought too often had not the wisdom to distinguish the one from the other. Their means of demonstration were so uncertain, and their plans of inquiry so inefficient, that their conclusions were generally full of error. The more ancient sciences have had a perilous voyage through superstition and ignorance—each succeeding age has sifted out a little error, and added its stock of precious truth. The nineteenth century has received these treasures of knowledge, a rich legacy from the dead ages, and with an amount of educated mind which the world never before possessed, and new means of inquiry and demonstration, we may now reasonably hope that hereafter little will be enrolled upon the records of science which truth does not acknowledge.

We have gained the accumulated facts which constitute the science of medicine by methods of inquiry and analysis similar to those which have established the laws of mechanical philosophy. Our unfortunate race, since our first parents were ejected from the garden of Eden, have ever been the victims of disease and accident. Mother Eve opened Pandora's box upon us, and the countless ills have been busy from that day to this. True to the natural instincts, a way was early sought by our ancestors to bind up the wounded, heal the sick and smooth the dying pillow. These are offices alike dictated by Divine command and the necessities of our common nature. Philanthropy could labor in no wider field, nor desire a richer reward.

The historical records which we possess respecting the progress of practical medicine are scanty and uncertain. The writers who have investigated this point with the greatest learning and assiduity, inform us that Egypt was the country in which the art of medicine, as well as all other arts of civilized society, was first cultivated with any degree of success. From some remarks which are incidentally made in the Mosaic writings respecting the learning of the Egyptian priests, it would appear that it consisted in a great measure of the employment of magical incantations, and so far, therefore, as it effected a cure of disease, it must have operated through the medium of the imagination. This has been, in all ages, the first step in the art of medicine, if such it may be called, and its efficacy must have been in exact proportion to the superstition and ignorance of the people upon whom it was practiced.

We can scarcely be said to have had a science of medicine up to the time of Hippocrates. He is justly considered the father of medicine, and many of the doctrines which he taught and the plans of

medication which he practiced, have withstood the test of ages, and will ever keep his name in remembrance. The impetus thus given to this noble science, so ancient in origin, so beneficent in mission, it grew with ages, and its history now enrolls the names of many of the greatest thinkers and benefactors of our race. No other science bears upon its banner the names of such a host of worthies—no other has grown from closer observation, deeper research, or more extensive or varied experiment.

The motto in this science has ever been the apostolic one: "Prove all things, and hold fast to that which is good." Every accepted principle has been tried in the retort and crucible, and weighed in the balance. All the collateral sciences have lent their aid in the discussion of questions arising out of the nature of disease and its proper treatment. The earth, the air and the ocean have been ransacked for remedies, each of which when presented, has been examined by all the force of intellect and all the accumulated knowledge which the world possessed. There is scarcely a disease which human flesh is heir to, upon which volumes have not been written, and upon many whole libraries have been written. There is not a standard plan of medical practice which has not endured as close research, as deep investigation, as any method in any science. There is not an accepted remedy in our Materia Medica, that has not been turned and turned again, observed and reobserved—its effects in every possible direction noted, under every variety of circumstances—in every quarter of the globe—upon all races of men—on many of the inferior animals, and the conclusions drawn and recorded for the benefit of our race.

At an early period in the history of the science of medicine, it was divided into different departments of knowledge, each of which is but a part or parcel of this great fund of truth which constitutes it. It has been thus arranged to facilitate study and investigation, and combined they constitute one harmonious whole, which would be incomplete with the loss of any of the parts. These sister classes have grown up from the same and cotemporaneous research, the separate truths developed by equally correct modes of observation, and the principles established by the same exact rules of evidence. All ages have contributed a stock to this common fund—all nations have brought their tribute of truth, and poured it into this treasury of knowledge. It is still in its youth, with many faults which other years may correct, but for that reason not less a science.

There can be but one science relating to a simple class of knowledge. As there is but one science of chemistry, or geology, or mathematics, so there is but one science of medicine. The fund of knowledge tributary to the healing art, sifted through six thousand years, bought with more brains than any other science, is the science of medicine—the one and only science of medicine—none of the *isms* and *pathies* which empirics have sought to impose upon the credulity of the unsuspecting, but the true eclecticism of the regular school, the rich inheritance which our fathers bequeathed us, and which, as worthy sons, it is our duty to improve, honor and defend.

Medicine is not an exact science. Much of the knowledge which it accepts is not susceptible of that absolute and positive demonstration which would be desirable, and which is attainable in mathematics and mechanical philosophy. This difference does not arise from a lack of uniformity in the laws of nature as they apply to the animal economy, but from the incompleteness and uncertainty of our knowledge of them.

The animal is a wonderful mechanism—an aggregation of numerous parts with certain inter-dependencies in health and in disease. Within certain limits injury or disease of any of these many parts will disorder other parts, or the whole organism. Besides this, each of these parts, as well as the whole frame, bears a certain relation to the world in which it is placed and all objects around it.

When utilized by the *life* principle, it performs the work of a great chemical laboratory, many of whose processes, with our present knowledge of physiology and chemistry, are inscrutable to the human understanding. Add to this the fact that the whole machine is shut in from eye and sense, except the external surfaces and a few approaches to the interior, and we realize that we have a great problem before us, with few certain data upon which to begin the solution. No other science labors under such difficulties to a similar extent, and hence we are entitled to the greater honor for what we have achieved.

The extensive range of knowledge embraced in the science of medicine can not be caught up in a single day or a single year, but diligent and protracted study, assisted by all the improvements in the arts of instruction, are requisite to fit a man to assume the responsibilities of human life. To honor his profession and benefit his race, he should be a student until his locks are silvered at the bedside. With such endowments he goes not with uncertain thought and trembling hand to the sick-bed, distrusting his science and denying his skill,

but bold in honest faith in his profession, and strong in the conscious power of science, he reaches forth his hand to succor and to save. He stands at the bedside a man and a philosopher, and acknowledges a responsibility which no bribe can betray. He feels that the life of his patient and the confidence of anxious friends are divine trusts, and he implores the lights of science to illume and guide his judgment.

Such men, and such only, should minister at the bedside. To such men, and such only, is the profession of medicine an honest one. Such are benefactors to the country and race. Their ambition is not to accumulate wealth by pretending to that which they do not believe, and practising that in which their judgment does not confide; but to secure a competence by an honest discharge of honest duty, and live in the affections of men by devotion to truth and science.

In one important respect medicine differs from all other sciences. Its use as a science is restricted to the maintenance of health and the treatment of disease. Other sciences are more extensive in their use and application.

The structure and functions of the complicated organism which is so "fearfully and wonderfully made," with the conditions of its health and the laws of its diseased action, are matters which students, except of medicine, do not stop to examine. Many a man has calculated eclipses who did not know the function of the liver, or the position of his own heart. Many a student can conjugate Greek verbs or demonstrate Euclid's hecatomb proposition, who can not explain the simplest phenomena of the laws of life.

This ignorance of ourselves is so deep and so profound, that out of the pales of the medical profession, where men look in upon themselves, they recoil as though old Raw-head and Bloody Bones was after them. It is surprising with what trepidation otherwise well-informed persons examine a skeleton. Perhaps not one man in ten knows how many bones are in the fore-arm, and hardly as many are aware of the mechanism by which the animal frame is moved. Not one in a hundred has rational notions of the process of digestion. Of the nature of disease and its treatment the most chimerical and preposterous notions preval in what we call domestic practice.

The knowledge of anatomy and hygiene, and the elementary principles upon which the art of healing is based, are wrongly all treasured up in the medical library, while they should be taught and understood by all classes of people. The want of knowledge of this kind among our common people opens a fatal highway.

The most extravagant vagaries which the cupidity of the pretender can incite him to concoct, can be palmed upon the credulity of a people who have no standard by which to determine the truth or fallacy of his propositions. So small is the stock of knowledge relating to disease which the people possess, that they are ill prepared to judge of the qualifications of their medical attendants.

While medicine, as a science, has been pursuing the even tenor of its way, system after system, self-styled reforms, have arisen, flourished their brief day, and vanished, to give place to another. It is but a few years since that ignorant pretender, Dr. Thompson, revived the dogma that heat is life—that cold is death; that the principle of cold triumphing over heat or life, produces disease by the production of canker, which can only be prevented by reinforcing the life-principle or heat, by artificial heat and stimulants.

The practice founded upon this simple theory, consisted in hot emetics, hot injections, the hottest kind of stimulants, varying from the first to the thirtieth degree of potency, and aided by steaming hot sweats. The acme of science and skill was reached when the patient had been taken through a "*course of medicine*," which consisted in the successive degrees of stimulation until the highest point had been reached. The same course was applied for all sorts of diseases, like or unlike, simple and severe, and if the patient survived, the circumstance was paraded as a wonderful cure—if he was killed in the operation, the pious doctor and friends thanked God that he died "*secundum artem.*"

By this heroic practice it was soon discovered that the patients were disappearing from the earth as fast as the diseases, and had it long remained, the only memorials of our race and civilization, scattered over the vast solitudes of a once habited globe, would have been human bones, old boots, clyster-pipes, sweating machines, and packages of red pepper and lobelia.

This thing was not done in a corner—it had a wide range of public favor all over the country, and the imposing sign of "Steam Doctor" was paraded by the side of the veritable "M. D." The demise of this arrant heresy left a void in the mind of gaping credulity which was at once filled by Hahneman's system of Homœopathy. His motto was "*similia similibus curantur*," or, in plain English, "the hair of the hound will cure the wound." Of this system what most staggers one's judgment is the infinitesimal smallness of the doses, and the assumption that a medicine acquires new powers by shaking the bottle which

contains it. A few examples of the mode of preparing his remedies will show how gullible the human mind must be to be deceived by such pretensions.

One grain of the drug used, say opium, is dissolved in ninety-nine parts of alcohol—this is the first dilution—one drop of this is now mixed with ninety-nine other parts of alcohol—this is the second dilution. This process is repeated thirty times, which makes the thirtieth or decillionth dilution, the strength generally used by these practitioners. In one drop of this mixture there is one decillionth part of a grain of opium, which will medicate three hundred sugar pellets. Hence each granule will contain the three hundred decillionth part of a grain of opium.

The Atlantic ocean is a considerable body of water, and if one grain of opium were uniformly mixed with its entire fluid, we might reasonably conclude that the drug would be pretty well diluted, sufficiently so at least as not to be suspected of producing any very alarming effects if a sugar-pill the size of a mustard seed were moistened in it and administered to a man of ordinary constitution. But this would be a very highly concentrated dose compared to the thirtieth dilution, which would be the one-three hundredth grain of opium dissolved in a body of alcohol one hundred and forty billion times larger than the whole solid contents of our solar system. And this would be a very alarmingly concentrated dose compared with the one hundredth dilution recommended by Dr. Moore, or the eight hundredth dilution used with great success by Dr. Bilby of Glasgow. Surely these are mythical remedies adapted solely to mythical personages.

Incredible as these pretensions appear, and you will bear me witness that I have represented them fairly and honestly, Homœopathy is, to-day, the most popular system of quackery ever presented to the world. What is stranger still, it is an aristocratic quackery—it has imposed itself upon many otherwise well informed people. Packages of these pigmy pellets are carried in satin vest pockets and gold flossed satchels, and the mythical pills tickle the throats of "gentlemen and ladies."

In this connection we will also notice Eclecticism, another modern system, an off-shoot of Thompsonianism, more rational in theory and practice, but partaking of the general character of the parent stock. Dr. Beach, of Cincinnati, thinking too much fire a little dangerous, with his pepper and lobelia mixed up most of our vegetable drugs, and called upon Dr. Buchanan to magnetize the compound. Many of

our most effective remedies he left out of his "kit," and with respect to them he endorsed the teaching of Dr. Thompson, his predecessor. He then wrote a book and set out with it to Europe. He presented it to many of the crowned heads of the Old World, who of course are all medical philosophers, and from them received gold medals as tributes of respect for his learning and research. These glittering honors, of course, established the truth of his doctrines, and made his remedies doubly efficacious. Then he returned home, his knees trembling under the weight of his new honors, and got out a second edition of his book, which of course contained upon its first pages facsimiles of his royal medals, and went "in cahoot" with Buchanan & Co. They named the bastard "Eclectic Medicine," and opened a hall in Cincinnati to exhibit the youth in, which they called the Eclectic Medical Institute. The ill-formed creature for awhile laughed and grew fat; the doting parents stormed and scolded at everybody who would not come and kiss the brat and call it handsome. But the sickly thing, inch by inch, is dwindling away. The disconsolate friends have mesmerized it, steamed it, sweated it, puked it with lobelia and purged it with podophyllin, but they can not save it.

(*To be continued in the September number.*)

SULPHITE OF SODA IN DIARRHŒA.

(The New York Academy of Medicine has a few *Sections*, the meetings of which are held monthly, and the special subjects of each section are extensively discussed.

At the meeting of the "Section of Obstetrics and Diseases of Women and Children," held last May, at the residence of its President, Dr. Mark Blumenthall, the subject under consideration was Diarrhœa, and the following paper was presented by Dr. John H. Griscom):

The natural chemistry of physiology is of course understood to be the true basis of corporeal organization, the difference of the numerous animal tissues being dependent upon their varied compositions. The same principle is also applicable to the numerous secretory functions, the healthy operations of each being dependent upon the normal composition of the materials included in the functional operations. The privation of any one or more of the numerous materials devoted to the structure, or the presence of some other *abnormal* materials,

necessarily produces derangement of the functions, which we designate *disease*. One of the most frequent sources of organic and functional disturbances, and of the privation of the vigor and soundness of many of the functions, is the deficient chemical composition of secretions, or of the tissues concerned therein, frequently resulting in abnormal tissues, and the development of unnatural secretions.

The irritation and diseased condition of various structures is necessarily the consequence thereof, and their *amendments* depend upon the chemical correction of the fluid and solid tissues. Diseases of the skin, such as furuncles, carbuncles, erysipelas, urticaria, eczema, and many others, are almost wholly attributable to the chemical derangement of the *nutritious sanguineous fluid*. Under these circumstances, the internal structures being deprived to a certain extent of the composition which is required for the perfect operation essential to good health, to the development of tissues and secretions and correctness of functions, these normal operations being thus impaired, the materials thereby retained are submitted to the high temperature of the organization, and necessarily undergo more or less decomposition and fermentation, thereby giving rise to abnormal chemical constituents, which being innutritious are necessarily poisonous, and being absorbed into the circulation, give bad results in very numerous modes, thereby causing a large proportion of well known complaints.

It is therefore a great desideratum to have some means whereby the decomposition of the internal matters referred to may be prevented, and the vicious influences thereof upon other tissues avoided, even when the foul substances have been absorbed into the blood.

Many *other* diseases are also well known to result from the absorption into the circulation *from without*, of certain poisonous influences, which thereby cause derangements very often fatal. Of this class of disorders, a few marked illustrations are scarlatina, small-pox, typhus fever, yellow fever, cholera and syphilis, which are the results of the presence in the circulating fluid of certain foreign influences productive of deranged chemico-physiologic powers. The applicability of some means for the arrestation and prevention of the decomposition of the tissues and secretions, and thereby enabling all the functions to remain normal, and assisting them to perform their requisite duties, is of course of great importance, and it is one of the most happy results of the intelligence and faithfulness of many medical practitioners, that several articles of the materia medica have proved useful for said purpose. In no other common disorder than the subject of this Section's

present consideration, viz, Diarrhœa, is the capacity of certain articles more markedly successful, although the therapeutic influence of the articles now generally employed therefor were almost wholly accidentally discovered, not being based upon chemical science.

In this particular disorder, and also in almost all others derived from zymotic causes, it is a very felicitous circumstance that we are now in possession of a means for the arrestation of the influence of nearly all those abnormal and poisonous influences. The antiseptic and disinfectant powers of several chemical materials, by their application to very numerous animal and vegetable compounds which undergo decomposition and fermentation when exposed to the atmosphere, and especially to the heat of dwellings, and the high temperature of the sun, have long been appreciated and used for the purpose, by external applications; and of these antiseptic properties it is a very happy circumstance that there are some materials equally useful for the prevention of the same effects in the *interior* of the human organization, by introduction therein.

Of the antiseptic materials long known as valuable upon external use, there are a few which have been used internally for very numerous reasons, and found equally useful in both applications, viz: carbolic acid, pure carbon, sulphurous acid, and nitrous acid. Of the first named article, very numerous illustrations of its hygienic powers, both in surgical and other occasions, have been reported; but of the sulphurous acid, its long and well known antiseptic property has been ascertained to be remarkably useful in many internal diseases, and with that my own experience has been most abundantly and happily successful.

In every case of disease resulting from zymotic causes, which has come under my care and responsibility during the past five years, also a considerable number which are not attributable to that source, the use of this peculiar article has, without an exception, proved to be hygienic in the organization, not only suspending the functional disturbance, but also restoring the normal and healthy condition, and thereby removing almost all symptoms of disease.

In nearly all the disorders heretofore named, and also in dyspepsia, cholera infantum, cholera morbus, diarrhœa, dysentery and intermittent fever, the corrective influence of sulphurous acid has manifested itself almost invariably, and its combination with the other therapeutic agents which have been the basis of treatment for a long time, has

greatly aided them therein, though in most instances nature has proved fully effective.

The form of administration of this remedy, which alone I have used, is that of the sulphite of soda, which, when inserted into the digestive organ, very probably undergoes decomposition, and thereby both the articles of its composition, viz, the acid and the alkali, exert a corrective influence upon all the tissues and secretions with which they come in contact.

Of the intermediate influence of this article upon the subject of our present consideration (diarrhœa), I have very recently had evidence in two cases, one a child two years of age, the other a lady nearly sixty. In both cases a single dose of soda sulphis, in the former five grains, in the latter twenty-four grains, caused immediate suspension of the symptoms and a complete restoration of health in forty-eight hours by a few repetitions of it.

In another recent very serious case of typhoid fever, a lady thirty years of age, which I saw in consultation after about four weeks illness, and of which her family physician had asserted certain fatality, the administration of this article by my direction was followed with a complete restoration of health in a fortnight.

In two cases of scarlatina also, this spring, equally successful results were produced in a very short time, by the same remedy administered in connection with febrifuges and other remedies appropriate to the peculiar symptoms of each case.

AN ABSTRACT OF A REPORT OF SOME CASES OF DISENTERY, TREATED BY LARGE DOSES OF IPECAC., READ BEFORE THE COLLEGE OF PHYSICIANS AND SURGEONS, LOUISVILLE, KY.

BY DAVID W. YANDELL, M. D.,

Formerly Professor of the Science and Practice of Medicine, University of Louisville, Ky.

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The three methods of treating dysentery which for some years past have, according to my observation, been most practised by physicians in the valley of the Mississippi, are, (1,) by opium, (2,) by salines, (3,) by quinine. In each of these the auxiliary measures adop-

ted are, in the main, the same. The purpose of the present report is to call attention to the successful use of large doses of ipecac. in certain cases where the methods mentioned above had failed.

CASE I—T. P., merchant, æt. 30, robust, temperate, lived two miles from the city, in a malarial region. In July and August he had several sharp attacks of diarrhœa, which, during their course, would sometimes become dysenteric, but all of which yielded to oil, opium or quinine. Between the 9th and 12th of September he lost two young children with dysentery. They were treated by one of the most eminent of the Fellows of this College. I saw them several times in consultation. While they were sick, the mother had a violent outbreak of the disease, and the father had one or more diarrhœic or dysenteric discharges daily. The mother was speedily relieved by oil, opium and lead. He, himself, took no medicine until the 13th, when, unable longer to be up, he got oil, opium, lead and quinine. Two days after, his symptoms being no better, he was moved to the city, at which time (Sunday, the 16th) his condition was as follows: Nausea, insomnolency and general discomfort from the opium; skin hot and dry; pulse, one-hundred and twenty, rather full; tongue covered with a whitish fur. Twelve dysenteric dejections in the preceding twenty-four hours, all attended by tormina and tenesmus. Slight tenderness under pressure in the left iliac fossa, none elsewhere; much thirst; some appetite. He was ordered the saline treatment, (Epsom salts and morphine,) poultices on the abdomen; laudanum and starch injections, with full anodyne at bedtime; milk diet.

Seventeenth—Condition unchanged; discharges eighteen, more fluid and less bloody, but as distressing; pulse, one hundred and thirty; tongue furred; skin hot; directed the acid treatment: Dilute sulphuric, dilute muriatic acids, and deodorized tincture of opium, of each fifteen drops every two or three hours. To have morphia hypodermically at night.

Eighteenth—No improvement. Ordered him to be cinchonized by the next visit; to have morphia and poultices as before.

Nineteenth—Cinchonism decided; pain, tenderness, pulse, tongue, skin, dejections, materially the same. The distinguished gentleman who had treated the mother and children was called in consultation. The patient got chalk mixture, bismuth, logwood tincture, and injections of tannic acid, ice cold.

Twentieth—Slept well; discharges, sixteen, nearly all containing blood; tongue furred and red at edges and tip; pulse, one hundred

and twenty-six; skin hot; tenderness in iliac fossa undiminished; great vesical irritation; thirst considerable; appetite poor. Gave thirty grains of ipecac. at ten A. M., (guarding it by the hypodermic use of morphia); continued the local treatment.

Twenty-first—Slept four hours after the ipecac. On waking, had two large, thin and brown dejections in quick succession, unaccompanied by straining, but containing a trace of blood. Has had nine other fluid actions since, without blood. Pulse, one hundred and fourteen; tongue less furred; skin moist; tenderness less; tormina gone; patient says he is much more comfortable; some appetite; thirst less. Repeated ipecac. and morphia.

Twenty-second—Slept yesterday two hours after taking the ipecac.; awoke, and had one thin, fluid action; slept an hour, then had three thin brown dejections, about forty minutes apart; got his hypodermic dose at nine P. M.; slept till midnight; three fluid dejections in the succeeding three hours; repeated the hypodermic; slept three hours more; had, in all, seven dejections, all thin and brown, and but one containing any blood; feels nicely; relished food; says he is stronger; pulse, one hundred and thirty-two; skin pleasant: tongue coated, but less red at edges; ipecac. twenty grains; the hypodermic injection every six hours.

Twenty-third—Slept well during day and night; took food with a relish; feels stronger; discharges, thirteen, only one containing blood, the remainder showing some attempt at fecification; pulse, one hundred and twenty; tongue clean; skin soft; ipecac. ten grains; hypodermic injection.

Twenty-fourth—Slept well; appetite continues good; says he is improving; discharges, eight, seven clearly fecal, one with blood; pulse, one hundred and twenty; tongue less coated; skin moist; repeated ipecac. and hypodermic injection.

Twenty-fifth—Had a good night; took food freely; discharges, seven, no blood, thin, fecal, brown, yellow, large; tongue, clean, moist; pulse, one hundred and fourteen; skin moist; gave a scruple of quinine in three doses; omitted ipecac.; used the hypodermic syringe.

Twenty-sixth—Slept; feels better; is hungry; discharges, seven; large, loose, brown; pulse, one hundred and twenty; skin dry; tongue furred; ordered five grains of tannin every two hours till twenty are taken; continued morphia.

Twenty-seventh—Slept; discharges, fourteen, yellowish brown, fecal, decidly diarrhœic; pulse, one hundred and eight; tongue, dryish;

skin, soft, pleasant; appetite, good; strength improved; to have twenty grains each of tannin and quinine, in four doses, three hours apart, and logwood and chalk mixture.

Twenty-eighth—Had a good night; looks cheerful; discharges, five, thin but feculent; tongue, moist and white; pulse, one hundred and eight; skin soft; appetite good; to restrain the bowels if necessary by rectal injections, and to have no other medicine.

Twenty-ninth—Had an uninterruptedly good night; discharges, three, one of well-moulded feces; pulse, one hundred and two; tongue, white, moist; skin pleasant; appetite good; directed acids, barks, quinine and a general line of tonics, which resulted in a good recovery.

CASE II—Mrs. B., married, the mother of a family. Had suffered for three weeks with a slight dysentery. I saw her first the day that the case number one came to town. Her condition was materially that of Mr. P. Her dejections were mucous, bloody, accompanied by straining, and numbered from ten to twenty in the twenty-four hours. She got the same treatment given to case first, to-wit: Salines on Sunday; acids Monday; quinine Tuesday; opiates Wednesday; and astringents Thursday; and all these different methods were pushed to the full, but without benefit.

Friday—She had ipecac. At this time her pulse was one hundred and thirty; tongue furred; skin hot; discharges, thirteen in the previous twenty-four hours, mucous, bloody, straining. At times she wandered.

Saturday—Slept some; discharges, ten, three contained a small quantity of blood, the remaining seven were brown, thin, showing but little mucus; pulse one hundred and twenty; tongue furred; skin moist; appetite, none; mind, the same; had twenty grains of ipecac., and morphia hypodermically.

Sunday—Had tolerable sleep; less flighty; discharges, six, brown, somewhat fecal, without blood or mucus, or straining; she is better; expression good; got ipecac. at nine-thirty A. M.; vomiting at ten; gave chalk mixture, logwood, bismuth, and creasote internally.

Monday—Rested quietly until midnight, when she vomited; had a rigor at two A. M.; became again delirious; expression bad; eyes sunken; tongue moist; pulse, one hundred and forty-four, feeble, quick; skin cool. Ordered brandy, quinine, musk, camphor, beef tea.

One o'clock, P. M.—Still delirious; pulse, one hundred and forty-four, failing; skin moist, cool; no discharges since Sunday. Stomach

refused all medicines; features became pinched; sank gradually, and died at 8 P. M. No post mortem.

CASE III—J. G., æt. thirty-four, a policeman, of temperate habits. Had from four to ten dysenteric discharges daily for nine weeks. He was treated by three Fellows of the College—one trusted to salines, another gave opium and astringents, while the third used bismuth, astringents, poultices, injections, &c. I saw him in consultation, and his condition was as follows: Expression unhappy; skin dry; pulse, one hundred; tongue furred, white; temperature one hundred; appetite poor; no thirst; slept well when not called to stool; discharges, six to ten, small, mucous, bloody, accompanied by straining; slight tenderness over the ascending and descending colon. Ordered thirty grains of ipecac. Next day his expression was more cheerful, skin pleasant; tongue clean; pulse, eighty-four; temperature ninety-eight; some appetite; no tenderness over the colon; discharges four, large, thin, brown, without blood, mucus or straining; had twenty grains of ipecac. that night, ten grains each the two following nights, and on the fourth day reported himself well.

CASE IV—A minister, æt. forty-two; had dysentery for two days. The disease resisted oil, salts, opium and quinine, conjoined with the local and hygienic treatment usual in such cases, and was cured in thirty-six hours by two doses of ipecac., one of thirty, another of twenty grains.

CASE V—A boy, æt. seven, with a dysentery for six days, which proved rebellious to Crab Orchard salts, opium, lead and astringent injections, was relieved by three doses of ipecac. of five grains each.

CASES VI, VII, VIII, XIX, were in children, aged respectively, two, four, nine and eleven years.

In the first, it had existed one day; had resisted salts and morphia, and was relieved by two doses of ipecac.

In the second, the child had been sick four days; it had grown worse under Hope's nitric acid mixture, opium and salts. Four doses of ipecac. relieved it.

The third case had suffered for thirteen days. Had taken all the usual remedies, and was believed, both by the parents and the physician, to be past cure. She was on the chamber every few minutes. She had fever; insatiable thirst; tenderness over the whole colon; a red and furred tongue; no appetite; much vesical irritation—altogether, was as wretched as she well could be. Five portions of ipecac. relieved her—iron, quinine, good food and time cured her.

The fourth case had for three days a dysentery which paid no heed to the salines or opium, but which yielded to the second dose of ipecac.

Cases X to XV, are so nearly similar that a report of one may be taken as a fair picture of the entire group. Three of them were seen in consultation, three occurred in my own practice.

A German woman, æt. thirty-one, had been treated for a week for a dysentery of a more than usually violent character, by an excellent practitioner. She looked sick; had extreme tormina and tenesmus; from twelve to thirty small discharges in twenty-four hours; pulse, one hundred and eight in the forenoon, rose to one hundred and twenty in the afternoon; temperature one hundred to one hundred and two; skin hot; tongue furred; thirst great; anorexia; tenderness over the descending colon. She got half a drachm of ipecac. the first day, and morphine hypodermically at night. Three other doses of ipecac., of twenty grains each, and two of ten grains, completed the cure. Within three hours after taking the first portion, the discharges lost, in the main, their dysenteric character, and began to diminish in frequency. * * * * * * * * * *

I venture to think that the hypodermic administration of opium is a better mode of preparing the stomach for the reception of ipecac. than that in common practice. I further believe that peppermint water is a better vehicle than the tincture of orange peel for exhibiting the powder.

CASES IN OPHTHALMIC PRACTICE.

BY C. E. WRIGHT, M. D., INDIANAPOLIS.

FOREIGN BODY IN THE EYE FOR EIGHTEEN YEARS.

A man, aged fifty years, applied for relief March 13th, 1869. Eighteen years ago, while engaged in drilling, a small chip of stone was driven into the left eye, and could not be removed. After suffering for some time, he recovered tolerably good vision, and the particle of stone gave him no trouble until three years ago, when repeated attacks of inflammation soon destroyed all usefulness of the eye and gave him intense pain, disturbing his rest and unfitting him for work.

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When I first saw the patient, he presented a most miserable appearance. There was loss of appetite, wasting of flesh, and a peculiar pinched expression of the mouth and left side of the face, caused by the agonizing pain. The eyelids were very red and swollen, and from the palpebral fissure bulged forth the staphylomatous cornea. There was also a scleral staphyloma about three lines from the lower portion of the cornea. The eye and its appendages were intensely injected. Treatment to subdue the inflammation with a view to extirpate the globe was unsuccessful, although continued for one month. Slight pressure upon the scleral staphyloma greatly increased the pain and caused a desire to eject the contents of the stomach. At this protrusion, supposing the cause of the trouble might be there, I made an incision extending a quarter of an inch on each side and through the sclerotic prominence, and extracted a shriveled and cataractous lens. If the stone was at the point of incision, it must have been expelled by the sudden gush of fluid, as it could not be found. Although the patient was so sensitive to pressure, he did not feel the cutting of the knife. Perfect relief from pain followed the operation. The globe shrank to about two-thirds the natural size, and formed a most excellent stump for an artificial eye, which I introduced on the 18th of May, three weeks after the operation. The patient has worn the eye comfortably ever since, has enjoyed perfect immunity from pain, and has gained flesh rapidly.

EXTRACTION OF CATARACT.

A woman aged about eighty, from whose left eye I had successfully extracted cataract, was desirous of having an operation performed on the right eye.

On the 7th of June, assisted by Dr. Fletcher, I removed the cataract by the modified linear method of extraction, (sclerotic section with iridectomy). Four days after the operation the patient could distinguish objects. Owing to the difficulty experienced in cutting the conjunctiva with the knife, in completing the section through that membrane, I prefer using the knife as an elevator and dividing the conjunctiva with scissors.

The patient is at present writing (July 20th), having good use of both eyes with the aid of suitable glasses.

SCLEROTITIS RELIEVED BY EXTRACTING A CARIOUS TOOTH.

A young woman, æt. twenty-five, came to me June 7th, with cir-

cumscribed sclerotitis about the insertion of the external rectus muscle of the right eye. There had been no mechanical injury to the eye. Patient was experiencing no other difficulty save a severe aching of the second molar tooth on the same side. There was profuse lachrymation of the right eye. Treatment produced no perceptible good until the carious tooth was extracted, when the inflammation subsided as if by magic.

ON THE CAUSE OF THE DIASTOLE OF THE VENTRICLES OF THE HEART.

BY A. H. GARROD,
St. John's College, Cambridge.

The existence of an active diastolé of the ventricles of the heart following each systolé has been long recognized by physiologists, and there have been several explanations given of the phenomenon; but they are all subject to grave objections, and fresh methods of research have overthrown them one after another.

The object of the present article is to show that this active diastolé is mainly dependent on the turgescence of the walls of the heart, consequent on the flow of blood into the coronary arteries immediately after the systolé.

The experiments of Vaust in 1821, together with the known anatomical arrangement of the commencement of the aorta, strongly favor the supposition that during the ventricular systolé the circulation in the walls of the heart ceases on account of the close relation between the segments of the aortic valve and the orifices of the coronary arteries.

Immediately the aortic valve is closed the impediment to the flow of blood into the coronary vessels is removed, and the sudden repletion thus caused, directly after the closure of the valve, produces an equally sudden turgescence of the walls of the ventricles, the auricles from their thinness not being similarly affected. This turgescence of the tissue of the heart produces an active opening out of the cavities of the ventricles, and in a very short time they reach their maximum size.

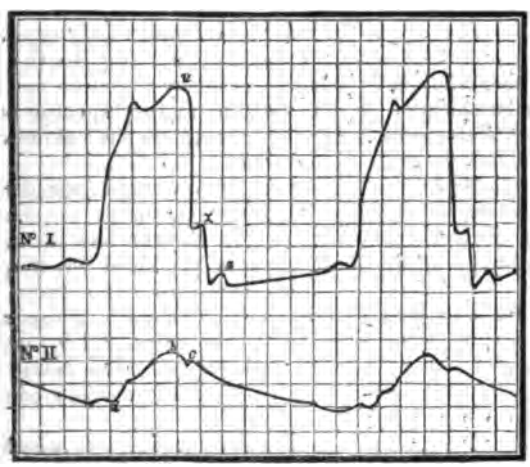
The following experiment supports this theory: Take a sheep's heart which has at least two inches of the aorta left on; attach the cut end of the aorta to a pint syringe full of water and inject; the first effect of this operation is the closure of the aortic valve, immediately after which water enters the coronary arteries, the ventricular walls swell and the cavities of the ventricles open out to their full extent. It will be then found that the heart is tough and not easily compressible, and if it be cut in two between the apex and the base, the halves

shew the cavities fully dilated, and they remain so until the water has escaped from the cut orifices of the vessels. The shortness of the coronary arteries and the sudden way in which they break up into minute ramifications favors the rapid turgescence of the heart walls.

If this theory be correct it follows that there must be an absorptive force exercised in both the ventricles immediately after the closure of the aortic valve, and Marey found that to be the case when he placed in either ventricle an ampoule registering negative pressures only.

The relation between the cardiograph traces from the ventricles and aorta throw so much light on the point under consideration that a detailed description of them will not be out of place.

The diagram is taken from Marey's work *De la Circulation du Sang*, p. 189.



No. I. is the trace from the left ventricle.
No. II. is from the aorta.

Simultaneous events are recorded in the same longitudinal lines, and the traces by their rise and fall indicate alterations of pressure in the ventricle and aorta respectively.

No more reference will be here made to the systolic than is necessary to explain the diastolic movements.

Towards the end of the cardiac systolé, the pressure which continues to increase in the ventricles (v) diminishes in the aorta (b), because then the latter receives less blood from the heart than it transmits to the capillaries.

After this, it is considered by Marey that the undulation x in the upper trace corresponds with c in the lower, and that they are both caused by the closure of the aortic valve; he also thinks the fall between x and z in the upper trace to be due to the relaxation of the ventricle, and, without explaining why, states that at that moment the pressure falls ordinarily below zero. But on carefully looking at his own diagram, as copied above, it is clearly seen that the undulation c

in the aortic slightly precedes *x* in the ventricular trace, and this together with the results obtained by Chauveau, by means of his combined haemadromometer and sphygmoscope, and confirmed by Lortet, leads me to doubt the correctness of Marey's explanation and to advance the following:

During the main ventricular descent the aortic pressure increases (*c*), probably from the rise of the base of the heart after its contraction, just as at the commencement of the systolé it falls (*a*) from the opposite cause.

When all contraction has ceased, the only impediment to regurgitation from the arteries, is the passive resistance of the ventricular walls, which is comparatively slight; so that blood flows back to the heart, compressing the ampoule into the ventricle and causing the elevation *x* in the upper trace, while it necessarily produces a similar depression in the lower one.

When the reflux of blood has become sufficiently rapid, the aortic valve closes, and in so doing puts an abrupt stop to the ventricular rise *x*. Immediately after this the coronary repletion and consequent turgescence commences, as shewn above, and by opening out the cavities of the entricles, diminishes the pressure on the contained ampoule, and so depresses the trace below zero.

This tendency to the formation of a vacuum, together with the associated raising of the base of the heart, causes so great a rush of blood from the auricles, which as Mr. Bryant has shown, are then quite full, that a slight undulation is produced in the ventricular trace *z*.

The increase in bulk of the ventricular walls, consequent on the coronary repletion, takes place in all directions, and by expanding the whole conical heart, pushes the base up into the cavity previously occupied by the full auricles, which it simultaneously empties by the absorptive force.

This theory being true, the heart is a machine in which simplicity of action and economy of force are most marked. The systolic movements fill the reservoirs which are to feed the cavities they empty; and all the diastolic forces are expended in active preparation for the succeeding systolé; the circulation in its walls besides its primary object, even aiding its mechanical function.—*Journal of Anatomy and Physiology*, May, 1869.

TREATMENT OF SUNSTROKE.

(This is the concluding portion of a lecture on Sunstroke, delivered by Dr. G. M. Smith, at the New York Hospital, and found in the *Medical Record*, July 15th:)

I come now to speak of the *treatment* of sunstroke. In speaking of the therapeutics I must recall the ordinary varieties of the disorder. The milder form, or that of ordinary syncope, is to be treated,

as has been before stated, like cases of faintness; the graver form of syncope, or that of sudden and profound collapse, requires the immediate exhibition of restoratives. The nervous system has been overwhelmed, and vital action has almost ceased. The means suited to relieve such a condition are obvious.

We will consider the treatment of a more typical case. What indications are there to guide in its management? Under ordinary circumstances man maintains a temperature of about 98° F. If the weather is extremely cold, and if, by reason of improper food, raiment, or shelter, he is unable to generate and maintain the proper amount of heat, his body becomes cooled, and a fall in temperature of a few degrees makes him lethargic. When in this condition he is readily frozen to death.

Now what occasionally happens in our midst during the intensely hot weather? The same vital action is generating in man a uniform warmth. Unsuitable aliment, and clothing, conjoined with exposure to an unusually heated atmosphere and to other unfavorable conditions, favor an undue accumulation of heat in the body. The individual falls insensible, the thermometer generally indicating that his temperature is above the normal standard.

In pyrexial disorders, when the temperature is high, we endeavor to lessen its intensity by bathing the forehead and by the internal administration of water and refrigerating draughts. Such means are grateful to and are desired by invalids.

Patients in the condition before indicated are, as we have said, overheated, and it seems rational to attempt to reduce their temperature. They are insensible and can not swallow cooling drinks, and we should therefore apply cold to the head, or, what is better, to the arms, and further even to the neck and chest, and thus expose a larger surface in which the blood can be tempered.

If the case is an extreme one, and the temperature is very high, it may be well to strip off all the clothing and sponge the entire body with cold water, or to use the sudden cold douche; and if these means are insufficient to cool the patient and to rouse him, it may be necessary to apply ice to the head and axillæ, and to rub the trunk and extremities with the same material.

The use of ice in such cases was introduced into this hospital in 1857, by Dr. B. Darrach, at that time Resident Physician. In the *American Journal of the Medical Sciences* for January, 1859, he published a report of four cases treated in this manner; three recovered and one died. In the fifty-three cases to which I have alluded ice to the entire body has scarcely been employed. It has frequently been applied to the head, but for general cooling it is doubtless safer to rely upon sponging and the douche.

It should constantly be borne in mind that cold is a most powerful remedy. These patients have a tendency to collapse, and if intense cold is unnecessarily employed, it may hasten such an unfortunate condition.

Be careful, therefore, to suit the degree of the cooling process to

the gravity and condition of the patient, and carefully watching the effect of treatment, cease the applications at the earliest practicable moment. Resort is not to be had to the ice frictions until is is found that cool sponging or the douche have failed to reduce the temperature and to revive to partial consciousness.

Some patients come into our hands while in a state of collapse, being cadaverous in color and temperature. It would obviously be improper to employ such treatment in these cases; they have passed the stage in which refrigerant means are indicated, and now require artificial heat, sinapims, warm frictions, and stimulating enemata to restore them.

In many cases in which the cooling process is applied, we find that the temperature of the body has diminished, the respirations become more natural, the pulse less frequent, and that consciousness has returned. This favorable condition may occur in a few moments or may not be reached for several hours, during which time, however, the harsher method of treatment is not to be continually applied, but the gentler partial applications.

In some instances the temperature falls, but there is imperfect consciousness and delirium—such patients are to be carefully dried, placed comfortably in bed, and stimulating enemata exhibited, while the head can be kept cool if extraordinarily heated. As the lungs are generally early congested, it is desirable to place sinapisms on the extremities and chest, or upon the latter dry cups may be employed. By thus favoring the peripheric circulation we lessen the liabilities to pulmonary and to other centric engorgements.

Dr. Beatson, surgeon in the India service, has encountered sunstroke among the troops under his charge, and gives the following concise directions in reference to the immediate treatment: "Unfasten as quickly as possible the man's dress and accoutrements, to expose the neck and chest, get him under the shade of a bush, raise his head a little, and commence the affusion of cold water from a sheepskin bag, continuing the affusion at intervals over the head, chest, and epigastrium, until consciousness and the power of swallowing return. When this takes place the affusion may be stopped and a stimulant mixture given occasionally in small doses."

In regard to the use of stimulants, I would remark that the same caution must be taken in prescribing them as in ordering cold applications. As soon as the patient can swallow, water can be allowed. If the pulse is frequent and feeble, stimulants are to be given, regulating the quantity by the effect produced. I have already spoken of the condition of the circulation in the malady under consideration. In administering the alcoholic and diffusive restoratives, be governed by the force and frequency of the pulse. Their inconsiderate exhibition will prove as injurious as their judicious employment will prove salutary.

To illustrate the promptness with which patients can be restored, it may be stated that eleven of the cases, to which allusion has before been made as having been admitted here in an unconscious condition

or nearly so, were discharged relieved on the same day; three on the fourth day, &c.

Such patients, on being discharged, should be advised to avoid as far as possible physical and mental labor, and to avoid exposure to the sun for some days after their convalescence, and should be cautioned to give heed to these points for some time after their health has been restored. Inattention to these precautions may induce morbid nervous phenomena, from which relief may never be obtained.

A word in regard to the *prevention* of sunstroke. Fortunately there are but a few days in the year in which we are liable to be overcome by the heat. During extraordinarily warm weather, it is especially desirable to avoid all enervating influences. We are, as it were, suddenly transported to the tropics, and are unacclimated. The pursuits of life are not materially intermitted, and attention to usual duties may provoke the disorder. The disease is by no means confined to the laboring classes, though it is more common among them.

As diaphoresis is generally profuse in warm weather, so there is a corresponding thirst. It seems proper to assuage such natural craving by cool water in suitable quantities. The excessive use of cold or iced water has been condemned, and has been regarded by some as a cause of sunstroke. We have all experienced more or less inconvenience from drinking such draughts when heated. Dr. Swift, in analyzing the causes of the sixty cases of insolation occurring here in 1853, came to the conclusion that drinking cold water hastened the development of the disease. He cited the case of a sailor who, having been at work in the sun, drank freely from a bucket of hydrant water, and after plunging his head into it, immediately fell insensible. It is not stated which form of sunstroke was thus excited. It may have been that of syncope. The system, however, should not be allowed to suffer for want of water, for abstemiousness I should infer would induce the disease. Water is to be taken that it may perform its ordinary office, in this instance, particularly, that it may moderately temper the blood and be evaporated from the nostrils, air-passages, and skin, and thus gradually cool the body. It does not, however, seem to me desirable to induce sudden shocks of the system by frequently drinking very cold beverages in large quantities. There may possibly be febrile reactions in the system after the chills induced by such draughts.

There is a professional as well as popular impression that the excessive use of very cold water will sometimes induce fatal results; and while there is any room for doubt on the question, is it not the part of prudence, at least, to abstain from such excess? A consideration of the immediate effects of cold water upon the system is a topic worthy of extended observation, but upon which my present limits will not allow me to enlarge.

Our ability to avoid disease should not ordinarily depend on the use of alcoholic stimulants. Intemperate habits enervate, and an unaccustomed and unnecessary temporary excitation at the time may be injurious or may be followed by a depression of the vital powers. There are doubtless conditions of the body in which cordials prove

salutary; such cordials enabling an enfeebled body to resist extremes either of heat or of cold. But I confidently believe that the majority of people should avoid stimulants, and that they would derive advantage during summer by using chiefly as a beverage, good water, which at times may be acidulated and sweetened. This remark particularly relates to those who are in the enjoyment of ordinary health, and who are still in the prime of life.

You are doubtless acquainted with the experiments of Franklin, Davy, Rumford, Coulier, and others, in regard to the conduction, radiation, and absorption of caloric. The scientific facts established by these observers should guide us in the selection of color and of the fabric of our clothing. There are few of our inhabitants so poor that they can not be suitably attired. Our laborers could readily wear a cheap white or light-colored garment over the dark *red* and *blue* shirts in which they so usually toil, and to which they are predisposed, by reason, I believe, of some fancied efficacy to be derived from the dye.

Dr. McDowall, Assistant Surgeon of the Bombay Army, in writing in 1865, on the color of clothing as influencing the temperature, health, and comfort of the wearer, has given his personal experience. He says: "I well remember that when encamped on the shores of the Bosphorus, in Turkey, a little incident occurred which vividly impressed this physical fact on my memory and shoulders. The forenoon being bright and inviting, we (some other officers and myself) determined, Leander-like, to lave our limbs in the classic waters of the East, though not precisely at the same spot he patronized. The walk was pretty long and hot. We one by one took our coats off and carried them on our arms, both on going and coming from the bath. I wore a cherry-colored flannel shirt, and although all our shoulders were more or less burnt by exposure while in the water, I was literally scorched, and for some days suffered greatly from the slighest movement or friction of my coat. We all suffered in *exact proportion to the depth of shade of our flannel.* Now, in the jungle in the hottest weather, and in the sun, I have often ridden, and do ride still, both for experiment and comfort, in my shirt-sleeves; but that shirt is *white.* Any other color requires a proportioned thickness—nay, even padding, according to some."

No less attention should be paid to the covering of the head. Hats should be made of light-colored straw, or felt, and the latter should allow of free ventilation. Assistant Surgeon A. A. Woodhull, U. S. A., in his report to the Surgeon-General, in April, 1868, upon the uniform and clothing of our soldiers, in referring to this subject, has said: "But, whatever covering is worn, it must be light in color, and be raised from the crown, to save the soldier from the disastrous effects of direct solar heat and confined hot air."

PROCEEDINGS OF MEDICAL SOCIETIES.

PORTLAND, IND., JULY 17, 1869.

The Jay County Medical Society met pursuant to adjournment.

The President, Dr. Wm. Freeman, in the chair.

The Secretary called the roll. Members present: Drs. C. L. Arthur, G. W. Shephard, T. L. Shephard, T. A. Cox, Jos. Watson, B. R. Freeman and J. E. Markle.

The minutes of the previous meeting were read and approved.

The credentials of W. G. Smith and L. G. Ralston having been examined and reported favorably upon by the Censors, they were unanimously elected to membership.

Reports of committees were then read and thus disposed of:

Dr. Reed, on Diagnosis of Dysentery, was continued.

Dr. Brewington, on Pathology of Dysentery, not present.

Dr. Wm. Freeman read an essay on Prognosis of Dysentery.

Dr. J. E. Markle read an essay on Treatment of Dysentery,

Dr. B. R. Freeman read an essay on the Diagnosis of Erysipelas.

Dr. G. W. Shephard read an essay on Pathology of Erysipelas.

Dr. W. H. Vance on Prognosis and Treatment of Erysipelas, was continued.

Dr. T. A Cox on Diagnosis of Acute Rheumatism, was continued.

Dr. T. L. Shephard read an essay on Pathology of Acute Rheumatism.

Dr. Jos. Watson read an essay on Treatment of Acute Rheumatism.

The different essays were discussed at some length, and, on motion, they were placed on file.

Dr. W. G. Smith presented a patient, male, fifty-five years of age, who was examined by the Society; phthisis pulmonalis was diagnosed; treatment recommended, alcoholic stimulants, cod liver oil, syrup iodide ferri, open air and exercise.

Dr. C. L. Arthur made an oral report in the case of a lady he was called to attend. She had been delivered by a mid-wife. Immediately after her delivery they placed her in a tub of cold spring water and bathed her all over. This treatment was continued for seven days,

with the addition of cold water injections into her rectum and vagina. (The husband was sick at the time, and knew nothing of her treatment.)

I was called to see her the seventh night after her confinement. Found her with puerperal mania; pulse one hundred and eighty; pain and tenderness over the abdomen; the lochia had ceased and the bowels were confined; took four men to hold her in bed. Gave a purgative, which operated freely; used hypodermic injection of morphia every hour for three hours, when she became quiet and went to sleep. Returned next day; found her as bad or worse than on the previous day. Gave her a hypodermic injection of one and a-half grains of morphia, with no effect; repeated in two hours, when she became quiet and slept soundly for four hours, when she awoke and her reason was restored in a great measure, and continued quiet until the next day two o'clock, when she expired, the victim of officious old women.

An election of officers was held and resulted as follows: For President, Dr. J. E. Markle; Secretary, Dr. G. W. Shephard; Treasurer, Dr. C. D. Arthur; Censors, Drs. Wm. Freeman, C. L. Arthur, and T. L. Shephard.

The President made the following appointments for essays to be read at the next meeting:

Dr. C. L. Arthur, Diagnosis of Pneumonia.

Dr. G. W. Shephard, Pathology of Pneumonia.

Dr. Joseph Watson, Prognosis and Treatment of Pneumonia.

Drs. B. R. Freeman, T. L. Shephard, W. G. Smith, L. G. Ralston, and Wm. Freeman essays on subjects of their own choosing.

The Secretary was ordered to prepare and furnish a copy of the proceedings for publication in the *Western Journal of Medicine.*

On motion, the Society adjourned, to meet on the 9th day of October, 1869, at New Mount Pleasant, Ind.

J. E. MARKLE, M. D., *Secretary.*

BRAINARD MEDICAL SOCIETY.

The Society met in Winamac July 7th, 1869. Proceedings read and approved.

Dr. J. H. Smith presented a patient for examination, who was examined and the treatment discussed.

Dr. W. T. Clelland read a paper on surgery; Dr. A. R. Thompson one on the mechanism of parturition.

Dr. Eaton, chairman of the section on Materia Medica, Therapeutics, &c., presented a paper on bitter tonics in general and Euonymus Atropurpureus in particular.

A communication was read from Dr. G. V. Woolen, secretary of the State Medical Society, asking the members to forward their names and remittances, if they wished the Transactions for the year.

The *Western Journal of Medicine* was selected as the organ of communication for the Society.

Dr. J. W. C. Eaton raised a club of five for the above named journal.

Adjourned to meet in Winamac August 4th, 1869.

I. B. WASHBURN, M. D., *Secretary.*

CORRESPONDENCE.

CINCINNATI, JULY 25, 1869.

MR. EDITOR: In the July number of the *American Journal of the Medical Sciences* Dr. Edward Hartshorne, of Philadelphia, thus alludes to my correction of what I believed, and still believe, to be an error in his comments on the earliest historical notice by British writers of "weight extension" in the treatment of fractured thigh:

"Dr. Geo. C. Blackman (*Western Journal of Medicine*, May, 1869,) presents the following note with a quotation from the *Chirurgical Observations and Cases* of William Bromfield, a well-known contemporary of Pott, and surgeon to St. George's Hospital in London, in order to correct an imaginary error he attributes to me in my comment on the mistake of Heister, then of Bell, and afterwards of others, in regard to the pulley-extension adopted and recommended by Fabricius Hildanus as the method of Ambrose Pare."

Now, in our brief remarks on Dr. Hartshorne's most excellent paper we had but one object in view, and that was to show that Dr. H. was in error in stating that "the first European writer, out of the continent at least, who definitely speaks of this mode of fractured thigh, &c., &c., is John Bell. (*Principles of Surgery*, fourth edition, Edinburgh, 1801)." We regret that Dr. H. did not place the extract just quoted from his paper in connexion with the copy of our remarks which he has

published in the July number referred to, as we think the majority of readers would have agreed with us, that our comments were intended only for his statement that John Bell, in 1801, was the first to notice the weight extension. Nor are we willing to admit that Bromfield's allusion to the practice is so very "vague," when in his *Chirurgical Observations and Cases* (London, 1773), referring to different methods, of treating fractured thigh then in vogue, he adds:

"As short splints and stretched out limbs are, by them, thought the best method of practice, *and even a large weight hung from the ankle-joint, to keep the muscles of the thigh extended* when the femur is fractured, is not everywhere exploded."—P. 112.

Again, Dr. Hartshorne remarks:

"I trust enough has been said to show that Dr. Blackman's collation of one sentence of mine with one of Bromfield's affords no evidence of hasty compilation in what he is pleased to call an "elaborate paper."

On the contrary, nothing was further from our thoughts than to attempt to furnish such evidence; for it is seldom that we have an opportunity of perusing a paper presenting such careful research, and which, in our humble opinion, seems so exhaustive.

In conclusion, he adds:

"If Dr. Blackman will take the time and trouble to follow the same course of inquiry, really *at first hand*, as I certainly did in the course of an investigation for another and more important purpose, I think he will agree with me in the conclusion that Heister mistook Hildanus, thus committing "erroneous compilation," and that John Bell and others must have been misled into the same mistake through "second hand quotation."

To this we can only respond, that it is not very probable that any one who has perused Dr. Hartshorne's truly elaborate papers, will deem it necessary "to take the time and trouble to follow the same course of inquiry"—nor will any one, we think, be disposed to dispute the conclusions to which he has arrived in reference to the "erroneous compilations," which have been committed through "second hand quotations." Truly Yours,

GEO. C. BLACKMAN.

SPRINGFIELD, OHIO, JUNE 29, 1869.

EDITOR OF JOURNAL—*Dear Sir:* While every person, especially every physician, should rejoice at the appearance, and herald the triumphs of any agent which relieves human suffering, yet I think it as

much a duty to expose cheats and denounce pretended discoveries, which only gull the profession, and through them the public. For this reason I beg leave to speak of my "findings" in the trial of local anæsthetics.

I purchased last winter of Max Wocher, of Cincinnati, a fine apparatus and began to use it to some extent in my practice. I used pure sulphuric ether in my experiments; but as my objections apply to the *freezing*, they would be the same for rhigolene or any other agent adapted for use in the instrument in question.

In the first place, the application of the agent is attended with most unpleasant sensations. In anæsthetizing an abscess my patients would generally kick around and screech more than if I had plunged a lancet in without any previous process. After freezing, the cutting was not felt much, of course, though as a general thing, the patient refused utterly to tolerate the spray until the parts were in condition for a painless operation. But the tug of war comes when the tissues begin to thaw out. If you want to have a realization of a howling dervish of Khurdistan, just anæsthetize a felon on a poor fellow's finger and wait till sensation begins to return.

Did you ever, when a boy, snow-ball for an hour, and then stick your fingers into the blaze of a hickory fire? That's something like it. Or, in running bullets, did you ever run one into the palm of your hand? If so, you can realize the delights of local anæsthesia.

I paid Mr. Wocher fourteen dollars for my instrument. It can be bought at a bargain now. A floriculturist might use it to squirt tobacco-water on his plants to kill lice, or an oculist might freeze pig's eyes with it for dissection; but I can never have the face to ask a patient of mine to submit to its tortures again.

Yours very truly, H. S. FULLERTON.

PHILADELPHIA, JULY 15, 1869.

A calm pervades the medical portion of our community. The summer sessions of our medical schools have terminated, and those zealous students who remained to avail themselves of the opportunities afforded in the practical courses of the University, and of the Jefferson Medical College—in the numerous and varied clinical courses in our hospitals, and in the greater advantages offered for extended and careful anatomical investigations in the less crowded dissecting amphi-

theatres, have taken their departure, many to recruit in the fresh air of their country homes, their energies, well-nigh exhausted in following the hurried courses of instruction of the past sessions, and to digest, if that were possible, the mass of information which has been *crammed* into them under the forcing process of our present system of medical education.

The learned Professors, equally exhausted, but compensated in the division of the receipts from the *seven*, instead of the *ten* or *twelve* chairs, as it should be, are resting from their labors. Those not engaged in active practice have retired to their country residences to enjoy rest and quiet—some happy in the possession of a fortunate class of patients, who betake themselves and families annually to the sea-side, have followed their example, and have established themselves in their "cottages by the sea," where they may combine business with pleasure. Again, a few, toilers, workers through heat and cold, have remained at their posts, enjoying the comforts of their homes, and are happy in the preparation of the materials for a new course of lectures, or for a new edition of a successful work.

Recurring to the hard-driven student, I am tempted to ask, when will anything practical be accomplished in regard to the very important question of reform in our system of medical education? Each year, in our National Association, reports are presented, suggestions offered, plans proposed, and discussions held, and still no definite action is taken. Why is this? Is it for the reason that reform is not needed, or are the plans proposed not feasible? I am disposed to think that no question exists as to the need of reform, or of the practicability of some of the plans proposed. Does the difficulty lie in absence of co-operation on the part of the medical schools, and does this refusal to co-operate arise from a desire to avoid division of the fees, which would necessarily follow the creation of additional chairs, and the extension of the course? These are important questions, and the interests of the schools as well as of the students demand they should be answered, and that such action should be taken as will place medical instruction in this country upon a basis in keeping with the progress of the science, and with the spirit of the age in which we live.

During the past spring additional clinical advantages have been afforded the students of our medical schools in the establishment of a clinic for the diseases of women and children at the Philadelphia Hospital, and also of a clinic of diseases of the ear at the Will's Ophthalmic

Hospital. By means of the former, the valuable material in the large obstetrical and children's department of the hospital has been made available for the purposes of clinical instruction in these important branches. The inauguration of this effort to utilize the too-long neglected material of this department is hailed with satisfaction by all of the friends of this institution. It marks an era in its history, and gives evidence of the infusion of a new spirit into its management. It may be regarded as the "beginning of the end" of that unwise opposition on the part of some of the managers, which tended to limit the use of the cases under treatment in the hospital for the purposes of instruction. It seems but just, and due to the large number of students who come from all parts of the country to this city, to obtain their medical education, they should be permitted to enjoy the benefits of instruction in our eleemosynary institutions, toward the maintenance of which they, in a measure, contribute.

It is hoped that the day is not far distant when, by additions to the medical staff, all of the clinical resources of this large hospital will be fully developed and employed for the purposes of instruction.

Through the kindness of Dr. Richard J. Dunglison, I am permitted to lay before your readers the following brief sketch of the life of his father, the late Prof. Dunglison. In a former letter I alluded to the retirement of Prof. Dunglison from active duty, and the remarks made by Prof. Dickson at the commencement exercises of the Jefferson Medical College. On that occasion the Professor expressed the hope that—"At peace with all men, and surrounded by everything

> ——'that should accompany old age,
> As honor, love, obedience, troops of friends,'

he should long remain with us who so truly admire and esteem him." This hope was not to be realized. Disease, which had fastened upon him many years before, and which had been resisted with unexampled fortitude, stayed not its progress, and in one short month after the utterance of this kind wish, exhausted by great and long-continued bodily suffering, though in full possession of his intelligence and "capacious memory," he passed away—profoundly regretted by the "troops of friends who so truly admired and esteemed him."

He was born January 4th, 1798, at Keswick, Cumberland, England. Intending to pursue a mercantile life, his early education was in that direction. Owing, however, to the death of a relative with whom he designed engaging in business, he abandoned the intention of leading a commercial life, and commenced the study of medicine. He be-

gan the practice of his profession in London in 1819, after having fully qualified himself by attendance upon a course of lectures at Edinburgh, one at the "Ecole de Médicine," and several private courses in Paris; he also passed the examinations of the Royal College of Surgeons and the Society of Apothecaries in London, and in 1823 he graduated at the University of Erlangen in Bavaria.

On his return to London, he decided to devote himself to obstetrical practice, and was soon after elected "Physician Accoucheur" to the Eastern Dispensary. In 1824 he announced a course of lectures on "The principles and Practice of Midwifery," to be delivered in the following October. Before the time had arrived for the delivery of this course of lectures, he received an invitation from Francis W. Gilmer, acting in behalf of the "Board of Visitors of the University of Virginia," and who had been sent abroad to select Professors to accept a chair, the duties of which comprised instruction in "Anatomy, Surgery, the History of the Progress and Theories of Medicine, Physiology, Materia Medica and Pharmacy." Undismayed by the comprehensive nature of the duties devolving upon the occupant of the chair to which he was invited, he accepted the invitation, and made arrangements to emigrate.

In October, 1824, he married Harriette, daughter of John Leadam, Esq., practitioner of medicine in Southwark, London, and embarked for this country, which, owing to numerous delays and a long voyage, he did not reach until February 10th, 1825.

Landing at Norfolk, Virginia, he proceeded to Charlottesville, the seat of the University. Here he resided until 1833, at which time he was elected to a chair in the University of Maryland. His residence at Charlottesville he always spoke of as embracing many happy years, rendered so, in a great measure, by the intimate friendship of Presidents Jefferson and Madison.

In 1836 he became connected with the Jefferson Medical College, and removed to this city, where he resided until his death, which occurred April 1st, 1869.

His literary labors began at an early period, and continued without interruption until within a few days of the close of his life, bodily infirmity compelling him then to lay aside his "well-used pen." The results of this indefatigable labor with his pen were numerous contributions to literary and scientific journals, translations from the German and French, and the publication of many standard works upon medical subjects. Of the latter those best known and best received

were, "The Practice of Medicine," "Human Physiology," "General Therapeutics and Materia Medica," of which passed through several editions. His most successful work, and that which has been justly characterized as a monument of patient research, skillful judgment, vast physical labor, and great erudition, was his Medical Dictionary. Numerous editions of this reliable work have been issued from the press, each one "carefully revised and greatly enlarged." The anxious desire of the author "to make it a satisfactory and desirable, if not indispensable lexicon, in which the student may search without disappointment for every term that has been legitimated in the nomenclature of the science," was fully realized. The labor required to accomplish this must indeed have been "something prodigious," the character of which, he remarked in the preface to the second edition, "has been so forcibly depicted by the great English lexicographer as well as the distinguished Scaliger."

"Si quelqu'un a commis quelque crime odieux
S'il a tue son pere, au blasheme les Dieux,
Qu'il fasse un Lexicon: s'il est supplice au monde
Qui le punisse veux que l'on me tonde."

Numerous diplomas and certificates of honorary membership, received from literary and scientific associations of this country and Europe, attested the high estimation in which he was held at home and abroad.

Possessing administrative abilities of a high order, he was often selected as presiding officer of associations with which he was connected. For many years he was Dean of the Faculty of the Jefferson Medical College, and "administered its affairs with eminent success." He had been vice-president of the Sydenham Society of London, of the Pennsylvania Institution for the Instruction of the Blind, and of the American Philosophical Society. At the time of his death, he was president of the Musical Fund Society of this city, and "Emeritus Professor of the Institutes of Medicine and Medical Jurisprudence" in the Jefferson Medical College.

Profs. Pancoast, Gross and Dickson have been chosen to deliver addresses upon his "life and character," before the Faculty of the Jefferson Medical College of Physicians, and the American Philosophical Society. His son, Dr. Richard J. Dunglison, is engaged in the preparation of a memoir of his life.

The whole community, as well as the medical profession, have been called upon to mourn the loss of another of the eminent mem-

bers of the profession, in the sudden death of Prof. Chas. D. Meigs, which occurred June 22d, 1869, near Media, Delaware county, Penn., in the seventy-eighth year of his age. Dr. Meigs was one of the most extensively known, highly esteemed, and generally beloved physicians of this country.

He was born in the State of Georgia, in 1791; graduated at the University of Pennsylvania in 1812, and practiced medicine in his native State until 1820, when he removed to this city. In 1840 he was elected Professor of Obstetrics in the Jefferson Medical College, occupying the chair for nearly twenty years. On his retirement, he was made Emeritus Professor of Midwifery and of the Diseases of Women and Children. He was one of the Physicians to the Lying-in Department of the Pennsylvania Hospital for ten years.

As an author, he enjoyed a world-wide celebrity. An original thinker, a graceful and forcible writer, he imparted to all of his works a character and a beauty of diction which rendered them most attractive.

A cultivated French scholar, one of his earliest efforts was the translation of "Velpeau's Midwifery;" then followed his work entitled "Females and their Diseases—a series of Letters to his Class"—"Various Treatises on Obstetrics and the Diseases of Children"—essays and papers in medical periodicals. During the present year he concluded his literary work by a translation from the French of the novel of "Typhaine's Abbey."

He was very much interested in agricultural pursuits, and had resided for a number of years upon his farm in Delaware county, where he pursued his literary labors without interruption, and indulged his tastes in agriculture.

His health had declined somewhat latterly. He was found dead in his bed—having retired the night before in his usual health. No cause has been assigned for his sudden death.

His son, Dr. J. Forsyth Meigs, of this city, has been selected by the College of Physicians to write a memoir of his life.

Thus, in a short time, have passed away two of the eminent men of our profession. Friends and colleagues for many years, zealous and most industrious workers, unlike in many respects, but alike in the greatness of their intellects, and in the possession of all of those qualities of character which belong to the kind-hearted, benevolent, high-minded and courteous gentleman. In the record of their careers they have left behind imperishable monuments in honor of themselves.

The patient mentioned in my last letter, upon whom amputation at the coxo-femoral articulation was performed by Dr. F. F. Maury, at the Philadelphia Hospital, died two weeks ago—seven weeks after the operation. The disease, for which the limb was removed, returned in the stump, not, however, until union of the flaps had occurred in almost their entire extent, and the ligatures had all come away. As far as the operation was concerned, the case may be regarded as successful—death occurring from the return of the disease.

Dissection of the tumor and surrounding structures discovered an interesting condition in the occlusion of the internal saphenous vein for some distance, by masses of morbid matter, closely resembling the material of which the tumor was composed. At the autopsy the iliac veins were found in a similar condition. This occupation of the veins by diseased matter suggested the question as to its transmission to other parts of the system, and the developement of secondary formations. The evidence derived from this case was against its transmission in this manner, as the organs of the thoracic and abdominal cavities were reported free from disease.

The case of ovariotomy, by Dr. Atlee, reported in my last letter, terminated fatally, on the fifth day following the operation. In this case both ovaries were removed, and the case was complicated by extensive adhesions. As a post-mortem examination was denied, the causes of death could not be definitely ascertained. Since that time the Dr. has performed four operations, all of which have terminated successfully. Of the seven cases, of the new series of one hundred cases, but one has died. In the last case, although there were some adhesions, and the patient was much exhausted by long-continued suffering, the clamp was removed on the fourth day, the sutures on the sixth; and the patient sat up on the eleventh. In connection with this subject, I desire to call attention to an interesting and elaborate article by Dr. Lôen Sköldberg, of Sweden, published in the Swedish Archives of Medicine, on the early history of ovariotomy in England and America, and on the present position of the operation. The question of priority in the performance of this operation, for a long time a mooted one, is ably and fully discussed by the author. Referring to the cases of Houston, 1701, Percival Pott, reported in 1783, D. Zondi, and Laumonier, 1781, (Galezowski's he does not mention,) he argues that, as these cases were either partial or accidental, and not undertaken after previous diagosis, the claims of priority for these operators can not justly be conceded. He concludes that, "America is

the country which, with justice, claims to be regarded as the cradle of ovariotomy, and to Dr. Ephraim McDowell, of Kentucky, (born in Virginia November 11, 1771, died at Danville, June 25, 1830,) belongs the honor of being the first surgeon who, not only after previous diagnosis, undertook the first complete extirpation of a dropsical ovary, but also performed a whole series of these operations."

This, if I mistake not, is the first recognition of our country and of Dr. McDowell, on the part of European authors. This may be regarded strange, in view of the fact that they were so completely established by Prof. Gross in his report upon "Kentucky Surgery," published in 1852, and subsequently incorporated in his "System of Surgery."

Dr. S. W. Gross, the talented lecturer upon "Diseases of the Urinary Organs," in the summer school of the Jefferson Medical College, sails for Europe in a few days. He designs visiting the centres of medical learning on the continent and in England. He will devote most of his time to the study of his specialty, under the instruction of Sir Henry Thompson, in London.

We wish him "bon voyage." J. E. M.

BIBLIOGRAPHY.

CLINICAL LECTURES ON DISEASES OF THE URINARY ORGANS, DELIVERED AT UNIVERSITY COLLEGE HOSPITAL.

BY SIR HENRY THOMPSON,

Surgeon Extraordinary to H. M. the King of the Belgians; Professor of Clinical Surgery, and Surgeon to University College Hospital. London. With Illustrations. Henry C. Lea, Philadelphia, 1869. Pp. 204.

The American publisher has done the profession in this country a good service in issuing this truly practical and most valuable volume. It contains the lectures which have appeared in an abridged form in the *London Lancet*. Sir Henry informs us in his preface that they were never committed to writing by himself, but were reported verba-

tim by one of their best short-hand writers. He adds: "I now present, in one small volume, * * * the corrected copy in full, unchanged in form, and therefore unshorn of the familiarities which the conversational style peculiar—and, I believe, appropriate—to the class-room demands. And I do this, also, because I prefer that these lectures, originally short, should not suffer any abbreviation, and because I desire to offer, not merely to the members of my own clinical class, but to students at large, some of the fruit of long and careful study in that field of practical medicine in its widest sense, to which they relate."

The following is a list of the lectures: Introductory; Diagnosis; stricture of the Urethra; Hypertrophy of the Prostate and its Consequences; Retention of Urine; Extravasation of Urine and Urinary Fistulæ; Stone in the Bladder; Lithotrity; Lithotomy; Cystitis and Prostatitis; Diseases of the Bladder; Paralysis; Atony; Juvenile Incontinence; Tumors; Hæmaturia and Renal Calculus.

At this time we can only present to our readers the notice of the reprint of this excellent volume, and offer them the table of contents. We need not add that the work is the production of a master, and will prove most acceptable to every practitioner. We are promised a more extended analysis of the volume by one who, himself, has had a large share of experience in the treatment of these trying cases.

CARBOLIC ACID, ITS SURGICAL AND THERAPEUTICAL USES—A PAPER READ BEFORE THE CINCINNATI ACADEMY OF MEDICINE, JULY 17, 1869.

BY WM. B. DAVIS, M. D.

Cincinnati: A. Abraham, Book and Job Printer, 118 West Third street, 1869.

The brochure with the above title was read before the Cincinnati Academy of Medicine. It is contained in the *Cincinnati Lancet and Observer* for July. In its present shape it comes to us as a neat pamphlet of thirteen pages.

Dr. Davis presents a brief *résumé* of the history of Carbolic Acid, and its surgical and therapeutical uses, together with some observations made by himself in relation to its value in the treatment of diphtheria, measles, scarlet fever, small pox, etc. Dr. D. concludes that

in those diseases carbolic acid is a valuable medicine; but we can not say that the statistics presented warrant this conclusion.

There is quite a disposition on the part of many members of the profession, at present, to regard this article as a sort of universal panacea, and, as a consequence, many who use the medicine will be disappointed, notwithstanding its great value as a hygienic, therapeutic and surgical agent. J. R. W.

EMBOLISM.

BY S. D. SEELYE, M. D., OF MONTGOMERY.

From the Transactions of the Medical Association of the State of Alabama, at the Annual Session in Mobile, March, 1869. Montgomery, Alabama, 1869.

Dr. Seelye presents in this paper a record of an interesting case in which fibrous clots were found in the heart after death. This case serves as an introduction to the essay on "Arterial Embolism and Heart Clot," which follows. The literary history, pathology and treatment of Heart Clot and Embolism are briefly noticed in the ten pages devoted to the subject.

The only objection we have to this paper is, that it is too short. Ample justice can not be done to a subject like this, within the compass of the few pages to which Dr. S. has limited himself.

J. R. W.

MISCELLANY.

THE AIMS OF MODERN MEDICINE.—(We are indebted to the *New York Medical Journal* of July, for the opportunity of reading a most interesting essay bearing the above title, and which is credited to the *London Quarterly Review*. The last two pages are given below, in lieu of giving the entire article, for which we regret not having sufficient space. In reading this essay, we could not help guessing at its authorship; *ex pede Herculem*—there is but one man, in the medical profession, in Great Britain, and this is evidently the work of a doctor, that writes as this is written, and that man is Dr. Chambers):

The essential feature in a successful medicine is that it "*endows*" the imperfect body with a renewed function, or "*appropriates*" to its use some substance in which it is deficient.

This view as to the relation of disease and remedy is again growing rapidly, and is year by year more generally adopted by the profession. If printed proof of this be required, it is afforded by a list of the new drugs which have been first brought into general use since the era with which we have been comparing the present. Cod-liver oil, phosphate of lime, ox-gall, pepsine, pancreatine, are familiar instances of novel methods whose intention is to supply a corporeal want; while the advertising sheets of periodicals, and the displays on druggists' counters, show what sort of new preparations it is worth while to invent for the convenience of physicians and patients. Nearly all are of a *constructive* nature. Many of these are devised with narrow views, and prove fallacious accordingly (we may instance the inhalation of oxygen); but their very introduction shows the tendency. Many we do not know how to use yet, and must await bedside experience. Nevertheless, there they are: and the synthetical or creative direction lately taken by chemistry promises a rapid increase in their number.

It may be observed, also, that when a change is made in the explanation given of the action of an old-established treatment of acknowledged merit, that changed explanation always points to material added instead of material taken away. For instance, the beneficial results of vaccination used to be interpreted thus: it was supposed that the vaccine causes a fermentation in the body by which there is effected the destruction of some substance previously capable of accepting the small-pox poison; which, therefore, passes harmlessly through the person. Nowadays the pupil is told that the protecting virus unites with the supposed dangerous substance, and by its presence preoccupies the place which might otherwise have been open to the small-pox. It is suggested that thus it is easier to understand the cessation of the protection after a period of years, and that it is more in accordance with the analogy of nature for a base to be set free by the wearing away in time of its acid, than for a destroyed substance once gone to be created anew.

In all matters medical the high court of appeal is clinical experience. Arguing from this, some have suggested that theory is superfluous altogether, and that all to be done is to use what has previously been found to be useful. This would make all progress to consist wholly in accident. Before the almost infinite combinations of bodily derangement which are daily presenting themselves newly to the sight of the observant practitioner, he would feel utterly powerless, or else he must shut his eyes to any but the very simplest types of disease. This were folly in anybody, but in a consultant it is dishonest, for he is called in for the express reason that the case is one difficult from its novelty or rarity. As a matter of fact, however, few of these objectors ever do prescribe for a sick person without theorizing, and, when they have to put their reasons into words, very wild and absurd they

will sometimes be found. The only originator of action can be theory, and the choice lies between one that is taken up hap-hazard and one that is adopted on rational grounds.

But the high court of appeal is experience. Yes, the poet of the Greek race-course was quite right: "'Tis the trial proves the man." Clinical researches and empirical decisions must always hold the most honorable post of any department of medicine. Never probably was there a time when they were so highly appreciated as now; so that, with much confidence we can leave to be estimated by this measure the restorative system of therapeutics which we have augured to be so rapidly prevailing among our teachers of medicine.

The almost universal adoption, by all hospitals, of a system of registration and case-taking renders the dicta of experience of late years not only much more accurate, but much more rapid than in former times; it also guards against the fallacy of statistics collected for the special purpose of proving a particular point. A few hundred instances, carefully observed and tabulated, will produce an impression more distinct than many thousands loosely remembered and scattered through a generation, while unconscious documentary evidence is the strongest that can be had. An attempt also is being made by the British Medical Association to render available the cases occurring in private practice, by issuing printed schedules to be filled up in a uniform manner. The idea is a grand one, and, whether successful or not, the Association merits the blessing of all time for trying thus to utilize the waste of daily experience.

We must not despise the results of judiciously appropriated accident, leading to the discovery of the use of remedies. Melampus, the soothsayer, physician to one of the obscurer kings of Trace, observed, during one of his country rambles, that goats which had grown morbidly frisky were calmed after having instinctively or accidently browsed on a plant, since called Melampodium. So, on his patron's daughters falling into a similar state, he administered it, and effected a cure. A metropolitan hospital physician, a short time ago, ordered a baby under two years old, in a peculiar morbid state, what he considered the large dose of four drachms of rum. By mistake the prescription was read four ounces; and so the infant, instead of a tablespoonful, had three glasses a day of this powerful spirit. It throve wonderfully; but it was not till the end of the week that the prescriber discovered what a fortunate error had been committed. Now, in either of these cases, would the accident have given instruction, had it not chimed in with a rational theory in the mind of the observer? Deductions from accident offer an instance of the striking combination of experience and theory.

It is no reproach to the goodness of the road, that there are quicksands, into which those who follow the guidance of restorative medicine may easily fall, if they are careless walkers. Those from which at present we foresee most danger are "efforts of Nature," "*la médecine expectante*," and alcohol. The attribution of disease to efforts of Nature has already been alluded to as a valuable reform upon absolute

Galenism. Sydenham assumed that these efforts are necessarily good, and that the principal duty of the physician is to aid them in expelling morbific material, or at all events, not to hinder them doing so. Good for the type, good for the race, good for the kind, good for the kin, perhaps reverence for what Nature really means, will induce us to acknowledge those efforts to be. We will allow that to the case of man, the lessons of "scarped cliff, and quarried stone" do not apply, for supernatural means have been taken to inform us that our type is already moulded on the highest model, and worthy of the highest care. But to the individual Nature is merciless. And it is with the individual that the physician has to do. Will the mother resign to the grave her cross-grained, deformed first-born, because it would be better for the race, nay better for her own immediate kin, that the family should be continued by his younger brother? Many a cumberer of the ground, when laid on a sick-bed, feels that, so far from being missed, his place will be more worthily filled up, after sundry efforts of Nature for the good of mankind have been successful; yet he elects to stay. Many a patient knows that science would be immensely enlightened by a sight of his remains—but he had rather not. Before we assist efforts of Nature, we must have evidence that their end is not our extinction, not a capital punishment for neglecting to use our reason.

La médecine expectante is simply a disbelief in the utility of all interference. A young man hears his elders point out the harm done by some previously popular treatment, but he fails to understand what is substituted for it. So, knowing that a certain percentage of his patients will recover if he does nothing, he takes that course. Let him reflect that possibly the very case before him may be the one which makes the difference in the percentage, which, naturally fatal, may be healed by art, and we think he will be roused to action. Let him also observe that the evidence of history shows a progressive improvement in medicine; the denounced treatment was probably better than that which was popular before it, and that better than leaving the patient to hurt himself by fallacious struggles for health. It is better, therefore, to do something of which he knows the imperfection than to do nothing at all. Asclepiades very properly called all medical science, which does not end in action, "a meditation upon death."

Alcohol is perhaps the greatest danger of the three, inasmuch as its use involves questions of quantity and degree, the solution of which is always painful to superficial minds. Because, in small amounts and in selected cases, it is followed by an increase in the vital functions, there is a tendency to hope from these effects a pure gain of vital force, and to lean on it alone. Experience does not justify that hope; it shows, that, while, up to the limit of aiding perverted digestion, alcohol is a decided restorative and promoter of life, beyond that limit it actually arrests life in a degree proportioned to the dose. The limit differs in every disease; so that, in this powerful agent, instead of having an easily-managed tool, we are wielding a weapon requiring great skill and foresight.

Forewarned and forearmed against these perils, and kept straight by a constant appeal to experience, we feel sure that what we have made bold to call "restorative medicine" can not but prolong human life, and lighten its burdens. We have shown it to be unconsciously adopted by the rising teachers of the present and future, and may confidently expect that at no distant time it will be put more distinctly into form as the true art of healing.

Before we conclude, we would take leave to say a few words as to the duty of the public, in performing their part in promoting the progress of which we have been trying to trace the footprints. Their principal duty bears, like all those which political economists class as virtues, a selfish character; it really may be summed up in an endeavor to set a higher value upon their lives than on their property. The proof of their doing this will be their taking steps to secure, to that profession which guards those lives, opportunities for the highest and most protracted education, and means for carrying out its investigations into nature.

This consummation is certainly far from being yet attained. A tale is told of a Scotch farmer, who protested loudly against the apparently modest sum of half a crown a visit for attendance on his wife—"Eh—it's just ruinous! Half a croon! And I can ha' a coo-doctor for three an' saxpence!" Inasmuch as the human body is neither eatable nor saleable, he reckoned it as of inferior worth to the bovine. A not dissimilar spirit is shown in an unhesitating vote by Parliament of 3,000*l.* for the cattle-plague inquiry, while not a penny was allowed for an investigation into the spread of leprosy in our colonies, while every item of expenditure for increasing the efficiency of the medical profession is haggled over, and every attempt to enforce a higher education looked at with coldness and suspicion, for fear the enhanced goodness of the article should entail a corresponding rise in its price. Surely this is a suicidal proceeding. Let each educated person examine for himself the kinds of knowledge needful for this profession of medicine, and he will not fail to be convinced that not shrewdness, or knack, or habit learned from tradition, can be the chief virtues of its students. There is scope in it for the highest and broadest intellects, and he is most suited to be your physician who is most worthy of the name of man. It is your business to give him every encouragement to make himself so by a leisurely and complete, and therefore, expensive, education.—*London Quarterly Review.*

NEW PHASE OF THE VELOCIPEDE MOVEMENT.—We regret that an unseemly case came into the Durham Borough Police Court on Monday. One surgeon (Mr. Jepson) charged another (Mr. Blackett) with having committed damage in his field by practising on a velocipede. The damage was so slight as not to admit of statement or computation, and so the charge broke down. The misfortune is—the charge being so slight—that local rumor attempted to explain the case by a supposition of professional jealousy on the part of the prosecutor. It is no doubt unpleasnant to have a field cut up with the experiments of

adventurous velocipedists; but Mr. Jepson should have suffered some damage, and have exhausted other modes of redress, rather than take a professional brother into court.—*Lancet*, July 10th.

THE BLESSINGS (!) OF POVERTY.—A series of articles on "Political Economy and its Application to Popular Science Questions," is being published in the *Weekly Scotsman*. The following extract on the benefits of poverty is a good specimen of the writer's style, and worthy the attention of a profession that sees so much of poverty:

"One of the oldest and noisiest of cants of which this world is full, is the cant about the benefits of poverty. Perhaps nobody believes it; but how ready most of us are to enlarge on the inexpressible blessing of having nothing! This cant is the cardinal doctrine of asceticism. It is the cry of all the Senecas that ever lived, whether they have come as Roman stoics, preaching in purple and fine linen and with well weighed epigrams the vanity of riches, or as Puritans, the modern stoics. It is one of the commonest, most Protean, and abiding misrepresentations of Christianity. Yet, an instinct not to be preached out of existence, impels men to gather wealth, as an instinct impels bees to gather honey. Moralists and preachers notwithstanding, man goes to the mill, or the field, or the sea, as the bee to range over the wild thyme or clover. Surely for grown men it is time to cease talking as if there were affinity between brown bread and any of the cardinal virtues, or as if charity were incompatible with broadcloth worth so much a yard, and to hint that we are nearer the state of original innocence the less garments we possess, or that a man is in a good way provided he have holes in his stockings. Let him darn them, and a step is taken. We do not deny that on potatoes and dripping may be nurtured the sturdiest virtues; but some moralists forget that the former do not insure the latter. How many things are impossibilities without wealth! Civilization, and all that it brings in its hands—leisure, knowledge, culture, the fine arts, and, vastly more momentous, the hope of a better lot for the millions that must now labor on unenlivened by rays of worldly prosperity, happy if they can deaden their desire of that smoothness of life which all of us at some time or other dream of—are possible only with a large accumulation of wealth. Without there is no immunity from famine. Our ancestors, being poorer than we are, lived lives that were on an average shorter than the lives we live now; and, if things march as we desire and hope that they will march, our children will live longer than we live. To the increase of wealth, we owe in great part political emancipation; to the poverty of the world, we owe the very existence of slavery; for, as Aristotle long ago remarked, if the chisel and axe could work of themselves, there would be no slaves. And when a country becomes so wealthy as to be able to yoke wind, water, and steam, so that the chisel and axe do work of themselves, slavery is rendered unremunerative and antiquated—in his own interest, the master frees the slave."—*Medical Press and Circular.*

EDITORIAL AND MEDICAL NEWS.

THE SOCIAL EVIL is a subject which, however painful and even repulsive, demands especially the study of intelligent physicians. Medical men know vastly more than any others the physical disorders and the terrible disease which, though not *necessarily* connected with Prostitution, so often are its consequences; they have, too, probably, a broader mantle of charity to cast over the erring than has the rigid moralist, who would utterly cast out all who fall below the high ideal of absolute virtue and purity; they are disposed to recognize the imperfections and the weaknesses of human nature, and would, had they the power, so make laws and govern in this regard as to attain the greatest possible good with the least evil, knowing that absolute perfection in human character and human conduct is now but the millenial dream of a future more or less remote.

An acute observer, and one of the most philosophic writers of the day, has remarked that, "Licentiousness is the vice of young men and of old nations." Now, though our own nation can not justly be termed old, it is, probably, the observation of many in our profession, that if *prostitution* has not decidedly increased within the last few years, *venereal diseases* have; probably facts would as fully justify the former assertion as the latter. But be this as it may, can we as medical men do nothing to check the spread of syphilis? From wives, whom we have seen suffering, often ignorantly, for the gallantries of husbands untrue to marital vows; from young men, their life-hopes blasted, possibly by a single indiscretion, or crime, if you please, committed under the impulse of hot passion; from children, born to a heritage of disease, and with wailing voices, emaciated bodies, and with the beauty of infancy sadly marred and disfigured, sinking into early graves, or else living on and growing up to be mere fragments of humanity, the degenerate offspring of degenerate sires, and transmitting, peradventure, tainted, or at least enfeebled, constitutions to their offspring in turn, appeals go up to every humane physician urging his efforts if not to "stamp out," as Sir James Simpson has recently proposed should be done in reference to small-pox, syphilis, at least diminish the number of its victims and the extent of its ravages.

Of course reasonable medical men, indeed all intelligent men, devising means to restrain evil, will not shut themselves up to the supreme folly of legislating human beings into a state of moral perfection; they know how little unmixed good is to be found in human experience, and will accept the lessening of evil when it can not be entirely removed, and be willing to have a partial good where the complete is unattainable.

It is true, as observed by one of the most recent writers on *Venereal Diseases*, "Continence is the only safeguard against venereal contagion."* This author goes on to say that, "the time is still remote when this vice, *i. e.*, prostitution, which has existed from time immemorial in all civilized communities, may be expected to cease. For this reason it is more imperative to check the progress of those contagious diseases, which, though spread by promiscuous intercourse, are not a necessary accompaniment of prostitution. They injure not only those indulging in the vice, but also numbers of innocent persons and society at large to an enormous extent." Mr. Hill states distinctly, and enforces his statement by conclusive statistics, that "*the utility*"—we italicise his words—"*of sanitary restrictions has been demonstrated in almost every place where they have been instituted.*"

With such light upon the subject, ought not physicians to advise, in the interests of society, for the sake of health and to repress disease, legislative authorities, whether State or local, that not only prostitutes, but their male associates, should be subjected to at least weekly examinations, and the moment one of either sex becomes diseased, put her or him in quarantine until cured?

Neither time nor space will now permit the discussion of this question; but we beg our medical friends to consider it well, and let them see if they can not do something towards checking the spread of venereal diseases. Still farther, as bearing upon this general subject, we ask them to give heed to the following striking passages from a remarkable † work recently published in England and republished in this country. Especially do we ask that they note the author's statement as to how the preservation of "the purity of countless happy homes" is attained, and also as to "the neglect of legislators," a neglect quite as apparent in this country as in his own:

"In no highly civilized society is marriage general on the first development of the passions, and the continual tendency of increasing knowledge is to render such

* Berkeley Hill's work—page 253.
† History of European Morals, from Augustus to Charlemagne—By W E. H. Lecky, M. A., vol. II, pp. 296-301

marriages more rare. It is also an undoubted truth that, however much moralists may enforce the obligation of extra-matrimonial chastity, this obligation has never been even approximately regarded; and in all nations, ages, and religions a vast mass of irregular indulgence has appeared, which has probably contributed more than any other single cause to the misery and the degradation of man.

"There are two ends which a moralist, in dealing with this question, will especially regard—the natural duty of every man doing something for the support of the child he has called into existence, and the preservation of the domestic circle unassailed and unpolluted. The family is the center and the archetype of the State, and the happiness and goodness of society are always in a very great degree dependent upon the purity of domestic life. The essentially exclusive nature of marital affection, and the natural desire of every man to be certain of the paternity of the child he supports, render the incursions of irregular passions within the domestic circle a cause of extreme suffering. Yet it would appear as if the excessive force of these passions would render such incursions both frequent and inevitable.

Under these circumstances, there has arisen in society a figure which is certainly the most mournful, and in some respects the most awful, upon which the eye of the moralist can dwell. That unhappy being whose very name is a shame to speak; who counterfeits with a cold heart the transports of affection, and submits herself the passive instrument of lust; who is scorned and insulted as the vilest of her sex, and doomed, for the most part, to disease and abject wretchedness and an early death, appears in every age as the perpetual symbol of the degradation and the sinfulness of man. Herself the supreme type of vice, she is ultimately the most efficient guardian of virtue. But for her, the unchallenged purity of countless happy homes would be polluted, and not a few who, in the pride of their untempted chastity, think of her with an indignant shudder, would have known the agony of remorse and despair. On that one degraded and ignoble form are concentrated the passions that might have filled the world with shame. She remains, while creeds and civilizations rise and fall, the eternal priestess of humanity, blasted for the sins of the people.

"In dealing with this unhappy being, and with all of her sex who have violated the law of chastity, the public opinion of most Christian countries pronounces an opinion of extreme severity. In the Anglo-Saxon nations especially, a single fault of this kind is sufficient, at least in the upper and middle classes, to affix an indelible brand which no time, no virtues, no penitence can wholly efface This sentence is probably, in the first instance, but the expression of the religious feeling on the subject, but it is also sometimes defended by powerful arguments drawn from the interests of society. It is said that the preservation of domestic purity is a matter of such transcendent importance that it is right that the most crushing penalties should be attached to an act which the imagination can easily transfigure, which legal enactments can never efficiently control, and to which the most violent passions may prompt. It is said, too, that an anathema which drives into obscurity all evidences of sensual passions is peculiarly fitted to restrict their operation; for, more than any other passions, they are dependent on the imagination, which is readily fired by the sight of evil. It is added, that the emphasis with which the

vice is stigmatised produces a corresponding admiration for the opposite virtue, and that feeling of the most delicate and scrupulous honor is thus formed among the female population, which not only preserves from gross sin, but also dignifies and ennobles the whole character.

"In opposition to these views, several considerations of much weight have been urged. It is argued that, however persistently society may ignore this form of vice, it exists nevertheless, and on the most gigantic scale, and that evil rarely assumes such inveterate and perverting forms as when it is shrouded in obscurity and veiled by a hypocritical appearance of unconsciousness. The existence in England of unhappy women, sunk in the very lowest depths of vice and misery, and numbering certainly not less than fifty thousand, shows sufficiently what an appalling amount of moral evil is festering uncontrolled, undiscussed, and unalleviated, under the fair surface of a decorous society. In the eyes of every physician, and indeed in the eyes of most continental writers who have adverted to the subject, no other feature of English life appears so infamous as the fact that an epidemic, which is one of the most dreadful now existing among mankind, which communicates itself from the guilty husband to the innocent wife, and even transmits its taint to her offspring, and which the experience of other nations conclusively proves may be vastly diminished, should be suffered to rage unchecked because the legislature refuses to take official cognizance of its existence, or proper sanitary measures for its repression. If the terrible censure which English public opinion passes upon every instance of female frailty in some degree dimishes their number, it does not prevent them from being extremely numerous, and it immeasurably aggravates the suffering they produce. Acts which in other European countries would excite only a slight and transient emotion, spread in England, over a wide circle, all the bitterness of unmitigated anguish. Acts which naturally neither imply nor produce a total subversion of the moral feelings, and which, in other countries, are often followed by happy, virtuous and affectionate lives, in England almost invariably lead to absolute ruin. Infanticide is greatly multiplied, and a vast proportion of those whose reputations and lives have been blasted by one momentary sin, are hurled into the abyss of habitual prostitution—a condition which, owing to the sentence of public opinion and the neglect of legislators, is in no other European country so hopelesely vicious or so irrevocable.

"It is added, too, that the immense multitude who are thus doomed to the extremity of life-long wretchedness are not always, perhaps not generally, of those whose dispositions seem naturally incapable of virtue. The victims of seduction are often led aside quite as much by the ardour of their affections, and by the vivacity of their intelligence, as by any vicious propensities. Even in the lowest grades, the most dispassionate observers have detected remains of higher feelings, which, in a different moral atmosphere, and under different moral husbandry, would have undoubtedly been developed. The statistics of prostitution show that a great proportion of those who have fallen into it have been impelled by the most extreme poverty, in many instances verging upon starvation."

RACIBORSKI'S ADMIRABLE TREATISE ON MENSTRUATION, from which our readers will remember we took occasion to quote some months ago,

is reviewed, according to the *Boston Medical Journal* of July 22d in the *Bulletin de la Thèrapeutique*, in a sprightly style. The reviewer quotes from the work the following anecdote, to enforce the author's advice that women, arriving at the menopause, should abandon gaieties and worldly pleasures, and devote themselves to beneficence and charity:

"M. Raciborski himself has a pet anecdote to show, as it is intimated, how circumstances sometimes lend themselves to the enforcement of the physician's edict. It tells of one of those women of the world, in whom the mushroom of autumn pushes its growth with unusual difficulty, and not without the attendance of neuropathic symptoms, liable to lead to a change of Doctor, if the medicine man employed be a novice. Now this lady, one day, suffering and disquieted, sent for our *confrere*, and at the conclusion of the interview promised that if she should get well she would submit to the wise advice with which he had for a long time importuned her. "I believe you are right, Doctor," said she. "I attribute my disorder to a keen mental disturbance. You know how we poor women are exposed in the world to be pursued by jealousy. Our pretended friends rarely pardon us the least success; and you know, my dear Doctor, that this was my lot for a long time. But, never before, in all my life, did I receive an affront like that offered me yesterday, in public, at the fancy ball of the Minister de ———. I had a ravishing toilette—a dress of pure white, covered with *ivy*, a brilliant on each principal branch. My hair was dressed to correspond. Everybody paid me compliments; and for an instant I had the weakness to believe in their sincerity. At the most blissful moment of triumph, however, a blue domino who was passing stopped, made a feint of examing me from head to foot and cried out in a loud voice, 'To-day, my beauty, your toilette is irreproachable in point of taste. Ivy! Everywhere ivy! So appropriate to *ruins*.'" The conclusion of the little secret drama was that Madame ——— submitted to cruel necessity, and from that day forth enjoyed perfect health."

We think there might be coupled with it the story of another of Raciborski's *clients*—also found in this work—who was so passionately fond of dancing that she hoped she might die waltzing!

*PROCEEDING OF THE SHELBY COUNTY MEDICAL SOCIETY.—Pursuant to a call the following physicians of Shelby county met in the Seminary in Shelbyville, Ind., July 10th, 1869:

Drs. Day, Green, McCrea, Gordon, Kennedy, Comstock, Elder, Collins, Wood, Updegraff, Robins and Slocum.

On motion, Dr. Green was chosen Chairman, and Dr. Collins Secretary.

The chairman stated that the object of the meeting was to consider the propriety of organizing a County Medical Society.

* These Proceedings were received too late for insertion in the proper department.

Remarks were made by several in favor of such a society; and on motion, it was unanimously

Resolved, That committees be appointed on permanent organization.

Committee on nominations: Drs. Day, Elder and Collins.

Committee on constitution and by-laws: Drs. McCrea, Collins and Green.

On motion, Dr. McCrea was invited to extend a personal invitation to the regular physicians throughout the county to be present and give the organization their support and influence at the next meeting.

There being no further business, the Society adjourned to meet at the same place on Saturday, July 24th, at two o'clock P. M.

SHELBYVILLE, IND., JULY 24, 1869.

The Society met pursuant to adjournment.

Present—Drs. Day, Green, Collins, E. S. Elder, S. F. Elder, Slocum, Leyter, McCrea, Gilmore, Robertson, Comstock, Gordon, Perry, Leinville and McFadden.

The minutes of the previous meeting were read and approved.

Dr. McCrea reported that he had notified twenty-four physicians to be present and participate in the meeting—fifteen reported favorably.

The report was received and accepted.

The committee on Constitution and By-Laws submitted their report, which was received and adopted.

The committee on nominations reported the following officers for the ensuing year:

For President—Dr. W. F. Green.
Vice-President—D. E. S. Elder.
Recording Secretary—Dr. S. P. McCrea.
Corresponding Secretary—Dr. G. M. Collins.
Treasurer—Dr. C. E. Slocum.

Who were declared duly elected.

The President appointed the following standing committees:

Committee on Admissions—Drs. S. F. Elder, M. B. Gilmore and S. A. Camstock
Committee on Ethics—Drs. Day, Collins and Robertson.

Dr. Day moved that the subject for discussion at our next meeting be, Is diarrhœa a prerequisite to typhoid fever?

Dr. S. F. Elder moved that the proceedings of the meeting be published in each of the county papers and in the *Western Journal of Medicine.*

On motion, adjourned to meet the first Saturday of September, at ten o'clock A. M., in the Seminary.

S. P. McCREA, M. D., *Secretary*.

IODINE AS A SPECIFIC REMEDY IN INTERMITTENT FEVER, is the title of an exceedingly interesting article in the July number of the *Archives Générales*, by Dr. Willebrand, Professor of Clinical Medicine in the University of Helsingfors.

It appears that more than four years ago, Professor Willebrand was led by chance to use iodine in the treatment of typhoid fever. Since that time he has pursued his experiments, abundant opportunity having been afforded by the great prevalence and intensity of typhoid fever in Finland, consequent upon the famine and misery which scourged the people. These experiments have satisfied him that, while the disease can not be cut short by iodine, any more than by any other known therapeutic agent, yet this medicine exercises upon the typhoid poison and the fever resulting from it an influence so favorable as to remarkably lessen the mortality. He observes, that in the last half of 1868 the exanthematous form of typhus gave place to abdominal typhoid, and that iodine even in this last form appeared to produce a salutary effect. Certain forms of intermittent fever, occurring during the prevalence of typhus and of typhoid, from which they could not be diagnosed during the first days, were subjected to iodine treatment, and with remarkable results. It was soon ascertained that malarial fever could be combatted with other specifics than cinchona, and that iodine was one of these. The iodine was administered in solution. One gramme of iodine and two grammes of iodide of potassium were dissolved in ten grammes of distilled water; five drops of this solution were given in water every two hours each day. Iodide of iron was administered in doses of ten centigrammes four times a day for the paludal cachexia and the anæmia consequent upon intermittent fever.

The author then details nineteen cases of intermittent successfully treated with iodine—most of them yielding after the second attack, this second paroxysm being generally much milder. There were only two cases in which the disease was not conquered before the fourth. From the spring of 1868 to the following autumn not a single case of paludal fever was treated by quinine.

The author believes, from his experience, that iodine deserves to be ranked as a specific remedy in malarial intermittent fevers, and that per-

haps it has an advantage over quinine in this regard, that after intermittents are cured by the former, relapses are less liable to occur than when the cure has been by the latter.

Professor W. states that neither in infancy nor in advanced age, has the iodine any injurious effect, and that the opinion emitted by Trousseau and Pidoux to the effect that it is a tonic, is true. Pulmonary affections did not prove an objection to its administration. Even the nausea and vomiting of the grave forms of intermittent yielded as if to a true specific.

So much for Professor Willebrand's article. The employment of iodine in intermittents is not a new thing. Upon referring to Bouchardat, *Manuel de Matiére Medicale de Therapeutique et de Pharmcie*, tome second, page 647, we find, according to the formula of Barilleau, the tincture of iodine, ten drops, in infusion of camomile, three times a day—continued several days, as given in intermittent fevers; while that of Barbas is iodine in the same quantity, but administered in infusion of chicory.

Nevertheless, it may be better, as advised by the Finland Professor, to give the remedy in aqueous solution, in smaller doses, and with briefer intervals.

We hope if any of our friends should give a faithful and full trial to iodine in intermittents, they will have the kindness to give us the results. Our country practitioners, who are obliged to furnish medicines to their patients, would be saved many a dollar if iodine should be proved to possess anything near the antiperiodic power of quinine.

MEDICAL STUDENTS have presented them at this season of the year abundant invitations to attend medical lectures. "Announcements" are almost as thick as autumnal leaves in Val——something, we say as thick, some of them thicker, not as numerous; as usual, a few of these advertisements glorify the professors to an extent slightly astonishing, were it not known that the true glorifiers were possibly the glorified. It comes to pass, now and then, that the weakest institutions are the loudest in self-praise and promises—a very light body can readily be driven to a temporary elevation by diligent puffing and blowing, and the lighter it is the more encouragment for such wind-work. But, alas! the poor students, tempted this way and that, lured hither and thither—so many portals of science opened to them, so many arms outstretched to recieve them, so many great men ready to instruct them, and hands ready for their fees—what are they to do?

The boldest attack made yet, at least the boldest we have any cognizance of, comes from an institution styled *the Philadelphia University of Medicine and Surgery*. This famous University happens to have two methods of warfare to take captive prospective doctors. In the first place, it issues a circular, or announcement, which has enough of eulogistic material spread thickly upon its teachers to meet the requisitions of a dozen ordinary college circulars; this "announcement" gives a sort of biographical dictionary of most of these teachers, all of whom are great men, and each one a little greater than any of the others; the entire thing is a sort of heavy broadside aimed at medical students *en masse*. This is the public demonstration. Now for the private. The University seems to have a sort of "sharp-shooter" to "pick off" by letter any who are rebellious and withstand the "announcement" battery. An Indiana physician who, unfortunately for the success of the sharp-shooting practice in his case, is already a graduate, received the following missive, or missile; and as he has no use for the generous offer, he wants it made known to others less fortunate. Upon consulting the biographical dictionary in the circular also sent us by Dr. C. with the letter, we find that the name appended to the letter has an A. M. and an Esq., attached thereto, and that the eminent owner thereof is "President of the Art Department," and "Professor of Technology." We don't know how much his technological professions amount to, but we believe him eminently fit for the Art Department. His *art* is, indeed, admirable.

How are medical colleges to meet the policy indicated in this letter? We can suggest nothing better just now, than that they should offer honorary degrees at half price, payable in Confederate money, and give a premium of ten dollars a head, payable in green backs, for all medical students, without regard to age, sex or color, delivered in good condition, warranted to matriculate, and to take out at least half the tickets.

And now here is the letter, *verbatim*, &c.; we hav'nt a doubt in reference to its genuineness:

"PHILADELPHIA, JULY 19, 1869.

"DR. WM. H. CYRUS—*Dear Sir:* I am informed that you are practicing physician, but have not graduated. Allow me to ask you whether it is your intention ever to attend lectures? If so, I can make very favorable arrangements with you.

"Perhaps with your experience and qualifications a part of the course may be dispensed with. I mail you an Announcement, and shall be pleased to correspond with you.

"Should you be disposed to state what credentials you can furnish, and your wishes, I may be able to render you some service.

"If you desire any of Dr. Paine's publications or to subscribe for the *U. Journal*, I should be pleased to receive your orders.

"Yours respectfully, L. FAIRBANKS,
"41 S. 10th st."

AT A MEETING of the General Council of Medical Education, and Registration, London, July 6th, a resolution to remove the name of John Pattison, M. D., of New York, from the Register, for infamous conduct in writing a threatening letter to the husband of a lady whom he had attended for cancer, was unanimously passed. It appears from the report in the *Lancet*, Dr. Pattison had received a hundred and fifty guineas for his services to the deceased lady, and he wanted a hundred more; upon the husband's refusing payment, the Dr. wrote threatening to publish the particulars of his wife's case, and also some strong observations upon his conduct towards her during her illness.

"MEDICAL OBSTETRIC ETHICS.—Dr. Wallace (Liverpool) is unquestionably right in the statement that a medical man called to a labor in the temporary absence of a professional brother, should immediately retire on the return of the medical man to whom the case belongs." This is an extract from an editorial note in a recent number of the *British Medical Journal*. The editor goes on to say that such conduct is "usual and right." We regret to say that this rule is not observed as it ought to be even by some who know better, and who prate loudly about *ethics*. An honorable physician will not continue his attendance upon a lying-in patient a single day, or a single hour, after knowing that the family physician, or one simply employed to attend the case, whether hitherto the family physician or not, can be obtained.

THE JOURNAL of the *Gynæcological Society*, of Boston, made its appearance in July. It is neatly printed, and its contents will be highly appreciated by every practitioner who is ever called to treat diseases of women. We hope it will be liberally sustained by the profession.

MEDICAL STUDENTS will observe the cards of five medical colleges in our advertising department. They, of course, will choose one or none of these, as they think best.

CIRCULAR NUMBER TWO, which is a *Report on Excisions of the Head of the Femur for Gunshot Injuries*, has been received from the Surgeon-General's office. We expect to have from one of our surgical friends, whose valuable contributions so often enrich the *Journal*, a full notice of this Report.

WITH THE next issue we expect to send bills to all delinquent subscribers. How many will pay now, and thus save themselves the annoyance of such personal and direct dun?

DR. AUSTIN FLINT, JR., we see from the *Archives Gènèrales* of July, has received a prize from the French Academy of Sciences, pour ses *Recherches experimentales sur une nouvelle fonction du foie*, experiènces originales et d'un grand intérêt pour la pathologie et la physiologie..

THE INTERNATIONAL MEDICAL CONGRESS OF 1869.—The International Medical Congress, which held its first meeting last year at Paris, will meet this year at Florence on the 20th of September, under the honorary presidency of M. Bouillaud. The work of the Congress will be divided as hitherto into two parts—namely, the discussion of the special questions in the programme, and communications on other medical subjects. The Committee have selected the seven following questions for this year:

1. Marsh miasm; the conditions of its development in different countries; its effects on man; the curative and preventive remedies.
2. The therapeutic value of the different methods of treating cancerous diseases; their indications and contra-indications; the value of general treatment.
3. The treatment of gunshot wounds, in relation to the progress of the art of war and of modern international law.
4. The hygienic conditions of hospitals, and the value of home treatment.
5. The influence of railways on the health of man.
6. The conditions which favor the production of endemic and epidemic diseases in great towns: the means of prevention, and the advantages to be derived from the proximity of great rivers and the sea.
7. The rights and duties of the medical man in relation to the Government in different countries, and the reforms which can be reasonably expected.—*London Lancet.*

INTESTINAL PUNCTURE IN TYMPANITES.—Under the advice of Dr. Fonssagrives, intestinal puncture, as a last resource, has been several times practised at Toulouse, on two patients suffering with tympanites. In the first case, the abdomen formed an immense mass; the patient was perfectly cyanosed and suffocating. An exploring trocar was inserted into the most distended part of the lower umbilical region. The gas escaped so violently as to extinguish a candle. The distension returning the next day, two fresh punctures were made in different places, and gave so much relief that the life of the patient was prolonged four days. In another case six punctures were successively made until the gases were naturally evacuated, and the patient cured.—*L'Un. Med.*

PROF. FRANK H. HAMILTON has recently received the degree of L. L. D. from Union College.

DR. RUTHERFORD, of Edinburgh, is Dr. L. S. Beale's successor in the Chair of Physiology at King's College.

THE BRITISH AND FOREIGN *Medico-Chirurgical Review* of July, in concluding a review of *Recent Works on Syphilis*—Lancereaux, Hill, Barton and Cullerier—uses the following language:

"Lastly, we may ask, Is there any rule to guide us in the treatment of syphilis by specifics or otherwise? In any given case can we say with certainty whether mercury should be used or iodide of potassium, or whether the case will do equally well without either of these remedies? To this we must answer, There is no absolute rule of this kind. There are, indeed, certain cases in which most surgeons prescribe mercury, and there are certain other cases in which most surgeons prescribe iodide of potassium; but, on the other hand, there are not wanting practitioners of experience and repute who tell us that all the forms of syphilis and its sequelæ will get perfectly well without any specific treatment at all. If there are any cases in which it is generally held that mercury is necessary, they are iritis and infantile syphilis, and yet we are now told that these cases do just as well without the specific as with it; while iodide of potassium, which has always been used for the less acute symptoms, is now thrown into the shade by fresh air and sea bathing! How far these views can be sustained, it must be left to experience to decide, but at present it appears to us highly unwise to lay aside altogether the use of mercury. In cases of syphilitic retinitis we have the clearest proof of its value, and we should be hardly justified in withholding it in a case of this kind. And, if the specific treatment produces such marked and beneficial results where we have the opportunity of observing its effect closely, may we not conclude that its influence is similar in other cases where we are unable to watch the affected

part with equal accuracy? Experience may indeed show that mercury is not necessary even in iritis and retinitis, but at present a surgeon would seem to be almost as much bound to give it in these cases as a physician would be to give quinine in an attack of ague. The organ which is affected is one of great delicacy, and of the utmost importance to the patient: mercury is nearer a specific remedy than any other we possess; and it can not be said that any serious evils are likely to follow its careful and moderate use. Thus, though we may say that there is no absolute rule to guide us in the administration of specifics, yet there are various cases in which it would seem that the surgeon is hardly justified in withholding mercury, and there are others in which pretty nearly the same thing may be said of iodide of potassium. In this opinion we are confirmed by observing the authors, whose works we have been noticing, all agree in recommending the cautious and temperate use of specific remedies."

*Speculum Illumination for Insects in the Ear.—On July 31st, 1869, L——, a boy, about ten years old, came into the office shaking his head violently, squalling most vociferously. Being unable to quiet his agitation, or to divine its cause by soporific words, I resorted to "gentle traction," and drew out from him that another boy had been pouring water into his left ear. An ear speculum was at once inserted and illuminated by means of a laryngeal mirror. A small black speck was sighted, which rapidly developed into a black ant. He (the ant) saw "salvation free," and made for the light *instanter*. So accelerated were his movements we could not contemplate them, and when he stood on his fore-legs in the expanded end of the tube, waving his bulbous extremity joyously in air, we misstook him for a "base-ballist" in a "striking" attitude, and dodged. That action, however, removed speculum, insect and the patient's distress.

I do not know that illumination by mirror has ever been broached for the removal of insects from the ear. It is a simple method, and, I doubt not, in every case, will prove quickly effective.

(Our Ohio friend, probably, was the witness of *auricular* confession when the ant was erect as he describes him, or it might have been a case of *ant-eversion*, while certainly its abrupt departure would be regarded as a case of acute *procidentia*.)

Wanted.—The September number, 1844, of volume IV, of the *Western Lancet*. The entire volume will be purchased, if the owner requires it. Address this office.

*This comes to us from an Ohio subscriber, without his name being *pre* or *af-fixed:* and as we received it, so it is given to our readers.

THE WESTERN JOURNAL OF MEDICINE,

(*Formerly*, "CINCINNATI JOURNAL OF MEDICINE.")

Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

VOL. IV. INDIANAPOLIS, SEPTEMBER, 1869. No. IX.

A CASE OF OBSTINATE EPISTAXIS, REQUIRING PLUGGING OF THE POSTERIOR NARES, WITH SOME REMARKS ON THE AFFECTION AND THE OPERATION.

BY JOHN D. JACKSON, M. D., OF DANVILLE, KY.

(Read before the Boyle County Medical Society of the State of Kentucky, March 2, 1869.)

On Sunday morning, 7th of February, 1869, I was consulted by a member of the family of Mr. S. M., for advice as to the most proper course to pursue to check an obstinate hæmorrhage from the nose, of which Mr. M. was at the moment suffering.

The messenger said he had gone to bed in his usual health, and had awakened about four o'clock in the morning, to find his pillow saturated with blood. All ordinary popular means of which the family knew, had been tried without avail, and the bleeding was continuing at a tolerably rapid rate, though the patient did not at all complain of weakness, notwithstanding more than a pint of blood had been lost.

I directed the messenger (Mr. M.'s son) to tell his father to stand erect, with both hands held aloft as high as he could reach for a few minutes, and if not effectual in checking the bleeding, to have him put both legs up to the knees in as hot water as could be borne by him; to snuff up the nostrils ice-cold water, and bind ice around the neck and upon the head. Being in the act of visiting a case which

would detain me a half or three-quarters of an hour at the time, I told the messenger to let me know, about the time of my expected return, of the results of the measures recommended, and if they were not successful, I would go and see the patient.

Before my return to my office, Mr. M. had fainted, and a messenger was sent for my immediate presence; in the meanwhile, finding me absent, he took Dr. Dunlap with him. On returning to my office and seeing the call on my slate, I proceeded toward the house of the patient, but before reaching it, met Dr. D., who told me that on the gentleman's fainting, the hæmorrhage had ceased, and he had not found it necessary to do anything.

A dose of Epsom salts had been taken by the patient of his own accord, and he was told by the doctor to repeat it until the bowels were freely moved. It may be here said that Mr. M. had all along been in good health, and his bowels perfectly regular. The patient got on well on Monday and Tuesday, going about his business as usual, feeling none the worse for his bleeding. On Wednesday morning, the 10th, at break of day, I was again summoned to see him. His son said that at about the same hour as on Sunday morning, he had awakened and found his pillow saturated with blood, and that the hæmorrhage was continuing unabated. On my arrival, I found him sitting with his feet in a tub of hot water, and a basin before him with about three-fourths of a pint of blood in it, and a spittoon beside him containing nearly as much. I filled the left side of the anterior nares from which the hæmorrhage was coming, with lint saturated with powdered alum made into a magma with muriated tincture of iron, pushing the lint as far back as I well could. The blood ceased flowing at once. The pulse of the patient was very good, being seventy-eight to the minute, and about natural in volume. He said that he fainted on Sunday, not from weakness, he thought, so much as from the intense coldness and pain produced by the ice placed over his head and neck; the whole neck, and especially well over the carotids, being enveloped in ice. He says that his general health has never been better than for the past year.

Left him, enjoining quietude—informing the family that I had to ride several miles into the country, but that on my return I wished to hear from him. About ten o'clock A. M., the hæmorrhage recurred. I was sent for, but not having returned, Dr. Dunlap was again called in. On my return to my office at eleven, finding a message for my im-

mediate attendance, I went straightway to the house, and found Dr. D. with the patient, and that by the use of lint saturated with the per-sulphate of iron, the bleeding had been partially arrested, though not completely so. He had also given him, internally, ten grains of tannic acid. I learned that he had again taken "salts" that morning of his own accord, and that it had operated freely three times, the hæmorrhage returning during its operation. After waiting some time, and perceiving the blood to still flow down the pharynx by the posterior nares, and in front through the right nostril, the left nostril being firmly plugged, we removed the plugging, and replugged quite far back with fresh lint saturated with per-sulphate of iron and powdered alum. This again checked the hæmorrhage, when Dr. D. left. I remained with the patient about a half hour longer, when the bleeding again commenced, flowing in a trickling stream over the uvula into the pharynx; from its repeated recurrence and long continuance, a little web of fibrin having formed, and was hanging down from the uvula. I again removed the plugging, and endeavored to fill the posterior nares through the nostril with dry lint, and to pack it well up against the turbinated bones. This with care I could partially do, though could not pack the lint firmly upward where I most desired, and at a point from which I suspected the hæmorrhage to come, just where the narrow tunneled chamber uniting the anterior with the posterior nares expands out into the latter. However, I temporarily succeeded in again checking the hæmorrhage; but it was not ten minutes until the bleeding again recurred. I once more removed all the lint which I could, for some in the posterior nares remained, and again packed, covering the first dossils with dry powdered tannin, and used dry lint for the anterior chamber. Thinking, from the experience I once had in manipulating with a case of fibroid polyp of the posterior nares, that I might be able with my finger alone, unassisted by instruments, to place a piece of sponge against the posterior nares by way of the pharynx over the soft palate, with a good deal of difficulty, owing to the involuntary contraction of the soft palate, on touching its edges, drawing up against the superior portion of the pharynx, I finally succeeded in doing so—placing a soft piece against the posterior orifices of the two nostrils, as I could feel them with my forefinger. Again the hæmorrhage was checked, to again burst forth after a few minutes. The patient had now lost since morning, as well as one could estimate it, probably three pints of blood, possibly more. He did not, however, complain of faintness, though

the loss was commencing to tell upon his circulation, and his hands, all along warm, had become quite cold.

All ordinary means had now, to my mind, proven a failure; and a patient of sixty years of age, it is well known, will not recuperate from an excessive loss of blood like one of sixteen. Anyhow, I was unwilling to trust to further temporising, or the repetition of the syncope of Sunday for its cessation. Plugging of the posterior nares was the only reliable untried means left. I returned to my office, and providing myself with a number five flexible gum bougie, some silk, and a large and a small sized uterine sponge-tent, in company with Dr. Dunlap, hastened back to the patient. Assisted by Dr. D., I introduced the bougie through the left anterior nostril, the posterior nares, and over the soft palate, until it emerged into the pharynx, when seizing it with a pair of dressing-forceps, I drew its point out of the mouth, and running a double silk ligature through the point of the bougie by means of a stout needle, ran the ligature through the large tent, so that the apex of the cone was toward the mouth. After fixing firmly the ligature upon the tent, and running another strand of silk through the base of the sponge so as to be enabled to withdraw it, I withdrew the bougie through the nostril, the ligature following after, drawing up the tent over the arch of the palate to the posterior nares. A little of the base of the tent projected against the pharynx, and obstinate gagging following, it was necessary to withdraw the tent, which was easily done by means of the single ligature, and cut it smaller. Again it was introduced, and seemed to answer; but after few minutes the moisture of the parts so swelled it as to make it again project beyond the arch of the palate, and render its presence intolerable. It was a second time removed, and trimmed down to a size rather less than the smallest tent, which we had not introduced from dread of its proving too small. This, though for awhile uncomfortable, was pretty well borne, its introduction being followed by instantaneous arrest of the hæmorrhage; the anterior nares being occluded by lint crowded in firmly, and the strands of the double ligature being temporarily passed over the cheeks and confined to the back of the head, the single ligature depending from the base of the sponge being drawn out of a corner of the mouth and confined over one ear. This was at four o'clock P. M. At nine at night, found him getting along as comfortably as could be expected, considering the fact that no air could pass through either nostril, thus necessitating the mouth's being constantly open for breath-

ing. Complained a good deal of a roaring in his head,* and throbbing above the roof the mouth where the sponge presses. Pulse, ninety-six. Left ten grains of Dover's powder, to be given if he should not be able to sleep without it.

Thursday, 11th—Rested pretty well by aid of the powder last night; pulse eighty. Has taken some mush and milk for breakfast, though swallows with much difficulty: says it hurts him to swallow, and that his throat is very sore. Prescribed twenty-drop doses of muriated tincture of iron every four hours. At dark he had marked fever; pulse, eighty-eight, full and hard; no headache, though complains a good deal of soft palate, and of the offensive odor from the decomposition of the retained blood and secretions within the nostril. Ordered bathing of the face and hands with cold water, a suspension of the iron, and a repetition of the Dover's powder if necessary to produce sleep.

Friday, 12th—Rested quiely last night after taking the powder. Mush and milk again taken for breakfast; pulse eighty; tolerably comfortable, considering everything. Ordered the iron in fifteen-drop doses as often as on yesterday. At nightfall again saw him. Skin hot; pulse eighty-eight, full and hard; feels quite uncomfortable. Says he took a glass of rich milk at each meal, to-day, as his food, nothing else; will take a glass and drink it all down at once without stopping—says he can not drink otherwise. Iron suspended, and Dover's powder repeated.

Saturday, 13th—As heretofore, pulse eighty in the morning, and at night eighty-four. Fever coming on every evening, since the vesperal excitement may possibly be due to the iron, ordered it suspended—indications for its use are not very marked anyway.

Sunday, 14th—The fourth day since plugging. Removed the dressing with some difficulty, owing to the tightness with which the sponge was wedged into the nares. On doing so, blood flowed down into the pharynx, clotting on the edges of the soft palate. It, however, seemed to be due only to the abrasion on removing the sponge,

* How commonly patients tell us of throbbings in the head, of noises of various kinds, purring noises, ringing noises, whirring noises, and the like! We treat these usually as nervous symptoms. They are so; but they are nervous symptoms developed through the blood vessels. The sounds are the sounds of blood passing through vessels off guard, of rubbing in osseous channels, or sonorous substance. They are examples of disturbed muscular balance between heart and artery. And, after great exhaustion, as after hæmorrhage, when the heart nerves itself, and by the least excitement is thrown into undue action, one of the first annoyances of the patient is the throbbing, the noise of the head. The balance is disturbed.—*Richardson on Arterial Murmur, Med. Times and Gaz., Oct.* 17, 1868.

which had been pressing so firmly on the mucous-membrane, for only a few sconds elapsed before its cessation. The apex of the sponge had been firmly wedged into the nares, and was covered with pus and mucus and tinged with a little blood. The nostrils were syringed out with cold water, and the patient returned to bed with greatly increased comfort, though he still can not breathe through either nostril.

Monday, 15th—Examined the patient this morning by hooking my forefinger around over the soft palate, and found the first piece of sponge introduced yet remaining and firmly impacted against the posterior nares, but more especially occluding the orifice of the right nostril. Was unable to remove it with my finger. A flexible catheter introduced by the nostril, failed to loosen it; but on making pressure very firmly, would curl upon itself. A silver catheter and large probe, on being used, each gave too much pain to persist in their use, and, besides, were attended by slight bleeding from the nostril. The trouble on using force by the nostril was, that it was impossible, by sensation alone, to determine that the pressure was not being made upon the mucous membrane of the nares, instead of the foreign body. The sponge was too far back to be reached with the straight dressing-forceps, and all the curved pairs accessible proved equally valueless, because of not being properly curved. To have been shaped properly, they should have been bent nearly to a right angle. Finally, the finger was introduced well back against the foreign body, and on pressing down the palate quite firmly, the sponge was loosened from its imbedded position, then by keeping the soft palate well pressed up, I, at last, with much effort, succeeded in hooking into it the point of Sims' tenaculum, and removed it. No blood followed its removal, though some pus was upon its apex. On first introducing this piece of sponge, a piece of sewing-thread had been fastened to it, but got broken off.

From our experience in this case, we would say, that in future we shall always make it a first care to attach a *stout ligature* to the sponge or lint, prior to its introduction. From the very strong traction which it was found necessary to use upon the first piece removed by means of the silken ligature attached to it, (so firmly was it impacted in the nares), the trouble must have been very great indeed, had not the precaution been taken to attach the ligature. We lay stress upon this point, because all writers upon operative surgery do not speak of the necessity of using this ligature. Bernard and Huette, whose work is our highest authority in this department of surgery, do not speak of it, though their translators, Drs. Van Buren and Isaacs, in a foot-note,

allude to it, and hint at the trouble liable to ensue when its introduction has been neglected.*

COMMENTS.

Epistaxis, or bleeding at the nose, (for though the word compounded of two Greek words *epi* upon, and *stazo* I flow drop by drop, would literally apply to slow bleeding from any point, has, as far as we know, been always confined in its application to hæmorrhage from the schneiderian membrane), is so common, so every day an occurrence, that it is usually deemed too trifling to be worthy the notice of the medical man; but as we *sometimes* see it, the best powers of the physician may be taxed in controlling it. Possibly the thin covering of the blood vessels of the nasal passages has rendered them especially liable to rupture, and possibly there may be something yet undiscovered in their minute anatomy, or close relation to the large cerebral vessels—the internal carotids, from which they originate, especially subjecting them to effusion of their contents. But, be the cause what it may, we are all cognizant of the fact that, with many persons, and especially children, nose-bleedings are exceeding common, succeeding slight injuries, or violent exercise, or mental emotion, or headache, or uncomfortable sense of fullness of the head, and that sometimes they are plainly vicarious to the discharges, and especially the menstrual in the adult.† So well is all this known, that with the masses, as well as with medical men, the discharge is generally deemed a salutary one—nature being supposed to use the parts as a sort of safety-valve, and the hæmorrhage to effect the prevention of probably worse troubles.

The direct connection of the ethmoidal vessels with the cerebral, makes epistaxis a local bleeding in cases of cephalic congestion. This has been long observed, and did not escape the shrewd observation of

*Mr. M. has, to this date, July 19th, had no return of hæmorrhage from his nose. There has, however, been constantly present, succeeding the epistaxis, an osæal discharge, but free from odor, being simply mucoid. This, though it has diminished, still persists in a slightly annoying form, simulating a mild chronic catarrh of the left nostril, despite the systematic application of carbolic acid lotions and other means through Thudicum's nasal douche. It is a question in my mind, whether the discharge is due to an original lesion of which the epistaxis was the initial symptom, or has been produced by the per sulphate of iron and muriated tincture of iron and alum, or the continuous pressure of the sponge used in plugging.

As having a possible connection with the case, we would mention the fact, that while in New Orleans some thirty years ago, Mr. M. was gored by a bullock, the wound laying bare and injuring a portion of the left superior maxillary and nasal bones. From this injury, however, he had never especially suffered, nor had he ever had any serious hæmorrhage until the one above recorded.

† We are aware of a very curious epistaxial idiosyncrasy in the case of a stout young farmer, who has never been able to work in green hemp—any attempt to do so being invariably attended by repeated nose-bleedings.

Galen, who is related to have once increased his reputation very much by predicting that a patient suffering with a cerebral trouble to whom he was called, would not get better until the nose should bleed—a prognosis which the result verified. Wardrop mentions cases which, "after resisting general bleeding, and the application of leeches to the head, were instantly relieved by the escape of even a few drops of blood from the nose." He tells us of a lady suffering with a disorder of the head, who had obtained no relief from the local bleedings made at the hands of her regular medical attendants, and who ultimately consulted a quack celebrated for his cures of head troubles, who introduced up the schneideirian membrane an instrument which he twisted around, and was followed on its withdrawal, by a flow of blood from the nostrils to her immediate relief. Taking hint from such cases, we might seriously ask ourselves the question whether we are not neglecting a very efficacious means of local depletion in cerebral congestion and inflammation of the brain?

But it is not with reference to epistaxis as a therapeutic means applicable to the remedying of other troubles, so much as to the different therapeutic measures applicable to the remedying of epistaxis when it becomes a trouble, that we would direct attention.

It is a rare thing that nose-bleeding goes on to that point at which life is endangered; the very loss of blood, as a rule, bears its own remedy by weakening the heart's force, and hence it is, we infer, that so many remedies are in repute among the masses, coincidence being mistaken for consequence. And the fact that every case of epistaxis may at any time cease spontaneously, seems hardly to have been taken sufficient account of by many of the profession proper, who have recorded an unbounded faith in this or that article of the materia medica, because following its administration, there has been a cessation of bleeding. This should always be taken into account by us, when we read of certain medicines proving specifics for epistaxis in the hands of certain physicians. Premising this much, we would say that Dr. Pockle and M. Negri declare that they have found secale cornutum to succeed in arresting hæmorrhage from the nose, when plugging had failed.* Dr. Morris has found salt a specific.† Dr. Watson prefers acetate of lead internally in the disease, while Dr. Latham looks on the use of mercury to ptyalism as a specific, though we might say that cases are on record of epistaxis coming on while the patient was ptya-

* Verges Zeitschrift, in *Times and Gazette*. June 8, 1861.

† *Amer. Jour. Med. Sciences*, April, 1856.

lized. Intermittent epistaxis coming on on alternate days, and therefore apparently due to malaria, has promptly ceased on the administration of quinine. In years gone by, a prime remedy for this local bleeding was a general bleeding. Any one who will read the clinical lectures of the late Dr. John Elliotson, may find an account of an hospital patient of his, who had lost a pint of blood on three successive nights, and for whom he prescribed salts and senna internally, and venesection to the amount of f ℥xvi.

There seems to be, to-day, a very firm reliance on the part of most of the profession, upon purgatives in obstinate epistaxis, a reliance founded on the recognized physiological laws regarding counter-irritation, or determination of blood to parts. It is upon this explanation that table-salt has been recommended for the trouble, just as it has been done in hæmoptysis. It is worthy of comment, that in the case recorded above by us, the third recurrence of hæmorrhage, came on while the patient was at stool induced by the action of sulphate of magnesia. It may also be mentioned, that in the midst of his attack, he took dry table-salt in large quantities, just as I have prescribed it in hæmoptysis frequently with marked effect, though no good result followed its use in his case.

The manual or surgical means, are as numerous as the therapeutic or medicinal proper. A common one, founded possibly on anatomical considerations, though erroneous, is the placing of a pledget of lint or fold of paper beneath the upper lip; and a paragraph has recently been going the rounds of the newspapers of the day, declaring the insertion of a piece of ice between the upper lip and the gums to be a specific remedy. On the principle of shock, or impression reflectively acting upon the vaso-motor nerves supplying the Schneiderian membrane, just as the application of ice or a bunch of cold keys applied to the nape of the neck is of benefit, we may explain its efficacy; but any efficiency of the method is not satisfactorily applicable as we have heard it, by supposing the supply of blood to be cut off or diminished by pressure, inasmuch as that portion of the membranes covering the ethmoidal sinuses, and the part from which the hæmorrhage in obstinate cases is most apt to be found to flow, is not supplied by the coronary artery, but comes nearly directly from the internal carotid. The ice beneath the upper lip Mr. M. had faithfully tried, but without the least consequent benefit, before calling in medical aid.

Dumas, of France, thought pressure of the nares against the septum all-sufficient to check the hæmorrhage.

M. Gibon, of Cherbourg, believed pressure of the carotid artery of the side of the nostril from which the blood flowed, a sovereign remedy. But his reliance is not based on satisfactory anatomical grounds, when we recollect the general anastomosis between both carotids and the vertebral arteries.

M. Négrier, of Angers, some twenty years since, presented to the Academy of Sciences of Paris, what he thought to be an invaluable mode of checking the hæmorrhage, which consisted of raising aloft the arm of the side of the nostril bleeding, and compressing the nostril with the other hand. But, as the *London Lancet* of that day rather wittily said, in noticing M. Négrier's announcement: "The proposer neglected to state the process to be adopted when the blood flows from *both* nostrils—in this case it is clear that both arms must be raised perpendicularly, and we imagine the patient must close the nostrils by compressing them between the great toes." But Monsieur Négrier's recommendation is not entirely unsupported by a show of reason. He says: "When a person stands in the ordinary posture, with his arms hanging down, the force needed to propel the blood through his upper extremities is about half that which would be required if his arms were raised perpendicularly above his head. But since the force which sends the blood through the carotid arteries is the same as that which causes it to circulate through the brachial arteries, and there is nothing in the mere position of the arms above the head to stimulate the heart to increased action, it is evident that a less vigorous circulation through the carotids must result from the increased force required to carry on the circulation through the upper extremities.*"

There is something plausible in the *rationale* of the process of M. Négrier, though it signally failed in Mr. M.'s case. We ought, however, to say, that while engaged in writing this paper, we were called (at 8 A. M.) to see a stout negro man (who, however, has cardiac hypertophy with mitral disease), who had been suffering with epistaxis, since one o'clock the previous night, and who had tried pressing the nostril against the septum with no effect beyond checking the flow through it to come out at the other, and on compressing both, the blood trickled by the posterior nares into the pharynx. On my arrival, bathing the face and head with ice-water, snuffing ice-water up the nostrils, as well as the introduction of narrow peices of ice into the posterior nares, the snuffing of dry powdered alum, the placing of large lumps of ice

* *Archiv. de Med., Lond. Med. Gaz.*, vol. 31.

over the carotids and upon the nape of the neck, were all tried in vain; but that on making him try M. Négrier's method, the hæmorrhage promptly ceased, without any return to the present, as far as I know.

If styptics, or a cold fluid could be brought into full contact with the bleeding surface, and kept continuously so applied for some minutes, it seems to us that next to plugging, we should have the most efficient means of arresting the hæmorrhage. The great difficulty of placing lint in accurate contact, or causing injections thrown in by syringe to reach, or be continuously applied to a spot situated high above the flow of the nares, and on the mucous membrane covering the deeply-groved fossæ of the turbinated bones, is readily imagined. In Thudicum's apparatus for the nasal douche, by means of which we know a continuous stream of fluid can be made to pass the entire circuit of the nares, entering one nostril, passing around the posterior nares, and flowing out by the opposite anterior nostril, it would seem that we have at command the means of fulfilling the indication most perfectly. This, however, is to a certain extent but conjectural; for though we are aware of the efficacy of its application in cases of ozæna, due to disease of the turbinated bones, yet I am unable to say that the stream sufficiently fills the nares during its passage, to be constantly in contact with the turbinated mucous-membrane in all its extent. I regretted much not having at command the apparatus, to try its effects in the case above related.

We are never justifiable in plugging the posterior nares, unless the patient is in imminent danger from loss of blood, until we have tried all ordinary means for its suppression; for, as Sir Thomas Watson truly says: "The operation of plugging the nares is not a very comfortable one to either bear or perform." Prof. Gross says that the practitioner who permits his patient to bleed to death from epistaxis, "should, provided he has had a fair opportunity of exerting his skill, be held personally responsible for his life." By plugging, we do not check the hæmorrhage by direct pressure, but what is really an indirect pressure is effected by the closure of the anterior and posterior orifices, the only apertures of exit; for although we have the *ductus ad nasum* remaining open, and have known a patient to blow blood out of the corner of his eye much to his surprise, and are acquainted with a little boy whom we have frequently seen blow air bubbles from the *puncta lachrymalia* for the amusement of his companions, yet while the blood can coagulate, no fears need be entertained of its welling up through this passage.

The operation of plugging the posterior nares is a very simple one, though performed under the circumstances under which we are frequently called to perform it, is usually a very disagreeable one, and to perform it upon a small child, or a nervous woman, whose terror and agitation tend to frustrate rather than aid our efforts, we imagine it one of the most disagreeable we can be called upon to perform in all surgery.

The ordinary operation is the one performed with Belloc's canula or sound, consisting of a watch-spring concealed in a curved silver canula; on the button which tips the instrument being sprung, the steel spring, armed with a stout silken double ligature, curls around the velum palati, and is readily drawn out of the mouth, enabling us to attach a piece of lint or sponge, to be drawn up into the posterior nares, on withdrawing the canula. The anterior nares we readily plug by tying the double ligature hanging out of the nostril around another piece of lint or sponge. (Dr. C. Edwards.)

Another method is, to pass a loop of silver or soft iron wire through the anterior and beyond the posterior nares, and drawing it out of the mouth, twist the wire around a dossil of lint inserted within the loop, to now be drawn back into the posterior nares, and the anterior ends to be twisted around another dossil inserted into the nostril.*

Franck has recommended a piece of dried pig's intestine, with one end tied, to be inserted beyond the posterior nares, by means of a sound, and on water being injected into it, when full, for the end outside the nostril to be tied. Dr. E. A. D'Arcy, of Jerseyville, Illinois, in the *Medical and Surgical Reporter*, of October 22, 1869, gives an account of a case of obstinate epistaxis, in which he had been unable to stop the bleeding by plugging after the ordinary method, in which he then tried the pig's intestine, but which burst by the distension from the water. He then had a sheep killed, and used the œsophagus, which he said proved sufficiently strong, and enabled him to save his patient's life.†

Mr. Patrick Gillespie has used glazier's putty enclosed in a linen bag, after unsuccessfully using lint; the hæmorrhage, however, recur-

* *London Lancet*, Feb. 3, 1849.

† Since reading the report of Dr. D'Arcy's case, we have made some experiments with the œsophagus of the sheep. We know not from what breed of the genus *ovis* Dr. D'A. got his specimen, but we would say that had he taken it from one of the ordinary animals furnished this market, his patient's nares would have had to grow to double the diameter of an ordinary person's, before, I think, he could well have succeeded in passing it through.

red once or twice on the skrinking of the putty, and from his account of its effects, we certainly would not feel disposed to rely on it.

Martin St. Ange, modifying Franck's method, has invented a little instrument which he calls the Rhinobyon, consisting of a small bladder fastened to a silver canula, with a stop-cock attached. The bladder being inserted to the posterior nares, is inflated with air, which is retained by the stop-cock, and the nostril in front is then plugged with lint.

Probably the *condom*, made of india rubber or gold-beaters' skin, and now to be found, we believe, in most of the drug-stores of the country, would, perverted from its original purpose, serve an excellent end in cases where the ordinary means had failed.

One of the simplest means, and such as is at the hands of every doctor, is that recommended by Martin Solon, which consists in the introduction of a flexible gum catheter or bougie through the nares into the pharynx, the end of which, on being drawn out through the mouth, can be readily threaded and armed with sponge or lint, or bladder, and on being withdrawn, can as efficiently serve the purpose of Belloc's canula as one could wish for.

We would give it as our humble opinion, that it is impossible for the nose to bleed when it has been properly plugged by the simple sponge. But to plug efficiently, we think it insufficient that a piece of sponge of any shape, or no shape, should be attached to the ligature, as is generally done, but that fine compressible sponge should be selected, should be cut into a cone the apex of which is sufficiently small to *enter the nares*, and thus accurately close the aperture of exit.

If this should fail because of fluidity of blood from the previous exhausting hæmorrhage, the uterine tent of compressed sponge, we imagine, could not, though, we think, the uncomfortableness following its swelling, makes it unadvisable to use it, unless under extreme circumstances.

Dr. W. H. Triplett, of Woodstock, Va., has recorded a case which, in his hands, proved fatal, after exhausting the application of all the local astringents, giving every hour, internally, two grains of acetate of lead and a grain of opium, until the patient fell asleep, and plugging the posterior nares with soft surgeons' sponge. After the plugging the hæmorrhage was checked for some hours, but while sitting up in bed eating, the stream commenced trickling down beside the sponge, and the patient bled to death.*

* *Medical and Surgical Reporter*, 1869.

We have only been able to find one account of the post-mortem signs exhibited by the schneiderian membrane after death from epistaxis. This was related by Mr. Crisp before the London Medical Society in 1839, and was the case of a woman who had lost a large quantity of blood, (estimated at four quarts), before the nostrils were plugged. She died after the operation in convulsions, and after death Mr. Crisp says: "On removing the right nasal and superior maxillary bones, the body of the sphenoid and the orbital plates of the frontal, the mucous-membrane of the nose and the sinuses were examined with great care, but no vessel could be discovered from which the blood had passed. The membrane over the inner portion of the turbinated bone was in a state of slight ecchymosis, and a small clot of blood was in contact with it."*

Probably some present may think an apology due, for detaining you so long upon so small a subject as "bleeding at the nose;" but those of you who have had, or in future may ever have, a desperate case requiring plugging of the posterior nares, will hardly think the *affection* a trifling one, whether what I have said has been worth listening to or not.

THE TRUE AND THE FALSE IN THE PROFESSION OF MEDICINE.

BY DR. WILSON HOBBS, CARTHAGE, INDIANA.

(Read before the Union Medical Society at Knightstown, Indiana, at their April session, 1869, and by their order offered for publication.)

(*Continued from the August Number.*)

But the most gigantic system of quackery that ever cursed the world, and surely we may expect none greater, is our present institution of Patent Medicines. It is a loathsome disease which has invaded the whole earth from pole to pole, and from ocean to ocean. While it has made princely fortunes of ill-gotten gain for a few designing men, it has filled the land with mourning and the whole earth with lamentation. Satan has thoroughly equipped patent medicine venders with his whole armor of falsehood and deceit. There is not a disease, however malignant, which they no not promise to cure—there is not a pain they do not promise to relieve—there is not a wound they do not promise to heal.

* *London Lancet*, 1839, vol. II.

The world is flooded with bitters, tonics, anti-periodics, alteratives, syrups, balms, balsams, pain-killers, pain-reliefs, pain-paints, pain-extracters, pectorals, expectorants, panaceas, cholagogues, mixtures, extracts, embrocations, liniments, salves, blood-purifiers, blood-regenerators, oils, lozenges, plasters, vermifuges, ointments, and pills, enough to fight all the battles of the world, if they were made of heavier metal.

The etymology of every language in the world, from the Hottentot to the Anglo-Saxon, is taxed to furnish names for these vile compounds. A large department in our country stores is always allotted to them, and each neighborhood post office is sure to be supplied. The drug store must allot at least every other shelf to them, and no reputable newspaper thinks it right to appear with less than two pages devoted to their wonderful merits. They have so entirely monopolized the almanac business, that now-a-days one can not look for the day of the month or the change of the moon, without being insulted by a patent medicine advertisement. The public highways are made disgusting by the indecent and lying notices printed upon the fences and out-houses, where the eye of the traveler may chance to fall. Every means which the arts of civilized life have supplied for the communication of intelligence is prostituted to this ignoble purpose, that there may not be a victim of disease or accident upon the broad earth from which something may not be filched. The appeals for public patronage are addressed to every generous impulse and noble sentiment of the human heart. "If it were possible they would deceive the very elect."

Let us analyze some of these popular medicines, and see what they are worth. Of those designed for internal use, the most are applicable to chronic disease if to any at all, and may readily be divided into three great classes, viz: expectorants, alteratives and tonics, to suit the three great families of disease, viz: of the pulmonary and digestive organs, and of the general nutrient system. If the nostrum be designed for pulmonary disease, the advertisement will set out with an enumeration of all the symptoms and conditions which can possibly arise in the various diseases of these organs, either acute or chronic, presenting them as so many separate diseases, and closing by saying that this wonderful preparation will certainly cure them all; and wonderful indeed it would be if it could be made to answer so many different conditions.

Ayer's cherry pectoral is designed for such diseases, and is com-

posed of the syrup of wild cherry tree bark, tartar emetic and acetate of morphia. This would be a good prescription for some cases of cough, but it can not cure consumption, and no one who understands the pathology of phthisis pulmonalis would recommend its continued use in that disease. It is a suitable prescription in but a very small number of the cases in which it is paraded as a positive cure; yet thousands of unfortunate invalids have been induced by flaming advertisements and manufactured certificates, to place all their earthly hopes upon its delusive promises, until, when undeceived, they were upon the brink of the grave from which nothing could rescue them. So of the whole class of villainous balms, balsams, extracts, cholagogues, &c. There is nothing new about them, and very little that is useful. Their great success arises from the fact that many persons suppose themselves sick who are not so, and after using half a cord of bottles of some panacea, they have but to suppose themselves well again to be so.

Of the family of pill, rhubarb, aloes and soap are the constituents of ninety-nine out of every hundred of those which are cathartic, and of those which are tonic, the bitter extracts with sometimes the addition of a little iron will tell the story of them all. Among the liniments there is little choice and little difference of composition. The volatile oils, capsicum, camphor and alcohol constitute the whole of them, and I would not give the snap of my finger for the difference between them. Perry Davis' pain-killer is little else than tr. of capsicum.

The most useful class of patent medicines are those which have the least medical effect. Swain, Townsend and Bull each made princely fortunes by the sale of the syrup of a drug almost destitute of medical qualities. I am sorry that this occasion will not allow me to do justice to this villainous traffic.

Neither will time allow me to discuss the more humble quack systems and quack doctors. I can barely stop to mention Indian doctors who go to heathenism to learn science. Since my attention was directed to medicine I resided two years among the savages upon our Western border, and while there I took especial pains to learn what the Indians know about disease and its treatment. The properties of a few plants are known to them. They frequently cord the arm and draw blood with sharpened flint; but aside from a few simple means, they rely wholly upon conjuration and incantation. They have few diseases amongst them, and these few are acute—rarely chronic. The

reason they are so stout and hardy a people is not their successful treatment of disease, but their mode of life, which nips in infancy all who have not iron constitutions—thus preventing the transmission of hereditary weaknesses.

We have root-doctors, too, whose eyes, like their brother rooters, never take in the light of the sun—Scotch doctors, that old Scotia would blush to own—wind-doctors, who blow fire out of burns and scalds. These were important inventions in the days of steam-doctors—blood-doctors who, without making a peg, can stay hemorrhages—conjuring doctors, who can cure disease by touch, &c. Your patience would tire were I to recount the whole race of quacks.

Let us look at the general character and professional attainments of these monstrosities. Whatever system of medicine we may favor, whatever opinions of disease and its proper treatment we may entertain, the structure of our bodies is the same, and we should equally and alike understand anatomy; the functions of the organs are the same and we should alike understand physiology. So of all the several branches which go to make up the science, except pathology and therapeutics. Here are the only points upon which we can differ. Hence, whether a man is a steam-doctor, root-doctor, hydropathist, homœopathist, allopathist, or what else, the same diligent and patient industry, the same protracted and persevering research, are necesary to fit him to assume the responsibilities of human life at the bedside. There are to my knowlege, and there have never been, but two systems of medical practice, aside from the regular profession, which conferred the degree M. D., or required a preliminary education to practice.

In the days of Thompsonianism I knew many self-styled doctors who never read medicine a month before commencing practice, and never in my life did I know one who understood medicine as a science, or who looked into books for knowledge. So of the whole spawn of medical pretenders. Their art, if they can be said to have any, is not founded on a science, and they study no science to acquire an art.

Examine the nest of Indian doctors, Uroscopian doctors, Physio-medical doctors, and the whole kith and kin of the race of empirics, and we can not but rejoice that they disclaim the use of calomel and the lancet—these would be dangerous means in such hands, used without knowledge and guided without judgment. These remarks apply with equal force to all pretenders, whether in or out of the regular school. Unfortnnately some ape the scientific profession, who have no fitness for their high duties. All such should be made responsi-

ble in our courts of law, for there is no good reason why every man who obtains money by false pretenses, be those pretenses what they may, should not be punished for his perfidy.

Most of these pretenders vest their spleen upon certain drugs used by the scientific profession, while they accept many or most others which we use. They first object to mineral medicines—they would shut out from their catalogue everything but vegetable simples; vegetable simples alone is their motto, and with this upon their lips, ninety-nine out of every hundred prescriptions which the knavish fools make contain one or more minerals. What is a mineral? "A body destitute of organization, and which naturally exists within the earth or at its surface." We eat minerals, and drink them, and breathe them, and they are contiually floating around us—indeed our bodies are but an aggregation of mineral matter, united by fixed cohesive and chemical laws, and organized and made alive by certain vital processes. Hence minerals can not be very dangerous things after all.

Some sects say it is not *minerals* to which we object, but the *poisonous minerals*. Well, if we go to casting poisons out of the "kit," why not cast out vegetable poisons also? The most violent poisons which nature or art has ever produced are from the vegetable kingdom—indeed, there are few mineral poisons of any considerable potency.

A substance may or may not be poisonous according to the circumstances under which it is used and the quantity taken. One grain of arsenic is a poison—one-sixteenth of a grain is not; ten grains of opium is a poison—one grain is not. So we must not set drugs aside because they are poisons, or we will have little left.

But the most decided objections are brought against calomel, opium, blistering and the lancet. I can not now discuss the merits of these remedies, or the nature of the objections brought against them; but I will here say that did I believe that calomel had produced one hundredth part of the miseries imputed to it, I would cast it from me despised and detested.

But I know the accusation false as imputed. The honest history of the drug—the testimony of the profession—my own observation and experience so prove. I know it to be a mild medicine, and at the same time a potent agent. It should be administered only by those who understand its properties and uses—the same may be said of all remedies. It has, doubtless, sometimes produced bad effects, but I have never seen such. I have been nearly twenty years engaged in the

practice of medicine—three years an army surgeon—where many thousand sick passed under my eye, and in all that time I have but once seen a mercurial ulcer as large as a wafer. I am nearly forty-six years old, and never yet saw a case of mercurial gangrene—have seen but two cases in which an intelligent jury would decide that mercury had left permanent traces behind it. I am well satisfied that I have seen hundreds of cases in which it gave the only hope of life.

But even admitting that sad effects sometimes follow its use, science has furnished us no substitute for it, and it is far better that a few should bear its permanent traces than that many more should die without it.

We frequently hear persons who have arisen from what was for weeks or months thought to be a death-bed—with impaired constitutions, attribute all their infirmities to the *strong* medicine they took while sick, especially to the calomel and quinine—not once dreaming that the disease which brought them to "death's door," could have done them any permanent harm. All injuries must be saddled upon the friends that come to the rescue—nothing upon the enemy that made the attack. This parade against "*strong medicine*" is made to deceive. Suppose an invading army were landed upon our shore, would we send boys to drive them back? If an armed assassin should attack your family, would you send a child to the rescue? As well might we in cases of malignant disease, go forward to meet the grim monster death, and give him battle with milk and water forces. Such attacks demand the whole artillery of medication, and even then the assailant is too often victor. The defence should be wisely proportioned to the invading force. To-day I was called to see a lady suffering from acute inflammation of a vital organ. As I moved my seat to the table to arrange my prescription, she said to me: "Please, Doctor—please don't give me any strong medicine. I am so weak I can't bear it." She knows not why she is so weak. She does not realize that an armed foe has taken complete possession of her, and bound her hand and foot, and that none but a mightier than he can dispossess him.

But we must not pursue this subject further, interesting as it is. We have thus hastily reviewed a few of the Quack systems and Quack doctors which, during the last few years, and at present, have claimed and now claim the honors and profits of the profession of medicine. From the greatest to the least of them, they have no settled principles founded upon reason or science, but are made up of a few specific

modes and uncertain opinions; and, wandering from these, they become self-contradictory and lost. Like will-o'-the-wisps, they arise from the bog in which they are born, to dazzle and mislead the credulous beholders—flourish their brief hour in darkness and clouds, and disappear to make place for a successor. Whereas true medicine has gone onward, right onward, gathering wisdom from every age, country and clime. The sleeping centuries have not dimmed the lustre of her eye, or silvered her aged locks, but with the freshness, vigor and elasticity of youth, she steps right onward with the majesty of a queen. The fruits of beneficence and love are scattered wherever her footsteps tread; and when her arm is too short to save, she drops a tear and points to God.

"Hail, noble Queen! Speed onward—right on!"

A SYNOPSIS OF SOME GUNSHOT WOUNDS.

BY PROF. EDWARD RIVES, M. D., OF CINCINNATI.

The following is a report of gunshot wounds which came under my personal observation and care at the battle of Gettysburg, and is taken from the original record made by myself during the period of the existence of the field hospital, (about six weeks,) of which I had charge.

The wounded were, generally, men of robust constitution and in fine physical condition at the time of the receipt of their injuries.

It is proper to state that the situation of the field-hospital was on an eminence, at the foot of which flowed a bold stream which supplied us with an abundance of fresh, clear water. The shelter which I preferred and obtained was the single *tent-fly*. Each one was so stretched over the ridge-pole as to be about three feet from the ground on the sides, and of course the ends were entirely open. Three men were as many as were placed under one shelter. Perfect drainage was accomplished by ditching and by the natural declivity upon which the hospital was established.

As the reader is aware, the season was nearly mid-summer—intense sunlight, alternating with frequent showers.

Police duty was daily performed by detailed nurses and convalescents.

All debris was carefully removed and buried in sinks, into which fresh earth was daily thrown.

Owing to a deficiency in the number of tent-flies, about seventy-five men were placed in contiguous houses. These wounded congratulated themselves upon what they conceived to be good fortune, but which I would have been glad to avoid; and the result proved what I expected, namely, a greater mortality and slower recovery in the houses than under the flies. This experience accords with all my previous and subsequent observation of field-hospitals. Nor can I attribute this difference in mortality and recovery to any difference in the class of cases in the respective situations. Of the wounds here reported, the majority of complications of tetanus and all of the cases of hospital-gangrene, erysipelas and pyæmia occurred in the houses.

Some explanation is due to those not acquainted with the great difficulty, nay, impossibility of making a full and satisfactory record at such a time and under such circumstances.

There were many individual cases whose intimate history would have been of great interest to the profession, and which would have afforded me great pleasure and satisfaction to report, but the press not only of professional but of executive business on such occasions renders a close record of each individual case impossible. Many of the salient points of these cases I remember, but in matters of this kind I prefer to adhere to records made at the time, lest I might, unwittingly, be led and lead others into mistake.

These records, if valuable at all, are, therefore, chiefly so in a general statistical point of view, and I give them to the profession for what they are worth:

SITUATION OF THE WOUNDS.	Numb'r	Deaths.	Pr. Ct'g of Deaths.
Abdomen	16	8	50
Leg	46	6	13
Forearm	27	2	7
Face	9	..	...
Humerus	9	..	...
Testicle	2	..	...
Thigh	53	4	8
Perineum	1	..	...
Foot	15	..	...
Back	12	1	8
Ankle	5	1	20
Hip	6	..	...
Buttock	2	..	...
Neck	7	1	14

SITUATION OF THE WOUNDS.	Numb'r	Deaths.	Per Ct'g of Deaths.
Breast	17	5	29
Side	11	--	...
Shoulder	14	3	23
Knee	8	3	37
Elbow	1	--	...
Head	6	3	50
Wrist	1	--	...
Hand	2	--	...
Penis	1	--	...
Total	271	37	14

With the exception of four shell-wounds, all were caused by small projectiles—a fact accounted for by both the comparative infrequency and fatality of shell-wounds.

It will be seen from the foregoing table that the total number of cases was two hundred and seventy-one; that the total number of deaths was thirty-seven, that the per centage of deaths was thirteen.

There were thirty-four amputations performed, eight deaths resulting thereafter, making twenty-four per cent. of deaths subsequent to amputation. The adjoining table exhibits the mortality following amputations of the several parts:

	Numb'r	Deaths.	Per Ct'g of Deaths.
Forearm	23	1	8
Humerus	6	--	--
Thigh	7	4	57
Leg	8	3	38
Total	34	8	24

It is proper to state that the circular operation was performed wherever practicable, and in the majority of cases.

The death against the amputations of the forearm was caused by a wound of the right lung, received simultaneously with that of the arm.

Of the three deaths against amputations of the leg, one case died of tetanus—one suffered amputation of both legs simultaneously—and one was a secondary operation, and died of pyæmia.

Of the four deaths against amputions of the thigh, two cases died of tetanus—two died of pyæmia, and were secondary operations—all were at or above middle third of the thigh.

In all, there were three secondary amputations, and all proved fatal—death occurring from pyæmia.

One resection of the shoulder-joint was successfully performed by Dr. Lewis, now of Alexandria, Va., very soon after the receipt of the wound. The head of the humerus was removed with an inch of the shaft. I am told that at this time the patient perceives little difference in the utility of his arms.

No secondary hemorrhage occurred to complicate any case.

Nine fractures occurred not requiring operative interference beyond the simple removal of comminuted bone. All promised to make a good recovery at the time they were removed to the general hospital. The situation and relative numbers of the fractures is as follows:

Forearm, two; humerus, four; clavical, one; leg, one; thigh, one; fractures requiring no operative interference, nine.

Visceral wounds were attended with the following mortality:

	Numb'r	Deaths.	Per Ct'g of Deaths.
Peritoneum and bowels	7	6	86
Lungs	8	5	63
Bladder	1	..	...
Brain	3	3	100
Total	19	14	74

Wounds of joints were attended with the following mortality:

	Numb r	Died.	Per Ct'g of Deaths.
Knee	8	3	38
Elbow	1	..	...
Wrist	1	..	...
Ankle	5	1	20
Shoulder	7	..	...
Total	22	4	18

No operative interference was allowed in any of these wounds, ex-

cept the resection of the shoulder-joint in one instance, and amputation in two instances.

The comparative liability of different regions to injury in battle, according to this report, as well as the number and per centage of deaths, may be seen from the following table:

	Numb'r of W'nds.	Died.	Per Ct'g of Deaths.
1. Inferior extremity	127	14	11
2. Trunk	79	17	22
3. Superior extremity	40	2	5
4. Face	9	-	-
5. Neck	7	1	14
6. Head	6	3	50
7. Genital organs	3	-	...
Total	271	37	14

Of seven cases of tetanus, three occurred after amputation—all died. Of the wounds of the abdomen, one is especially worthy of mention.

It occurred to "John Dowdy, Company G, twenty-eighth regiment." He was struck by a minnie ball just below the ensiform cartilage, about five o'clock in the evening; the next morning he passed the ball by the rectum imbedded in natural feces.

This is not so strange as the fact that he recovered without any appreciable constitutional disturbance beyond that produced by opium.

The other deaths not accounted for (nine) occurred from the shock of wound, tetanus, dysentery and pyæmia.

THE FORCES OF ORGANIC LIFE—HOW INFLUENCED BY CHLOROFORM IN THE PRODUCTION OF ANÆSTHASIA AND DEATH.

BY Z. C. M'ELROY, M. D., OF ZANESVILLE, OHIO,
President Muskingum County Medical Society.

Many years since—the writer is no longer young—the following incident was read, when or where, not now recollected.

An Englishman, after ship-wreck, found himself on an island, among a people whose language he did not understand. This added

so much to his other misfortunes and difficulties, that he conceived the idea that a common education in all civilized countries should include a universal language of signs, for the benefit of those who might possibly be thrown together speaking different languages. In due time he reached home, and immediately set about carrying his idea into practical effect. For this purpose he visited the great seats of learning in and about London, but met with little or no encouragement, save that at one of these he was informed that there was such a chair, with a professor, in Edinburgh. He at once hastened off to that city. Those in London who had told him this to get rid of him, finding him so much in earnest, wrote to some acquaintances connected with the University there, to humor his whim when he arrived, and give him an audience. On inquiry of the janitor at Edinburgh, he was informed that there was a professor of a universal language by signs, and that he would be in his rooms at a certain hour. The matter was taken in hand by a few students, who imposed the duty of acting the professor upon the rather sharp witted janitor, who had lost an eye. At the appointed hour, the stranger was promptly at the University, and was conducted to the professor's room. On entering he held up one finger. The janitor, in reply, held up three. There were other signs exchanged, but these two serve my present purpose. After being bowed out of the professor's room, he was met by the mischievous students, who eagerly inquired of him about his interview. The Englishman replied by stating that on entering he held up one finger, to signify that there was but one God. The professor had held up three, signifying that God existed in the three persons, the Trinity, &c., &c. Their next object was to obtain the janitor's account; who said that the Englishman was very personal and impudent, for on entering the room, he had held up one finger to signify that he, the janitor, had but one eye. In return, he said he had held up three fingers, to signify that they had three eyes between them.

The article on "Death from Chloroform,"* by Dr. Jones of Circleville, O., recalled this incident to memory. Though our subjects are not identical, there is, nevertheless, a close relationship; sufficiently so, perhaps, to be practically treated as such. He thinks my theoretical explanation of the conversion of gravity into organic force,† in resuscitation from impending death, due to overdoses of choroform, very absurd. That may be so; but it seems to me he fails to show it

* *Western Journal of Medicine*, July, 1869.

† Loc. Cit., May, 1869.

to be so, either by facts or reasoning. That it was theoretical on my part is not an argument against the truth of the explanation given; for the only originator of action can be theory, and the choice lies between one that is hap-hazzard, and one that is adopted on rational grounds."*

Three facts are, however, recognized by both of us: One, that overdoses of chloroform have produced death; another, that by all quantities, small or large, life is often placed in jeopardy; third, that those so imperiled are frequently resuscitated.

Now, the actual death, or peril to life, after the inhalation of chloroform, and resuscitation from impending death, do not occur by chance or accident; but, like all other phenomena of organic life, are in obedience to invariable laws, and correct philosophic explanation of the events, hinges upon connecting them properly with the laws governing organic dynamics. Permit me, therefore, space for farther explanation.

From our articles, it is evident that Dr. Jones and myself look at organic dynamics from very different stand-points, or the conclusions we arrive at would hardly vary so much; for they are as diverse as the interpretations of holding up one and three fingers, respectively, by the shipwrecked Englishman and Edinburgh janitor.

Through two decades of professional experience the human body and life were mysteries, and therapeutics a muddle; though Horner, Jackson and Wood had explained them to me, as they had done to thousands before and since. It was somehow comprehended, though not very clearly, that human bodies were constructed out of the food eaten; but then there were so many isolated and contradictory facts in regard to it, all resting on equally good "authority" in such matters, that I was contented to learn, in therapeutics, that "tetanus" had been "successfully treated with calabar bean," or that "chestnut leaves" were good for "whooping-cough,"† &c., &c. And so, chewing the cud of contentment, relied on "authority" in all matters professional; not, however, without many misgivings as to its propriety, and longings for a "more excellent way."

Some years since a review of a book was read whose subject was "The Correlation and Conservation of Forces." At that time I was somewhat anxiously casting about for a subject for a "valedictory address," to be delivered to the society which has so often honored me

* *London Quarterly Review*, April, 1869.

† From current *Medical Journal*.

by electing me its presiding officer. No time was lost in obtaining the book, an American republication, as well as some English works, and, in fact, all that had been published on the subject at home or abroad. The society was notified several months in advance of the subjects of the valedictory, which was received as a pleasantry rather than as a matter of scientific interest; and so, I was nick-named "The Forces." Though frequently inquired of about "The Forces," nothing was said in reply but *badinage*, until the valedictory was read. It was received with much surprise; though the members are remarkable for their general and professional culture. In subsequent papers read to the society, or published, correlation of force has been pushed into practical medicine farther than by any other, no matter what his position in the world of science and letters, known to me, on either side of the Atlantic. Many other circumstances gradually led me, step by step, to resolve the mystery of life to my own satisfaction. It was made clear to me that the human body was composed of ordinary elements, which are well known, and controlled by forces equally well known, save in one particular..

A germ of the wheat plant; a soil, with moisture, light, heat, and the atmosphere, supplied the conditions for its growth and multiplication very many fold. Its seed, after undergoing sundry mechanical processes of grinding, sifting, &c.; and then some chemical alterations, arrested at a certain stage by heat—baking and *bread*, "the staff of life," is the result. Of this staff of life, man and beast, reptile and bird, fish or insect, mollusk or worm might partake, and with similar conditions surrounding, to-wit: light, heat and moisture, with the occult chemistry and dynamics of organic life, the wheaten loaf formed tissues for all. It was to the mode of force which thus, out of the wheaten loaf, constructed the tissues for all, that the term "formless" or "organizing" was suggested and applied, because the wheaten loaf was certainly "formless" protoplasm—the first matter or "physical basis of life,"* and that the form which it should assume when eaten by a living being, depended solely on what that living being should be; whether man or beast, bird or fish, reptile, worm or insect; black, or white, or poly-colored, deformed or symetrical, old or young, learned or unlearned, civilized or savage; and as each had its own specific forms, the power or force which gave these forms would be accurately and scientifically expressed by the terms "form-force," or "architect of organization." And it appeared certain that the force

* Prof. Huxley, *Fortnightly Review*, Feb., 1869.

or power or labor, which assimilated the protoplasm—first matter of life—to each of these forms, was but a continuation of the ordinary physical forces of light, heat, &c., which had organized from carbonic acid, ammonia, water, and the earthy and saline constituents, the wheaten kernel or germ; and as the potter had power over the clay to make one vessel or form for one purpose, and another, out of the same clay, for another, it was evident that in all forms, whether organic or inorganic, there was a necessity for the laborer and architect; that though there were sometimes, and exceptionally, combined in one person, as in the potter, making the forms of his own fancy or design, they were, in reality, in the construction of organic forms, separate modes of force, or there would be no protoplasm, or first matter of life for all—hence, in substituting for the term vitality—which is apparently single, and without definite meaning, in fact used to cover a vast mass of ignorance, and repel investigation, two terms, expressive of exact and definite modes of force, the matter to my mind was greatly simplified; though Dr. Jones thinks that the multiplication of terms has, to him, added complexity. But it does seem to me that two terms, with definite meanings, expressive of exact facts or laws, are more simple than one term without definite meaning. And this was all the more conspicuous in reasoning them, through to consequences. Thus, over the formless or organizing force, therapeutic agents unquestionably have influence to promote or retard its operations in many ways, as by low temperature and rest, the velocity of tissue waste and repair are reduced to their minimum; while high temperature and physical labor, run both up to their maximum, as exemplified by laborers in harvest fields.

But the matter of form is beyond the control of remedial agents. Two weeks since it was my privilege to assist at the post-mortem of a child twenty-two months old, from whom was taken what was once a mesenteric gland, but then was a formless mass weighing eight pounds, though the entire little patient, tumor and all, weighed only twenty-two. Here was eight pounds of organic matter out of normal form in a child's abdomen, and was the occasion of its death partly by mechanical pressure on the remaining contents of the abdominal and thoracic cavities, and partly by the appropriation of so much of the protoplasm eaten by the child, to the growth of the abnormal form.

It adds nothing to our knowledge to say that it was a cancerous mass; for what does the word cancer mean? Why, something malignant and awful—that is all. The tumor was constructed out of the

same first matter of life as the tissues of normal form, and by the same organizing or formless force. These are the facts; then why not say that the normal type or form was lost, and that therapeutic agents to restore it are unknown, *i. e.*, over that mode of force giving and preserving forms, amidst the ceaseless molecular changes of organic tissues, we can, by remedial agents, exercise no control. To designate such, the term was suggested, because it expresses definitely its purposes and results in organic life; and, as in the child's case, organization went on, producing tissue or structure of one uniform type foreign to the body, the term formless was, in like manner, suggested, as expressive of its purposes and results. The little patient had therapeutic agents given to retard the operations of the formless force, which probably prolonged its life many days; but, as they had no power to restore lost forms, the little sufferer passed away. Therapeutic agents can and do promote or retard the operations of the organizing or formless force; but cases of lost forms are given over to the surgeon, whose sole power lies in their removal or destruction; and in some cases, as in that of the little child, he, too, is powerless.

It does seem to me, therefore, that my substitution of two forms, with definite meanings, for one without, signifies my conceptions and ideas of organic life. For its mystery, apparently, lies solely in its forms. The same formless "first matter of life," being used to construct all organic forms, whether in man or beast, reptile or bird, fish or worm, mollusk or insect.

This explanation and justification for my new terms and division of the forces of organic life, would be esteemed invulnerable, were it not that the difficulties of "communication,"* so graphically set forth by Mr. Wasson, are remembered and realized. These, like the story of the Englishman and janitor, remind me that, certainly, not this side of the millenium, will we all see or think alike. But to me these definite conceptions of the forces of organic life, throw a flood of light upon my ministrations to the sick, and explain intelligible formulæ the separate provinces of the physician and surgeon in the management of the "disarrangements" of the human body. The science, skill and art of the surgeon certainly falls outside of the "healing art," for to him pre-eminently belongs the province of destruction, *secundum scientiam;* while to the physician is committed the oftentimes difficult task of "promoting here, restraining there, and so bringing about that equilibrium of the forces of life which constitute health."†

Atlantic Monthly, October, 1864.

† Bence Jones.

In disposing of Dr. Jones' objections to my classification of the forces of organic life, it may be proper to say that the organizing or formless force, is certainly a co-relation of the ordinary physical forces of light, heat, &c.; and is to be regarded as the laborer—and that the form force is the architect—the giver and preserver of form with the momentarily changing material of organic tissues. And that these relations of laborer and architect are constant and unchangeable, so far as purposes and results are concerned in organic life. That a disturbance of their natural relations constitutes disease—that is to say, where form is preserved, but repair arrested, or where form is lost and repair continues—the one medical, the other surgical, but each tending to death.

In the consideration of impending death, or death forces over doses of chloroform, in my former article, they were considered entirely from a dynamical point of view. When enveloped in the muddle heretofore spoken of in regard to organic life, and the relations of therapeutic agents to organic structures, such terms as "asphyxia," "spasms of the glottis," &c., &c., had to satisfy me as to how these conditions were brought about. But when held down squarely to consider and realize that the acts of the circulation and respiration were due to some mode of force, and that in the act of their accomplishment force was not destroyed, but correlated in some other mode of force, it was found necessary to leave them entirely out of consideration as too loose or indefinite for the expression of the solution of any dynamic problem. The acts of circulation respiration require power. Where does this power come from? Physiology points to the nerve masses (not nerves) as the source. Pathology shows that it does not reside in the nerves, and further shows, that the nerves are only conductors of force.

Again, force depends always, whether in organic or inorganic natures, upon change of matter. Thus, the natural forces available to man for mechanical results, are gravity—as full of water, gravity in every such instance being correlated in heat, though compelled to turn round mill-stones before it is dispersed as heat. Currents of wind—heat being correlated as mechanical motion. Combustion—chemical affinity—complex organic compounds retroceding to simple states—the heat correlated in organization, reappearing during their oxidation or combustion.

So, also, in organic nature. All animal life depends for food, at last, on the vegetable kingdom. As inorganic elements are advanced

in organization, light and heat are correlated, consumed, or disappear, and form part of the organization itself. That is to say, a grain of wheat represents so much C. H. N. O. S. P. + light and heat. Upon the return of these elements to their states in nature, the heated correlated in its organization, reappears. If it were not the law that all organic compounds represent their inorganic elements, plus heat, gardners could have no hot-beds from the slow oxidation of refuse vegetable matter, as manure, grasses, &c. Hence the formulæ, "for every dynamic result, there must be change of matter."

The circulation and respiration being dynamic results, require power or force for their continuance. That force depends on change of matter; and death by chloroform is certainly due to an arrest of the changes of matter, which furnishes the forces for each, in all instances whatever. Dr. Jones objects to the formulæ that death by chloroform is always due to paralysis of the lungs, or heart, or both. What is paralysis? Can it be anything else than a suspension of the power necessary for the performance of their functions? Then, again, force in organic life always depends on, or it is due to, oxidation. How can oxidation be carried on without oxygen?

Dr. Jones speaks of the "respiratory sense," by this, perhaps, meaning the "hunger," as it were, of the capilliaries for oxygen. As this was not alluded to in any way in my article on the conversion of gravity into organic force, it requires no notice here.

The remainder of Jones' physiology is, to say the least, a little "foggy." My understanding is, that destructive metamorphosis in the living body, for the production of dynamic force, can only take place where oxygen is supplied; and that atmospheres of nitrogen and hydrogen, or either, are incapable of oxidising any organic substance whatever.

Dr. J. may be sure that the reign of law is supreme in the human body, as well as all organic life, and that nothing occurs by chance, or outside the pale of law. Chloroform is sometimes the immediate occasion of death. For it must not be forgotten that we are all due, or owing, each for ourselves, to death. (*Debemur morti nos nostraque.*) Before death, in such cases, the heart and lungs cease their play; in my experience in impending death, (never had a death from chloroform), sometimes one, and sometimes the other fail first, and the failure to perform their acts is certainly due to want of power or force.

In the study of dynamics, force must be traced through all its correlations, or modes, always remembering that it can neither be in-

creased or destroyed. If one mode of force disappears, another re-appears; for the forces of light, heat, chemical affinity, gravity, &c., are all convertible into each other, and each into all.

In the arrest of the circulation by cloroform, heat, and its correlative, mechanical force, disappears, and gravity re-appears, as shown by the blood settling to the most dependent portions of its circuit in the body. By depressing the head, before the blood has coagulated, gravity takes it to the brain and lungs and nerve masses; and, as in Dr. Mobley's case, disappears, organic force reappearing. Can anything be more plain, or more certainly demonstrated?

Permit me to say, in conclusion, that I thank Dr. J. for the opportunity he has afforded me to explain the modes by which the results stated in my former article were reached. Facts I know, and law I know, but symbols, as asphyxia, in the solution of dynamic problems, I reject. Nor should it ever be forgotten that the terms used in science are symbols. Facts will live forever. Symbols may and do change. It is a melancholy fact that chloroform has, apparently, terminated life. The symbol, asphyxia, has served its purpose, and must give way to some other term more definite. When a better formula, or one better expressive of the facts and laws concerned in the dynamics of anæsthasin, death, and impending death from chloroform, than "arrest of destructive metamorphosis," is presented to me, all possible haste will be made in adopting it, and consigning my own to oblivion. But, until then, I must hold that "arrest of metamorposis" fairly represents the facts and law dynamically, as presented in death from overdoses of chloroform.

A MEANS OF MAINTAINING AN ARTIFICIAL OPENING IN THE MEMBRANA TYMPANI.

BY DR. ADAM POLITZER.

(Translated from the *Wiener Medizinische Wochenschrift*, of April 21, 1869, by T. F. Rumbold, M. D., St. Louis, Mo.

Towards the close of last year I reported in this journal a method of maintaining an artificial opening in the tympanum of the ear, which succeeded in a case of great deafness in improving the hearing in a very high degree.

The method consisted in using a hard rubber eyelet with a groove

formed around it, so that the rim of the perforation of the tympanum closes upon it, thus holding it fast and allowing the air to freely enter the tympanic cavity. The report alluded to was made six weeks after the operation, and a considerable time has elapsed. I will give a further history of the case, and will follow it by a number of other cases since operated upon. As I suppose the history of this case and operation is only known to a part of our readers, I think it for the better understanding of the case to give a synopsis of it.

A woman, aged forty-eight years, of Vienna, suffered two years ago with an acute inflammation of the middle ear, on the left side, causing a perforation of the tympanum. After the flow of the secretion stopped, the hearing was not very bad, but at the same time she could, at will, force the air through the ear. Suddenly she became very deaf, and had a continual loud noise in her ear, at the same time she noticed her inability to force air through the ear. The examination of the tympanum showed a cicatrix in the place of the perforation. This was situated under the manubrium, oval in shape, horizontal in position, one line long, and one-half line high (wide), thin and sunken inward. A strong cylinder watch was heard only when pressed against the ear, and conversation about three feet distant; after the inflation of the middle ear, the increase of the hearing of the voice was only one foot.

I had, in this case, anticipated difficulty in the sound-conducting organs, the mallens and incus, which has formed adhesions to the wall of the tympanic cavity, caused by the previous ulceration. I was led to this conclusion by the symptoms given by the patient, who said, as long as she could force the air through the ear she was in but a small degree deaf. During the existence of the perforation, the sound-waves could pass into the tympanic cavity and strike upon the stapes, and from there to the labyrinth; but after its closure, this opportunity for reaching the labyrinth was cut off, and deafness followed. All this went to show that the indication for improving the hearing, was to open again the previous perforation; but up to this time our experience teaches us that all artificial openings soon close by cicatrization. For the prevention of this closure I used the hard rubber eyelet above described. An opening through the cicatricial tissue was made with a paracentesis knife; the eyelet was then placed into this opening by a very slender pincette. The watch which, just before the operation, required pressure to the ear, was now heard nine inches, and the voice forty feet instead of three feet.

This operation was performed on the 26th of October, 1868. During the interval I have had frequent opportunity of examining her, and of presenting to my hearers in the hospital. The patient, during these examinations, has experienced no pain, nor the feeling of anything in her ear—the tinnitus aurium has entirely left. The distance that the watch is now heard has increased to twenty-two inches, and the voice, in conversation, to sixty feet. As is seen, the hearing was not only restored to a great degree immediately after the operation, but has been improving ever since.

One thing worthy of notice is, the changing of the position of the eyelet in the tympanum. It has moved backward one and a-half lines from where it was originally placed. By examination, the cicatrix can be seen under the manubrium, and the eyelet at the distance firmly clasped by a part of the tympanum that is not composed of cicatricial tissue. A dark gray line reaches from the original perforation to the eyelet, showing the way or track that it took to where it now rests. The reason for this movement I am not at present prepared to give, but must make more observations, before coming to a definite conclusion.

The utility of any method can not be decided by one trial—only the result of several cases can give satisfactory proof of its value. I have here reported this case of six months standing, and although the hearing has been certainly improving since the operation, yet, I consider the period too short to come to a decided conclusion. For that reason I thought it better to postpone the complete report of the last cases operated upon, and give what general experience I have gathered from them.

The opening is made through the tympanum with a strong paracentesis knife, bent at a right angle; where the space in the meatus will permit it, the opening is made under the manubrium, or in the posterior quadrant-membrane, and where the meatus was too small or the curvature too great, it was made in the anterior quadrant-membrane; but this last place was not profitable, as in two cases the eyelet came out by suppuration, which was supposed to be caused by the eyelet pressing on the incus, which is only a small distance behind this. To enlarge the opening in the tympanum, I used a *laminaria stabcher*, two lines broad by one-quarter line wide, very carefully rounded and smoothed at the end. This was dampened and passed one-half line through the opening into the tympanic cavity. The inserting of this was more or less painful, as well as its swelling, and the withdrawal of it. It must not be neglected to put in a few drops of water immedi-

ately after the insertion, to cause its even swelling, and the less painful extraction. In one case where the point only of the laminaria was dampened it swelled in the cavity, causing much useless pain to the patient when it was extracted.

In a few cases there was very little excess of secretion after the withdrawal of the laminaria. In all normal and thickened tympanums, there was only a slight swelling around the perforation, or of the whole tympanum. In one of the cases the entering of the opening by the laminaria caused considerable pain and swelling, which lasted even through the following day; but on the next day all this passed away. On examination of the ear, I found the eyelet was in its proper place, and has remained thus. This was three months ago, December, 1868, since then there has been no scretion or inflammation, while the hearing is constantly improving. It was the easiest to put the eyelet in a tympanum where there was a cicatrix or an atrophy. In such cases it was entirely unnecessary to enlarge the opening with the laminaria; the use of a small probe was enough to open it, or even to push the eyelet in without it.

The pincette that I used to place the eyelet in position is a very small one, made by Leiter of Vienna, after my pattern. This was so constructed that it closed itself, and required pressure on the branches to cause the points to open or spread. On one of the branches, near the extremity, was a very small point, to prevent the eyelet from slipping too far on the pincette. The points of the pincette were inserted into the whole of the eyelet, and pressure on the branches caused the points to separate, thus holding the eyelet until inserted in the opening in the tympanum, after which the pressure is relaxed, the points withdrawn from the eyelet. I succeeded in one case in inserting the eyelet, on the point of the paracentesis needle, in its place in the tympanum.

The changes that follow the insertion of the eyelet are of great importance. Several cases lately operated upon, have carried the eyelet for several weeks without any inflammatory signs; but in some there was, on the second or third day, some inflammation of the tympanum, at the same time purulent discharges from the cavity; and in some of these cases the eyelet was washed away with the syringe. Thus far it has appeared that in quite the larger number of cases the eyelet caused no serious reaction on the tympanum or its cavity.

I must here call attention to one circumstance, which is of importance in showing one of the causes for inflammatory reaction. I found

in two cases were the eyelets were washed out, that on close examination of the inner end of the eyelets, they had a fine sharp point, which must surely have caused the irritation of the mucous membrane. This point was caused by breaking off the eyelet from the tube from which it was made. Great care must be taken that all roughness must be polished down.

It frequently happens that the secretion of the cavity will fill the small hole in the eyelet. This must be taken away by a drop of glycerine, and the use of a small stiff brush.

The details of the treatment of those cases shall, in a short time, be given in full.

SUCCESSFUL REDUCTION OF A DISLOCATION OF THE HIP-JOINT BY MANIPULATION.

REPORTED BY W. R. THOMPSON, M. D., VANDALIA, O.

April 9th, 1869, I visited a patient in conjunction with Dr. H. B. Nunemaker, for the purpose of reducing a dislocation of the head of the femur, of three days standing. Our patient, a boy, aged sixteen years, muscular and healthy, had been playing with a colt, which became unmanageable, running violently against him, dislocating the head of the femur upward and backward, upon the dorsum of the ilium. The injured limb lay in a semi-flexed position, the heel abducted and the toe inverted, resting on the instep of the opposite foot. Measurement revealed about an inch and a half of shortening. The patient was put under the influence of chloroform, and the dislocation reduced by manipulation, (Reed's method). The first effort we made the head glided from its bed; the circular movement brought it under the acetabulum, converting it into a sub-pubic dislocation. The movement was then reversed, which brought the head of the bone to its first position in the dorsum ilii. The limb was again brought across its fellow, and the circular movement carefully made, at the same time guarding the head of the bone from passing around the socket. To our gratification the head passed in with an audible snap, the limb assuming its normal position. No shortening. The patient was then placed in the horizontal attitude, the injured limb secured to its fellow by means of a roller extending from the ankle to the knee, as recommended by Professor H. H. Smith, of the University of Pennsyl-

vania, in his work on the Principles and Practice of Surgery, page 738, vol. I. On the following day, on our visit, the hip-joint was found to have been dislocated during the night. The boy, contrary to most positive orders, had attempted to raise himself up in the bed, and at the same time turning partially around, threw the head of the bone out; the leg assuming the same position as when we first saw it. Again the patient was placed under the influence of an anæsthetic, and the luxation reduced as in the first operation. He was then secured firmly by means of a splint and bandage to the couch in which he lay, in order to guard against a second luxation. In this secured position he lay for seven days, doing well, except some slight peritonitis occasioned by other injuries received in conjunction with the first dislocation. During the night following the seventh day, he loosened the bandage which held his shoulders and body to the bed. Finding himself again free, his first impulse was to get up. (He seemed unable to appreciate his condition.) In this attempt he again threw the head of the bone out of the socket. This, in our opinion, was easily accomplished. In the first place, there was an extensive laceration of the capsular ligament, allowing the head to glide easily from the socket; and secondly, the limb in its secured position to the splint and bed, with the shoulders and body free to move in the direction of the erect posture, and to the right. These movements would, under the circumstances, certainly produce a dislocation (the left limb being the injured one). At our request, Dr. J. C. Reeve, of Dayton, Ohio, was called in council, in order to fortify ourselves against any subsequent trouble, in a legal point of view. The patient was again anæsthetised, and Dr. Reeve thought, upon first examination, there might be a fracture within the capsular ligament; but, upon further investigation, coincided with our previous diagnosis. We then proceeded to reduce the luxation in the manner before mentioned, and with similar success. At the Doctor's suggestion, the splint was reduced in width from five inches to three, and not to be secured to the bed, and the toe was everted to about seventy-five degrees—the foot abducted about four inches from the normal axis of the leg—the body was secured to the bed as was previously done. In this position he lay for three weeks, after which time the splint was removed and passive motion induced.

At the time of writing the above, the boy is able to walk without crutches, though there is still some lameness—the foot is still in an abducted position, with the toe everted, giving him altogether an awkward appearance.

In this case the difficulty did not consist in the reduction of the dislocation, but in retaining it in its normal position after reduction; and it is our opinion the injured limb should always be secured with a splint, the normal axis of the leg maintained, and the toe but slightly inclined outwards. It will be seen that the splint, in this case, was left on somewhat longer than would be required in the majority of cases.

HYPODERMIC MEDICATION.

BY C. B. MILLER, M. D., OF LAWRENCEBURG, IND.

Having employed hypodermic injections in the treatment of disease quite extensively for the last four years, I am induced to give your readers the benefit of my experience—hoping it may disperse some of the clouds of unbelief that hang over many of our professional brethren, and induce them to make a trial of this very valuable therapeutic means.

In many diseases the first indication is the relief of the distressing pain that harasses the patient; and in proportion as we do this, we arrest the wear and tear upon the system. That this indication is best met by this method of medication is shown by its superiority over all others in the facility with which it may be employed, the rapidity and certainty of absorption, and consequently of action, and the knowledge of the exact quantity entering the circulation.

I will give briefly the history of a few cases.

CASE I—Was called in the evening of May 21st, 1866, to see M. W., æt. sixteen, who has been a cripple for several years from caries of the femur—the result of an injury. His only suffering now is from neuralgia, the inflammation having subsided and the sinuses all closed up—the pain of which has made life a burden for the past six months, and is willing to submit to amputation of thigh for relief. Injected one-third grain morph. sulph. over seat of pain with effect to relieve it entirely.

May 22—Evening—Slept well last night, and has been comfortable all day. Gave another injection, as he feels slight pain.

June 4—has been able to walk around, and free from pain until last evening, when it returned slightly after exposure. Gave another

injection, and he had no further return within the next year while under my observation, although at work daily.

CASE II—Dr. H. has been suffering with sciatic rheumatism, to which he has been subject for years, for two days. Persuaded him to allow me to inject morhia sulph., one-fourth grain over seat of pain, which relieved it almost immediately. Two days later, felt some symptoms in opposite hip—after getting wet. Injected one-third grain morphia in that with same result as before. Two years have elapsed, and he has felt nothing of his old torment; and it is almost needless to add, is a strong advocate of hypodermic medication in neuralgic affections.

CASE III—Mrs. A. Y., called at my office January 22d, 1867, complaining of facial neuralgia, which has been torturing her for several days—not periodical. Has tried various remedies, but none have afforded relief. Injected one-fifth grain morphia in arm, and the pain almost immediately subsided. Repeated injection two days subsequently, which resulted in a complete cure. The first injection in this case occasioned nausea but no vomiting, and a swelling resulted from the last, but disappeared in a day or two without treatment.

CASE IV—Was called early on the morning of November 4th, 1866, to see Mrs. G. N. Found her in the most terrible agony, caused by a cramping of the muscles of one side of the neck, paroxysms coming on every two or three minutes, when her screams could be heard two squares. Pain came on suddenly while assisting her husband to rise in bed—he having acute rheumatism. Relieved entirely and permanently by the injection of one-third grain morphia in arm.

CASE V—S. W. has been suffering for two days from sciatic rheumatim, brought on by exposure to wet and cold. Called at my office December 7th, 1866—scarcely able to walk. Injected one-fourth grain morphia over seat of pain—complained for a few minutes of burning, occasioned, and felt slightly nauseated, but all unpleasant symptoms passed off in a few minutes, and he walked out feeling as well as ever, and has had no return of it, though often exposed to the inclemencies of the weather.

CASE VI—December 26th, 1866, was called to visit Mrs. S. W., and found her suffering severely with sciatica. Has been troubled with menorrhagia. Injected one-fourth grain morphia over seat of pain, which immediatly relieved all pain, when remedies directed against her other symptoms, and tonics to improve tone of system effected a complete cure.

CASE VII—Mrs. C. G. called at my office May 6, 1868. Has been suffering for several days with neuralgia of supraorbital nerve—is rather anæmic, and troubled with derangement of stomach. Injected one-third grain morphia in cellular tissue of arm, which relieved neuralgia, though it produced severe vomiting and great prostration. Gave tonics to improve general health, and she has never suffered since.

CASE VIII—May 21th, 1867, was called to see Mr. J. S., who has been suffering all night with tic douloureux; pain so severe he has been walking the floor for several hours. Gave him an injection of one-third grain morphia, and pain subsided in a few minutes, and has never returned. In this case he had been suffering for several days, but not in the agony in which I found him. He complained a little of the pain of the instrument, but says he never experienced such decided relief from pain so quickly before.

I could go on and amplify cases from my note book, but I have already occupied too much of your space, and certainly enough has been said to convince any one open to conviction of the utility of this agent. I have tried and seen the syringe employed in eclampsia with decided benefit; but have not sufficient experience to state whether it will always act beneficially in that dreaded disease. I have not injected any other medicine than morphia sulph, under the skin, and should be very careful about doing so. I think its chief usefulness is confined to the administration of anodyne remedies. I never employ more than one-third of a grain at an injection, preferring to repeat it to incurring any risks from an overdose. I have never had an abscess result from its use, nor any other serious affection.

DYSENTERIC ARTHRITIS.

The *Archives Générales*, of August, contains an article with this title, by Dr. Huette. More than a century ago this form of disease was recognised by Zimmerman and others. Most of these observers, however, explained it as occurring from metastasis.

Dr. Huette terminates his elaborate paper with the following conclusions:

"1. There is a variety of arthritis having its sole and necessary cause in an epidemic phlegmasia of the mucous membranes of the rectum and of the colon.

"2. This rheumatismal manifestation does not occur in every epidemic of dysentery; it is subordinate to the influences of a peculiar medical constitution: individual diathesis may favor its development.

"3. Dysenteric arthritis, essentially apyretic, differs in its causes, in its progress, its general aspects, and its consequences from simple articular rheumatism. It presents a great analogy with blenorrhagic rheumatism.

"4. Dysenteric arthritis almost always poly-articular, has a duration of several weeks or several months. It generally terminates by resolution—rarely by suppuration and anchylosis.

"5. Metastasis does not explain the appearance of this arthritis, as was formerly thought; it is more rational to attribute it to a morbid affinity, which, the mucous membranes being diseased, determines reflex pathological effects upon other tissues of the economy."

THE ADDRESS IN MEDICINE, DELIVERED BEFORE THE ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, AT LEEDS.

BY SIR WM. JENNER, BART., M. D., F. R. S.,

Physician to the Queen; Physician to University College Hospital, etc.

MR. PRESIDENT AND GENTLEMEN: There are special occasions in a man's life when it is well for him to review his mental progress, points in his life at which he does well to note his bounds—to look back over the road he has traveled, count his gains, the difficulties he has overcome, the advances he has made; and so, by a pause in his labors, be stimulated to new efforts, gathering from the retrospect good hopes for the time to come. The same is true of a profession. Its members should from time to time look back to their earlier days; scan the advances their profession has made; compare what it is now with what it has been, and weigh the worth of its reputed progress. There are special reasons why the members of our profession, the practitioners of medicine, should from time to time sum up the gains which medicine has been making as a practical art. For in the daily practice of our profession so much occurs to damp our spirits; so many cases of difficulty arise in which the remedies of our art are doubtful; so many cases in which the practical difficulties in the way of diagnosis are insuperable; and so many cases in which, the diagnosis being clear, we know that we are impotent to cure; so many cases in regard to which our apparently well-founded expectations of affecting a cure prove vain, that even the most hopefully minded must be permitted to doubt if medicine be advancing as a practical art. Many entertain scepticism as to the value of medicine as an art, and especially as to the remedial power of drugs. "I trust you will not cast a doubt on the efficacy of medicine," said a distinguished member of our profession.

"They don't believe much in medicine at this hospital," wrote a reporter to one of our medical journals. I desire to repudiate scepticism in regard to medicine. I believe as confidently in the power of the physician to treat disease successfully as I did when clinical clerk to one of the first practical physicans of his day. Extended knowledge and accumulated experience have only increased my confidence in the remedial powers of our art. Nor do I believe that others upon whom the imputation of scepticism has been cast are less firm believers than myself in the value of treatment. Modern research has shown that a large number of acute diseases occurring in previously sound persons, have a tendency to terminate in the suspension of health even although no drug be given. This is fact—knowledge—not scepticism. Modern observation has also shown certain acute diseases, formerly supposed to be of indefinite duration, run a definite course—that is, end spontaneously at a certain date from their outset; and therefore the conclusions as to the efficacy of drugs to cut short these diseases—conclusions drawn before their definite duration was known—were formed upon false premises, and consequently were not trustworthy. All this is surely fact—knowledge—not scepticism. Again, advances in knowledge have frequently been attended by a more correct appreciation of the mode of action by drugs; and the expression of this has not unfrequently been most erroneously taken as an evidence of scepticism. Thus, if I believe that saline aperients do not act as formerly supposed they did—namely, by increasing the escape of the watery matter from the radicles of the portal vein, I am not in the least shaken in my belief that the symptoms which I attribute to over-distension of the portal vein are relieved by their action; or that their action is followed by a disappearance of watery fluid from the peritoneal cavity and from the cellular tissue. Again, if it should be considered, as proved by experiments on dogs, that mercurials did not produce increased secretion of bile in man, it would not throw doubt on the establishment of a great flow of a yellowish-green colored fluid from the bowel after the administration of a mercurial to man, and the relief of many depressing symptoms which follows. A man's bilious headache, as it is termed, would be none the less certainly cured by mercurial treatment, even though it should be shown to the satisfaction of the whole profession, that mercury does not increase the secreting power of the liver. Our mode of explaining certain effects in curative medicine would be changed, but not the facts themselves. My conclusion then is, that although with regard to the virtues of this or that particular drug, and the mode of action of this or that particular class of remedies, there is, no doubt, and always will be, difference of opinion—the evidence that satifies A. being insufficient, from the constitution of his mind, to satisfy B.,—yet with regard to the value of drugs in the abstract, and the value of treatment, there is really little difference of opinion amongst physicians well informed as to the present state of medical knowledge, and of equal experience in practice. I say amongst men equally well informed: let me illustrate my meaning. I was one of three who met in consultation concerning a case of apoplexy. In the opinion of one of my colleagues, the only

treatment to be adopted was as follows—namely, to place the patient in a recumbent position, with the head and shoulders raised; to enforce absolute rest; to keep the bowels so far loose as to prevent straining; to apply cooling substances to the head in the event of heat of the part occurring; and to support the patient with light nutritive food, having regard to his habits. The third gentleman protested against the modern system of doing nothing—was anxious to bleed, to purge, to blister, &c. Now the difference of opinion in this case was not due to scepticism; but on the one side to justifiable faith—that is, faith justified by knowledge; and on the other to absence of that knowledge. The case was one of dogenerate change—retrograde metamorphosis—of arteries. One had become so rotten that its wall had given way—its contents had escaped—a clot had formed, and by its mechanical effects given rise to the symptoms. The heart shared in the degenerative changes. The bleeding had ceased. To those who understood the real nature of the case, the lesions present, and the mode in which they had been produced, in short, the pathology of the case, belief in the efficacy of so-called active treatment appeared to be not only unjustifiable faith—foundationless faith—faith without knowledge, but to be faith in opposition to knowledge—which in medicine is the worst form of scepticism, inasmuch as it implies doubt of truth, and a belief in error—doubt which might prevent the saving of life—a belief which, embodied in practice, might kill. The present appears to me to be one of those special occasions to which I have referred, when with advantage to ourselves we may look back, and survey the progress which medicine has made as a practical art in our own time—I mean the time in which the large proportion of those present have been engaged in the practice and study of ther profession. The time allotted to this address will not permit me even to enumerate the advances medicine has made during the past twenty-five years. I shall therefore limit myself to pointing out some great divisions in which some at least of the great practical advances of medicine may be proved; and to giving, as briefly as possible, such illustrations of its advance in each of those divisions, as seems to me to be sufficient to justify this assertion, namely—that having regard to the attainment of its practical aims and objects as an art, no science has advanced during the period in question more than the science of medicine. As an art I say; for while medicine is universally acknowledged to have advanced as a science, its progress as a practical art is frequently regarded as trifling, and on recent occasions has often been publicly denied by some. As I do not propose to enumerate all the advances in medicine, so neither is it my intention to refer by name to those by whom the great advances in medicine have been made. And with regard to the illustrations I shall give of the position I have taken—in fact, to all advance in medicine as a practical science—it must be remembered that it is rarely, if ever, that a great discovery or a great step forward has been the direct result of the labors of a single man. Almost invariably it has resulted from the successive labors of many men. And again, it must not be overlooked that in regard to all forms of advance as a practical art, the silent workers render the most effi-

cient aid—the results of their unspoken thought and vast experience confirming or refuting the published assertions of a few. It is to the experience of the mass of the profession that we look for the final establishment of doctrine and the rules of practice. In the selection I am about to make in confirmation of the statement that our science in its advance as a practical art stands second to none, I am conscious that I will pass some facts which others will think of greater value than those I have chosen as illstrations. But I have been guided in my choice first by a desire to avoid disputed facts and theories; and secondly, by consideration of those things which have aided me in the most frequently effectual manner at the bedside, when asking myself these two great questions which are always presenting themselves to the mind of the practitioner—What is the illness of the patient? and what can do him good? By thus limiting myself I feel that, while this address will more directly attain its object, it will be deficient in novelty and scientific interest, and thus be unworthy of its predecessors. For this I crave your pardon. Sir W. Jenner then proceeded to say that amongst the really great advances in medicine was to be placed the recent separation of degeneration from disease, and the recognition of the difference between old age, actual or premature, and the changes wrought by inflammatory and other morbid processes. He here dwelt upon our recent increase of practical knowledge in regard to diseases of the heart, with regard to the effect of fatty degeneration of its muscular fibres in weakening the force with which the blood is driven through the degenerated arteries—a statement which, when first made at an early meeting of the Pathological Society, was received with shouts of laughter by the members. The knowledge we have gained of the degenerative changes, has also enabled us to rightly appreciate the changes in the brain which followed on degeneration of the coats of the arteries. A second great advance in medicine had resulted from the discovery that an elevation of temperature is the only trustworthy sign of the existence of fever; and that elevation of temperature can only be correctly estimated by the thermometer. The index-thermometer ranked in importance with the stethoscope, and its value in the diagosis of typhoid fever, in cases of acute deposit of tubercle, and in prognosis, was also illustrated. A third great advance in our practical knowledge has resulted from our appreciation of the influence of various mechanical consequences of primary diseases, such as embolism, and the paralysis and other conditions which it produced. A case of death after tracheotomy in diphtheria was also discussed. Another class of diseases in which we had made great progress was that due to fluid blood-poisons, and to the causes by which blood-poisons were produced. Sir William went on to allude to the epidemics of 1817 and 1819 in Edinburgh, and Dr. Welche's work upon the value of blood-letting in regard thereto, as an evidence of the absolute necessity of the knowledge of a natural history of a disease before any attempt be made to form conclusions as to the value of particular modes of treatment. He also remarked on the gain which physicians had experienced from improved means of research—especially alluding to the value of the microscope in determining a great many diseases

and changes of tissue. Another great gain to modern medicine had resulted from the diffusion of more correct ideas as to the meaning of the word cure; and the distinction that ought to be drawn between curing a disease and curing the patient—a distinction which the speaker exemplified by saying that they might cure scabies by curing its cause, and in many cases they cured epilepsy in the same way; but in the case of ague or fever they cured a patient without curing the disease, and even by means the *modus operandi* of which we are really ignorant. Though the science of medicine had attained to such a degree of perfection, that the diagnosis of special diseases was perfect, and the prognosis in individual cases invariable correct, yet the public would have little practical interest in its spread. Practitioners would be engaged in solving puzzles, and in little more. The public aims and objects of medicine ought to be to prevent disease, to cure disease, to prolong life, and to alleviate physical suffering. Every advance in the correct definition of special diseases, and in the diagnosis of special diseases, was a step in the direction of advance in preventive and curative medicine. In illustration of the advances made in preventive medicine, I would adduce the fact that drinking water is one of the greatest agents for the spread of two of the most fatal and acute diseases of the present time—namely, cholera and typhoid fever. In the ten years ending 1866, twenty-one thousand, three hundred and forty-eight persons died from cholera in England and Wales, and one hundred and ninety-two thousand, five hundred and sixty-two from fever. From the Registrar-General's returns it is impossible to say precisely how many of the latter number died from typhoid fever; but seeing that that is the endemic fever of our country, and that typhus prevails as an epidemic only, and that only in limited localities and for a short time, we shall be within the limits of high probability when we say that one hundred and fifty thousand persons died of typhoid fever during the ten years in question, and that in no one year of the ten did less han ten thousand persons die of that disease. Now with reference to cholera, the special facts collected by Dr. Snow prove that one of the great agents in the diffusion of cholera, is drinking water, that every virulent local outbreak in a limited district was clearly coexistent with the pollution of the drinking-water supplied to that district, and that persons living at a distance, if by accident they drank of the polluted water, suffered as certainly as if they dwelt in the district specially affected. The conclusion which follows from the facts collected by Dr. Snow is, that, the conditions existing, be they atmospheric or otherwise, which determine an epidemic disposition to cholera, the presence of minute particles of cholera excreta in water supplied to a district for drinking purposes will be followed by an outbreak of cholera in that district. Careful investigations into the circumstances attending the local outbursts of cholera during the last epidemic have proved the truth of the conclusion. I will refer to two such special investigations in confirmation, viz., Mr. Radcliffe's admirable researches into the relation between the water-supply and the spread of cholera in London; and to Dr. Bellot's most conclusive observations on impure water as a cause of cholera in Holland. Dr.

Snow's investigations traced special individual cases and local outbreaks to one exciting cause. Mr. Radcliffe's researches bear especially on the influence of the polluted water in determining excess of mortality in a large district of a great city. Dr. Bellot's facts show that those towns and those parts of a town in Holland in which there was the greatest facility for the contamination of the water-supply by cholera dejections were those which suffered by far the most severely. The spread of typhoid fever by contamination of the drinking-water supply is, if possible, less disputable than is the spread of cholera by the same means. Every new investigation has added new proofs to the strong presumptive evidence afforded by Dr. Flint's cases. Solitary cases, outbreaks confined to single houses, to small villages, and to parts of large towns—cases isolated, it seems, from all sources of fallacy—and epidemics affecting the inhabitants of large though limited localities, have all united to support by their testimony the truth of the opinion that the admixture of a trace of fæcal matter, but especially of the bowel-excreta of typhoid fever with the water supplied for drinking purposes, is the most efficient cause of the spread of the disease; and that the diffusion of the disease in any given locality is limited or otherwise just in proportion as the dwellers in that locality derive their supply of drinking-water from polluted or from unpolluted sources. The proof seems complete, that a large proportion of those who drink water containing a minute quantity of the intestinal excreta from a person suffering from cholera will suffer cholera; and that a large proportion of those who drink water containing a minute quantity of the intestinal excreta from a person suffering from typhoid fever will suffer typhoid fever. These diseases occur like small-pox, scarlet fever and measles, *as epidemics*, owing to causes of which we know little or nothing; but, when epidemics, unlike small-pox, scarlet fever, and measles, a local outbreak of cholera and of typhoid fever will be determined by the impurity of the drinking-water. Had the water supplied to the east of London been as free from organic impurity as was that supplied to the west of London, the death-rate from cholera at the east would have been a little larger only than was the death-rate at the west of London. Had the drainage and water-supply of Winterton, Terling and Guilford, been what modern medicine has shown for health purposes they should have been, these places would not have suffered the terrible outbreaks of typhoid fever, of which the medical officer of the Privy Council gives such full details in the tenth volume of his inexpressibly valuable reports. The persons who died at these places of typhoid fever, and a large proportion of those who died at the east of London from cholera, were as certainly killed by the water they drank, and killed without need, as if the water supplied to them had been contaminated with arsenic. And I am sure we will all agree with the most distinguished medical officer of the Privy Council, that "the distribution of fouled water by the Guilford Board, is as proper a case for judge and jury on action for damages by any of the five hundred people who had typhoid fever in that town, as any case in which a railway collision brings some score of passengers into harm; and the fact that these water-purvey-

ors gave typhoid fever to their customers, would be brought home to their consciences, and be suggested as a warning to other water-purveyors in a far more conclusive and effective manner, by such legal proceedings than it can be by any departmental statistics and remonstrations." After referring to a number of authorities on this point, and speaking of the effects of cholera in London, Sir W. Jenner proceeded: With reference to the power of our art to alleviate suffering, how great is the difference between the medicine of to-day and that of our youth. Who that has suffered from a painful local affection can think of the alleviation of his sufferings which follows from the subcutaneous injections of an anodyne without gratitude? Who is there that has had to submit to the knife of the surgeon whose heart does not overflow with gratitude to those who introduced and perfected anæsthesia? The electric telegraph, the greatest marvel of our time, was a thing which in a rough way scientific men had long thought possible; but to be cut for stone, and to know nothing of the agony, to have a leg removed and smilingly to ask when the operation is over—"When are you going to begin?"—these are marvels of which none dreamt; no exaggerations of fiction equal this reality. The discovery of the value of subcutaneous injection, of anodynes, and local anæsthesia by ice, ether spray, and of general anæsthesia by ether, chloroform, and nitrous oxide, are advances in alleviative medicine worthy to rank with the advances in preventive, curative, and prolongative medicine to which I have referred. Keeping in view, then, these practical matters, and the object for which medicine is esteemed by the public—namely, its power to prevent disease, to cure disease, to prolong life, and to alleviate suffering, I feel that I have said enough amply to prove the truth of my assertion that the progress of medicine as an art has, during the past twenty-five years, been second to that of no other science; while the present advanced state of medical education, the perfection of the means of physical research, the many new centres of knowledge being established in our colonial empire and in America, the widely-diffused acquaintance of the profession with modern languages; the rapidity with which knowledge spreads; the confirmation, correction, or refutation which follows so quickly on the publication of novelties; the great ability, the absence of prejudice, untiring energy, and truthfulness exhibited by the younger workers in the field of our science, render me hopeful that the next quarter of a century will be distinguished by far greater progress than the last.

After a few further remarks, Sir W. Jenner concluded amid loud applause.—*Lancet*, July 31st.

CORRESPONDENCE.

NEW YORK CITY, AUGUST 15, 1869.

DEAR JOURNAL: This summer has been with us, thus far, a remarkable one, both for its coolness of temperature and low mortality. We have not really had more than four or five days of excessive heat, and the city has been especially free from epidemics of any kind. If the mortality is as low for August as it was for July, in which month there were two thousand, six hundred and ninety-one deaths against three thousand, two hundred and sixty-seven, for July, 1868, a decrease of five hundred and seventy-six, or nearly eighteen per cent., this will have been one of our most healthful summers for a number of years. The Board of Health is exceedingly active in having tenement houses thoroughly inspected, and in abating nuisances. The total number of deaths in this city for last week was five hundred and ninety-one; of these, two hundred and sixty-two were from zymotic diseases, one hundred and twenty-four constitutional diseases, one hundred and fifty-one local diseases, thirty-two developmental, and the remaining fifteen were deaths from violence. Of the deaths from zymotic diseases, three were from small-pox; fourteen, measles; fourteen, scarlatina; four, diphtheria; six, croup; three, whooping-cough; one, typhus fever; three, typhoid fever; ten, cholera infantum; ninety, cholera morbus; twenty-one from other zymotic diseases; pulmonary consumption, sixty-eight; convulsions, twenty-four; pneumonia, twenty-two.

In Brooklyn, last week, the number of deaths was two hundred and twenty-four, of which, one hundred and thirteen were male, and one hundred and eleven female; of these, one hundred and sixty-one were under five years of age. The principal diseases were, cholera infantum, fifty; consumption, twenty-one; diarrhœa, eighteen; marasmus, sixteen; still-born, twenty.

Thus far, there have been but very few cases of sun-stroke occurring in our city this season. During the summer of 1866, while we were on the medical staff at Bellevue Hospital, there were a large number of cases of sun-stroke admitted to that institution, an abstract of which we published in the *Medical and Surgical Reporter* of Phil-

adelphia, of October 12th, 1867. Just at this particular season, it may not be inappropriate to repeat here what we then reported:

"There have been sixty-three cases of sun-stroke admitted into the hospital this summer. Fifty one of these were admitted during the month of July; fifty-three were males; ten were females; forty were fatal; twenty-three recovered; twenty-two were moribund when admitted, being unable to swallow, and dying within four hours after admission; about forty-five were comatose when admitted; about three-fourths were complicated with diarrhœa, and a few with vomiting; there were rice-water discharges in three; constipation was not marked in any case; the pupils were much contracted in about seven-eighths of the cases; in the remaining one-eighth they were dilated; the skin was intensely hot in all cases except two, in which it was cool; there were convulsions in twelve cases—one of these proved fatal, one case was followed by subacute meningitis, and proved fatal.

"TREATMENT—*Stimulants* were tried in six cases, but seemed rather to do injury than good—all of these died—cold to the head, and friction with ice were used in connection with the stimulants. *Chloroform* was given in drachm doses in one case with apparent benefit at first, but the patient subsequently died. *Blood-letting* was employed in three cases with no benefit—the patients all dying. *Bromide of potassium*, with cold to the head, and alternation of heat and cold to the spine, was employed in eleven cases, five of which recovered. In one case, the bromide was given and the patient wrapped in a blanket wrung out of hot water; he recovered. In another case, the hot blanket was used in the same manner, with the effect of rousing the patient from a state of coma for a moment, but he ultimately died. No bromide was given in this case, as the patient was unable to swallow. In one case, bromide was given in connection with the cold douche. In this case there was opisthotonos and greatly dilated pupils. The treatment seemed to relieve at first, but the patient ultimately died. In most of the cases, the bromide seemed to act as a powerful diuretic. *Autopsies* were obtained in seven cases. The *brain* was much congested in six of these cases; in one, it was apparently healthy; in five, there was a moderate amount of serous effusion beneath the arachnoid and into the ventricles. The *lungs* were very much congested in every case. The *heart* was soft and flabby in four, healthy in three. In five, the whole *intestinal canal* was very much congested, and presented numerous spots of ecchymosis. The mesenteric, solitary, and agminated glands, were much enlarged and vascular. There were points of ulceration in the large intestine in two cases."

The new Lunatic Asylum to be erected on Ward's Island by the Commissioners of Public Charities and Correction, is intended to accommodate six hundred patients, and the erection will be commenced forthwith. The Asylum on Blackwell's Island now contains over twelve hundred patients, with proper accommodations for six hundred only. The Commissioners are afraid that if insanity keeps on increasing at the present rate, the new Asylum will soon be insufficient for the accommodation of lunatics.

A public exhibition was given in the harbor, sometime since, of the

improved life-saving appliances patented by Captain J. B. Stoner. The advantages of the life-boat were first put to the test. The improvement claimed in this is the ballast—a weight attached to the end of a lever, which can be almost instantly lowered to a depth of twelve feet, more or less. When not in use, this weight is raised up so as to form a part of the boat, similar to a center-board. The test was made by nine men getting into the boat, filling it completely with water, and attempting to upset it by all getting on one edge. Though the edge of the boat was thus carried beneath the water, it righted itself instantly when the weight was removed. The life-preserver was next exhibited. This consists of a cork jacket, not visibly differing from those which have for many years been in use on vessels, and of a water-proof dress of rubber-cloth, which envelopes the whole person except the face. Rubber paddles for facilitating progress in the water, are provided for the hands. The prominent feature in this apparatus consists of two weights, of five pounds each, attached to the feet. These are designed to keep the body upright in the water. In addition to these means for keeping the body from sinking, he is supplied with a water-tight tin can, having considerable buoyancy, and containing fresh water, concentrated meats, matches, stimulants and sky-rockets for night-signals. This can is furnished with the ballast, which can be readily lowered, and which keeps it "right side up" in the roughest sea. Captain Stoner and Dr. Smith rigged themselves in their floats, weights and impermeables, and plunged into the sea. The time required to dress was at least fifteen minutes. After the men got in the water, the performance was beautiful; Captain Stoner and his companion displayed a red flag, ate and drank from their stores in the can, lighted a cigar each, and had a social smoke. Finally, having drifted several hundred yards from the steamer, they sent up signals of distress, in the form of sky-rockets and roman candles. This exhibition was quite satisfactory, and the signals being observed by the men in the life-boat, (which, in the meantime, had been rigged as a sailing vessel), they came to them and picked them up.—(*New York Tribune.*)

Since the above performances took place, Captain Stoner has perfected the machinery of his boat, and a few days ago a new trial with it took place. Seven persons got into the boat and tried to upset it, but failed. Then they filled it with water, and attempted without success to capsize it. The Captain then gave another exhibition of his life-saving apparatus. He stood upright in the water, hoisted his

day-signal, called "Eureka," burned roman candles and smoked a cigar. * * * * * * * * * * * *

The *Medical Record* announces two prizes offered by Prof. Louis Elsberg, of the University Medical College, and free to be competed for by all medical students. One prize is offered for the best illustrated report of the clinic of diseases of the throat at the University, and the other for the best anatomical preparation of the pharyngo nasal space.

Yours, very truly,

JAMES B. BURNETT, M. D.

PARIS, AUGUST 8, 1869.

The ruins of but one building in Paris remain from the days of Roman conquest and occupation, the ancient Palais des Thermes, founded towards the close of the third century. Here it was that his soldiers proclaimed Julian emperor in 360. Nothing stands now but the baths, a good miniature representation of their colossal prototypes of Rome.

The subsequent dynasty, which expelled the Roman, the Merovingian, under Clovis II., leave us, also, one building still preserved, and since many times enlarged. It stands on the island in the Seine, where the city first existed. Histories are written of the building. It is the oldest of its kind in Europe, unless China can antedate it, in the world. Generations have entered and passed away; dynasties have flourished and faded, monarchy, republic and empire, with almost all the vicissitudes of ancient Rome; the reign of tyranny and the reign of terror have swept over it, and it has stood, as it stands to-day, through all that more than millenium of time. The ravages which did not spare the great Cathedral opposite, but which converted it, mutilated and defaced, into a so-called Temple of Reason, did not desecrate a single stone of its composition. The fanaticism of priestcraft, which wreaked its cruel vengeance on that fearful night of St. Bartholomew; the fury of an enraged and insane mob, which did not hesitate to spill the blood of their very king and queen, in erasing every existence and emblem of royalty, never laid a violent hand upon it or any of its inmates. Prisons were demolished; convents and monasteries which, protected by the puissant hand of papal authority, covered a third of the best sites of the city, were swept away; monuments overthrown; statues melted down into bullets; but whatever the domi-

nant power, reason or passion, the old building was still preserved sacred when no other influence or power could act.

When law was abrogated, and religion contemned, medicine still preserved her power, and will; for is it not bulwarked and hallowed into each individuality of existence by the first and greatest law of nature, self-preservation? Upon the architrave of this building is written, in plain simple letters, Hotel Dieu; formerly it ran, Maison de Dieu, House of God—a name far more appropriate to it than to many of the statelier mansions of ecclesiastic pomp. Else than this front of half a dozen doric columns, it is an unsymmetrical pile; but we delight to traverse its long, dark corridors, and its wards named from the different saints in the calendar, and to roam over its covered bridge over the Seine, which connects it by an underground tunnel with the newer female department beyond, peopling them with the many men of might in medicine, who have passed half a life time here before having graven names high and ineffaceable on the pillar of fame. It seems sacrilege to raze it, even for the magnificent structure in erection across the way; but its years are numbered now.

The same splendor that characterizes all the public edifices of Paris, has been lavished upon her numberless buildings for the care of the sick. Her finest hospitals really merit the name of palaces. It is hard to conceive of room for improvement after an inspection of the Laraboisiere, and the new Hotel Dieu will fully equal it in arrangement—surpass it in architecture.

There are so many and such excellent works on the various hospitals of Paris in your easy reach, especially one lately published with large illustrations of all the principal hospitals of Europe, that we may refrain from any attempt at description and occupy our limits with more agreeable matter.

We copy, then, first for the benefit of your many readers who were once Paris students, the list of present chairs and occupants in the summer session just closed:

M.M.

Medical Natural History, Baillon.
Physiology, Longet.
Therapeutics and Materia Medica, Gubler.
Surgical Pathology, Dolbeau.
Legal Medicine, Tardieu.
Pharmacology, Regnauld.
Obstetrics and Diseases of Women and Children, Pajot.
Pathological Anatomy, Vulpian.

Hygiene, Bouchardat.
Medical Clinics, See and Behier.
Surgical Clinics, Laugier, Gosselin, Broca and Richet.
Obstetrical Clinic, Depaul.
Diseases of Infants, Roger.
Diseases of Skin, ———.
Diseases of Eye, ———.

The course of study in the summer sessions, for the four years, is arrranged as follows:

First Year—Medical Natural History, Herborization, Exercises in the Botanical Garden of the Faculty, Chemical Manipulations.

Second Year—Physiology, Internal Pathology, External Pathology, Practical Exercises in Physiology.

Third Year—Physiology, Internal and External Pathology, Obstetrics, Operations and Dressings, Therapeutics and Materia Medica, Pharmacology, Pathology, Anatomy, Medical and Surgical Clinics.

Fourth Year—Internal and External Pathology, Obstetrics, Therapeutics and Materia Medica, Legal Medicine, Pathology, Anatomy, Hygiene, Medical, Surgical and Obstetrical Clinics, Practical Exercises in Medicine.

Paris is dull enough now in Medicine—during the long vacation, most of the professors being in the larva condition and only to develope when the winter session begins. The daily visits are still, however, regularly made, and occupation enough might be afforded to the student if he could be present at that period. Unfortunately all visits are made in the morning from eight to eleven; and as this is a city of magnificent distances, and the hospitals are situated in the most remote points of these distances, an attendance on more than two daily is simply impossible. We are somewhat happily situated in this regard, about the centre of the celebrated Latin Quarter, a few paces from the clinics of the school, and within ten minutes walk of the Hotel Dieu and the Charité. The clinics contain two departments, the Surgical and the Obstetrical, the latter under the charge of Prof. Depaul; and we may make a note or two on its character. And first, then, with all the magnificent material in every department of medicine, which a city of one and two-thirds millions inhabitants naturally affords, backed by the neat sum of four and a half millions francs annual expenditures for educational purposes, the whole amount of obstetrical material that may be used in the instruction of students, is contained in this pitiably small department of thirty-six beds! and that, too, when one entire third of all births is illegitimate. *Proh pudor!* The grand lying-in hospital of the city is inaccessible to stu-

dents—why, we know not; and an interrogation of a French student only yields that inevitable shrug of the shoulders which means so many things that we have never been able to arrive at anything satisfactory. That it does not depend on a profound respect for female modesty, a few remarks further on may illustrate. The hospital is ordinary enough, too, in other respects. There is a considerable show of white linen in beds and in curtains, which surround them here as everywhere in Paris; but there is not that cleanliness of nook and corner which bespeaks the constant vigilance of the superior officer in these matters of such vital importance in this department; and though there is an abundance of assistants, in their white aprons, and a superabundance of nurses for such a small affair, there is too much easy familiarity all round to ensure that discipline which is so essential to the character of a modern hospital.

We have not been able to glean much of novelty in the way of treatment. Eight days is the period of decubitus. Diet very low at first, is gradually increased. All cases of puerperal difficulty affecting the abdomen are hidden under a large cataplasm. One or two rather severe blisters we have seen applied. The only case of puerperal convulsions proved fatal—there was nothing special in the treatment. There is still one quite interesting case in the wards. An occipito posterior position was delivered with considerable difficulty by the forceps, (the long French instrument is here employed), subsequently fever ensued and a large abscess formed in the subcutaneous tissue, just over the uterus. Long shreds or masses of degenerated adipose tissue and rectus muscle are daily extracted through the small orifice of spontaneous origin, which permits the escape also of a profuse purulent discharge, attended with gas of such an odor as at one time to have caused a suspicion of intestinal lesion. The microscope, however, excludes all stercoraceous matter. To-day the cavity was injected with potass. permangan. Patient's condition critical from long continued suppuration, but recovery still highly probable.

One practical fact should hardly escape unnoticed, and that is the enveloping of premature infants in raw cotton, a perfect case being made, leaving only the face free—the best means we have ever seen employed for constantly preserving a proper temperature.

The number of cases of cancer in Maissonneuve's wards in the Hotel Dieu is perfectly astounding. It would seem that he selects such cases from the whole city. He attacks them, certainly, in a most fearless manner, as we do not ever remember to have seen such huge

sloughing surfaces as these after the application of his caustic. We know nothing of results. It was our pleasure to witness the application of his famous gutta percha air-excluder, &c., on several cases of amputated limbs. We certainly noticed several cases in which it did not prevent the formation of pus, and one in which he removed it altogether on that account.

Your readers are probably aware that all the public positions of Paris are filled by competitive examination. We had some curiosity to sift the matter a little, and to-day we accidentally encountered an announcement for a concours for two physicians and one druggist, with the laws regulating such things in general. *Voila* the following extracts:

"The candidate must be a graduate, and must have studied five years; if an interne in a Paris hospital, four suffices; if an interne laureate, it is still slightly reduced. He must be inscribed at the office of the Secretary of Administration at least fifteen days before the commencement of the concours. The members of the jury are drawn by lot by the Directors of Administration, in the presence of two members of the Council, delegated to this purpose. The duties of jurymen are obligatory, and they may only be excused for grave causes. There shall never be more than two jurymen from one institution. A service once on a jury exempts from future service for a period of two years. Five days after closure of the lists, such candidate may present himself at the office of the secretary to acquaint himself with his jury. Any written objections to any juryman must be handed sealed to the Director, who shall consult with the two members of Council as to the proper steps. In case the Director and Councilmen fail to agree, the matter is to be referred for final decision to the Prefect of the Seine (mayor of the city). If no objection is tendered within five days, the jury is considered as definite. In case of a physician, the jury is composed of six physicians and one surgeon, seven in all, and all members of staffs of hospitals. For druggists, the jury to consist of six druggists, one physician and one surgeon—four of the druggists to be selected from the hospitals and two from the city. In all cases a parent or relative is to be sought out and excluded. The examination is divided into two varieties: first, the examination of admissibility, and second, the examination definite. The first is common to all competitors, the second only to those who have passed the first.

"Examination of Admissibility—1. An oral theoretical question on a subject of pathology—twenty minutes for reflection, and twenty minutes for answer. 2. A clinical examination of a patient—ten minutes for examination, and fifteen minutes for developing an opinion on the malady orally before the jury after five minutes for reflection. 3. A written opinion on a patient, for the preparation of which forty-five minutes is allowed after ten minutes examination—the opinion to be written immediately after the examination.

"Proofs Definite—1. A composition written on a subject of pathology, embracing its pathological anatomical elements—three hours time granted. 2. Clinical ex-

amination of two patients—twenty minutes for examination of the two—thirty minutes for the oral dissertation before the jury, after five minutes reflection.

"The maximum of points for each examination is fixed as follows: For admissibility, twenty; for the definite, thirty."

It is evident enough that mediocrity seldom gains admission into a Paris hospital, inferiority never.

The French student is a being of strange composition. Being a Frenchman, he partakes, of course, of his grand national characteristics; indeed, he is eminently an exponent thereof. He works all day generally faithfully, and then dissipates with equal fidelity all night. Of course there are many bright exceptions—we speak of the average. Dissipation in France, however, is not the course and vulgar rowdyism of many other lands; but is converted into a science, and displayed in such a manner as to allure youth in the most fascinating, almost irresistible manner. Every sense is addressed; the most tempting articles of luxury are every where paraded in the streets, the costliest and rarest viands, the choicest wines on the table, the most classical music at the opera, and grades all the way down in the lesser theater, whose name is legion, to suit the taste and pocket of every class. Woman is a luxury the most attractive of all. Boccacio's pen could scarce do justice to the morality of Paris. What Byron said of Spain, might be stated with equal justice of Paris. "The negation is omitted from the commandment, and it runs, Thou shalt."

Sunday is Saturnalia, and virtue and verdancy synonymous terms. Of course this is only the superficial view; and it must not be forgotten for a moment that behind all this dissolution and vice there still remain many great and honorable men, some of the world's greatest indeed, and many virtuous women; and it is to the peradventural existence of these that Paris may be said to be preserved from the effeminacy which proved the ruin of Venice, or from the more condign punishment which was visited upon Babylon, or Sodom and Gomorrah.

W.

ZANESVILLE, OHIO, AUGUST 16, 1869.

MY DEAR PROFESSOR PARVIN: Please say to your readers that, in addition to the *New York Medical Journal*, the whole of the article on the "Aims of Modern Medicine," the concluding portion of which was copied into your August number, has been republished in the *Living Age*, number 1306, for June 12th, 1869, as well as in the *Lon-*

don Quarterly Review, republished in New York in April, 1869. The price of the *Living Age* is but eighteen cents, of the *Review* seventy-five cents; and they can be had at or through all news-dealers everywhere. The purchase of either publication, containing it entire, will be a wise investment for all those who desire to obtain in small compass the prime "Aims of Modern Medicine."

Yours faithfully, Z. C. McELROY.

ANNA, OHIO, AUGUST 12, 1869.

EDITOR JOURNAL: In Braithwaite's *Retrospect* for July, 1869, page 248, is an article by Dr. L. W. Sedgwick, on the use of a reflecting mirror in examinations by speculum. Allow me to suggest that the common bull-eye lantern meets every want—is easily managed, and the light is unequaled for brightness. W. McMILLAN, M. D.

BIBLIOGRAPHY.

TRANSACTIONS OF THE AMERICAN OPHTHALMOLOGICAL SOCIETY—FOURTH AND FIFTH ANNUAL MEETINGS, 1867–'8.

This volume is the exponent of one of the most industrious of our scientific bodies; as such it should command the attention of every supporter of progress. It contains about one hundred and fifty pages, beautifully printed, and many very elegant illustrations. The society numbers fifty members, all eminent in their specialty; and all have labored to contribute to the Transactions in such a manner as to make the work an honor to their body. We will take space for a short synopsis of some of its contents:

In a report on the Progress of Ophthalmology for 1865, 1866 and 1867, as an evidence of the importance at present attached to this science, mention is made of nearly three hundred new works and monographs on the subject.

Hutchinson says of ophthalmoscopic appearances in tobacco amau-

rosis, that at first there is redness simply, later the disk grows pale from its periphery, especially on the outer side, and at length assumes a milky whiteness. This process occupies from four months to a year—not attended with pain or photophobia; blindness gradual and, finally, complete. Withdrawal of cause often induces speedy arrest of symptoms.

Virchow for *struma exopthalmica* uses perseveringly *iron*, *digitalis* and *belladonna*—objecting to iodine as harmful.

Observers conjoin in the statement that enucleation is never to be neglected in cases of *sympathetic ophthalmia* where there is merely *irritability* or even *serous iritis*, but that it is useless where the sympathetic trouble amounts to an *irido cyclitis*.

Dr. Luca, of Naples, suggests the powder of sulphate of soda as a superior agent for removal of corneal opacities.

Prof. Knap suggests as an improvement, obviating sympathetic trouble in other eye, the use of conjunctival sutures in the operation for staphyloma.

Dr. H. D. Noyes advocates complete correction of differing degrees of astigmatism in the two eyes as the best means of obtaining good binocular vision.

In diseases of the nasal ducts Dr. H. W. Williams offers a modification of Bowman's probes—giving them a bulbous extremity, and diminishing the shaft. Dr. Green advises the use of lead as superior to other material for styles.

Dr. Derby cites two cases in which atropia induced acute symptoms in glaucoma.

In an exhaustive article Dr. Loring demonstrates that convergence can not be changed without a relative alteration of accommodation; but that accommodation may be changed without altering convergence.

Dr. H. Williams reports favorably on his method of using the corneal suture after flap extractions of cataract.

Dr. Green has introduced a new series of test types, an improvement on those of Snellen and Jager.

Dr. H. Noyes states that the appearances in glycosuric and albumenuric retenitis are similar.

Dr. Jeffries demonstrates the frequency of severe ophthalmitis in facial *herpes zoster*.

Dr. Hildreth states that anæsthesia of the cornea occurs not from general intra-ocular tension, but from a peculiar condition of the cili-

ary ring, and that it is speedily removed by division of this ring, all the accompanying symptoms disappearing also.

Dr. Williams, of Cincinnati, gives his approval of Graefe's method of linear extraction of cataract above all others, as affording a greater ratio of success. He prefers to operate without anæsthetics. Dr. Noyes, of New York, also gives his testimony in its favor, but always uses *chloroform*.

The volume concludes with a new series of tests for detection and measurement of astygmatism, by Dr. Green, of St. Louis. J. G. R.

PROCEEDINGS OF THE STATE MEDICAL SOCIETY OF KENTUCKY, HELD AT LEXINGTON, APRIL, 1869.

Kentucky has a medical history of which her physicians are justly proud. Ovariotomy had its origin in Kentucky. A Kentucky surgeon, still living, commenced, half a century ago, a series of operations for stone in the bladder, which, for the unvarying success that attended them, placed him at the head of the Lithotomists of the age. A work on Pathology and Therapeutics, from the pen of a Kentucky physician, Prof. Cooke, though now out of print and seldom referred to, exercised for many years, a wonderful influence over the medical mind of the South; and for learning, closeness of style, and force of logic, will compare favorably with any work that has issued from the American press. The great work of Dr. Drake on the Diseases of the Interior Valley of North America, was written while he lectured in one of the medical schools of Kentucky. Dr. Bartlett, while connected with another medical school in Kentucky, wrote his classical work on Fevers. Many of Dr. Gross' popular volumes were composed while he held a chair in the University of Louisville; and it was while he was connected with the same institution that Dr. Flint began to collect the materials for his unequaled work on Practice. The volumes of Transactions issued from the Medical Society of Kentucky, in former years, were of signal ability, and after an interruption caused by the war, it is pleasant to see that they have been resumed.

The volume before us sustains the reputation of the Faculty, which has been adorned by so many illustrious names. Dr. Pawling's address, as President, can not lay claims to much originality, but it is sensible, and, what in such addresses is a rare merit, it is short. The

report of Dr. T. E. Jenkins on the Exposition Universelle, at Paris, in 1867, is admirable. He could not have compressed more information into the same space. France, he says, in almost every department of industry, played the leading part, and took up nearly half of the immense building in the display of her products. The exhibition of chemicals and remedial agents was nearly endless. Dr. Jenkins says of quinine:

"Among the many remedial agents which organic chemistry has afforded us, quinine occupies the first place, chloroform and morphine the second. Without quinine large tracts, indeed whole countries, would be uninhabitable for the white race. To the backwoodsman, a supply of quinine is as important as gunpowder. The "quinine famine" in the Mauritius demonstrated to thousands how small a thing even gold itself might become in comparison with the life-saving salt. During that fatal epidemic, while the population were dying at the rate of one hundred and eighty to two hundred per day throughout the island, a few ounces of quinine were obtained from a ship, for which the enormous sum of one hundred and thirty-seven dollars, gold, per ounce, was cheerfully paid."

The following paragraph is interesting:

"The greatest chemical industry of Great Britain, if not of the world, is the alkali manufacture from sea salt. The enormous magnitude of the soda production may, to some extent, be appreciated when we know that full forty millions pounds are annually made. Connectedwith the soda works are factories for producing chloride of lime, by which process a vast quantity of muriatic acid, which is a by product, is utilized. This acid is eliminated from common salt by the action of oil of vitriol during the first step in the process of Leblanc for soda making; and if the immeasurable volumes of this gas were let loose into the atmosphere they would blast vegetation for miles around. It was once thought that this nuisance could be avoided by carrying the gas up, by means of tall chimneys, to the highest regions of the atmosphere. The Muspratts of Liverpool erected, at great expense, a shaft as tall as St. Peter's at Rome, and containing several millions of bricks, to carry off their muriatic acid; but, on trial, it was found that this plan only increased the evil; for the gas, being heavier than the air, spread its deadly influence over a very much larger area of country. It was next condensed in the rivers and streams on the banks of which the works were erected, but this plan was soon abandoned when it was found that it killed all the fish inhaling or visiting the streams. Now, this noxious gas is condensed by conducting it into huge stone towers filled with coarse silicous pebbles or coke, kept constantly wet with water dropping from above. The liquid acid runs out from below, and is utilised afterwards by decomposing it with binoxide of manganese, eliminating chlorine, to be used in forming chlorinated lime."

The report of Dr. Craig on Medical Ethics shows a becoming zeal for the dignity of the profession; and we like his suggestion, that professors in medical schools should instruct their pupils in the ethics

which should govern medical men in their intercourse with their patients and with one another.

The report on vaccination, by Dr. Poynter, will be read with interest and profit by all seeking information on that important subject. Dr. Frazee's report on the Botany of Kentucky is taken up largely with an excellent biography of Dr. Charles W. Short, who did more than all the other laborers in that field to develope the botany of his native State.

The report on Obstetrics, by Dr. Bryant, is a "*résumé* of the history of obstetrics," and presents many facts of interest. The defect most likely to strike the reader is the extreme succinctness of the report. More detail would have rendered it more valuable.

Dr. Jenkins has a second report in the volume, relating to his specialty—Pharmacy. It is a report to be preserved for reference—full of useful matter touching subjects which concern the physician in his every-day duties. Dr. Jenkins is fully up with the improvements in Pharmacy, and here presents many of the most important which have enriched it in our times.

Dr. Bayless contributes a paper of great value to these Transactions. It consists of a report of "five cases of diseases of the bone from common causes, with the results of surgical procedure." We regret that our limits will not permit us to make an abstract of this important paper. It evinces fine judgment and tact in the writer, and will be read with interest by the practitioner.

It is gratifying to witness such evidence as these Transactions afford, of professional industry and learning. We shall look forward with interest to the future contributions of the Kentucky State Medical Society to medical knowledge.

PRACTICAL MANUAL OF THE TREATMENT OF CLUB-FOOT.

BY LEWIS A. SAYRE, M. D.

New York: D. Appleton & Co. 1869.

At meeting of the American Medical Association, held at Washington in May, 1868, Dr. Sayre presented a "Report on the Treatment of Club-foot without Tenotomy," which was published in the XIXth volume of the Transactions of the Association. The present mono-

graph is an extension of the report referred to, and is a promised "installment of a work on Orthopedic surgery soon to be completed." The first three pages are devoted to a brief statement of the anatomy of the parts involved, particular attention being called to the "*medio-tarsal articulation*," *i. e.*, the articulation between the *astragalus* and *os calcis* behind, and the *scaphoid* and *cuboid* in front, an articulation that Dr. Sayre believes has been too much overlooked in the construction of "club-foot" shoes. In common with the majority of modern writers, rejecting the theory that the various forms of talipes depend upon the spastic contraction of the muscle or muscles acting upon the part or parts of the foot toward which the distortion occurs, the writer holds that the essential element of the affection, in the great majority of cases, is at least primarily a paralysis of the muscles opposed to those seemingly contracted. "I believe that *all* cases of congenital talipes, *if examined immediately after birth*, would be found to be paralytic in their nature, and that the spasm or contracture found to exist in some cases after a time is really acquired, and due to irritation or inflammation of the muscles and fasciæ involved. Not that I would deny the possibility of such a spinal disease as should cause a tonic spasm of the muscles existing *in utero*. But if such cases do exist, they must be very rare, and, for myself, I have never seen them. * * * * What has been said above of the lesion in congenital talipes is, to a great extent, true of the acquired form. Acquired talipes, very generally, is due to the various kinds of "infantile paralysis," which are the frequent sequelæ of scarlitina, diphtheria, dentition and many other diseases in which a blood-poisoning exists, or which are attended with great exhaustion. * * * * Some cases of acquired talipes, however, are not paralytic in their character; these are occasional cases dependent upon diseases of the spinal cord, in which treatment can be of little use while the originating disease is uncured; cases following direct injury, which has caused inflammation and subsequent shortening and rigidity of muscles and fasciæ; and certain cases, in which acquired spastic deformities are added to the paralytic ones previously existing. This last is a very common condition of things, and, doubtless, has been the chief cause in prolonging the belief in the spastic nature of most of these deformities." As respects the *seat* of talipes, "in equinus, as in varus and valgus, the deformity takes place at the medio-tarsal junction. The deformity of calcaneus does occur at the ankle-joint, and this, I believe, is the only variety of which this is true." The "prime indications" for treatment are: 1.

To restore the foot to its normal position. 2. To assist the nutrition by all the means within our reach, such as heat, friction, motion, galvanism," &c. The earlier these indications are met, the more certain the cure. "Whatever be the treatment employed, it should *begin at birth*, if the disease be congenital, or directly upon the receipt of the injury, if acquired." * * * * * * * * * *

The most serious difficulties met with in the treatment of talipes arise from: 1. The advanced stage of fatty degeneration in the paralyzed muscles, due to prolonged neglect, and 2. The effects of the inflammation excited in the muscles and fasciæ by the irritation of walking with the feet in a false position; both of which difficulties could be avoided, or greatly diminished, by earlier attention to the case." Of *tenotomy*, which a few years ago was considered all-important in the treatment of club-foot, he says: "If what has been stated above regarding the paralytic origin of most cases of club-foot is true, then the severing of the tendons of muscles still remaining sound is entirely irrational. The very best result that could be expected from the operation would be, that the muscular support of the foot being removed on all sides, gravity would throw it into a normal position. The disease which underlies the distortion, namely, the paralysis, has been untouched. And if the tendon becomes firmly united, there is likely to be complete relapse of the deformity, if the union is complete, the foot hangs as helpless at the end of the leg as the flail of the thresher. But, while I believe that, in cases of congenital or acquired paralytic talipes, if taken in hand early, tenotomy is very rarely, if ever, needed, cases frequently present themselves where from neglect it is absolutely essential, as a preliminary measure to all other treatment. These cases are those in which the fasciæ have become contracted or the muscles contracted. Now, how is this contracture to be diagnosticated? By anæsthetizing the patient and then attempting to reduce the deformity. If the contraction yields without the rupture of any of the tissues, the condition is one of simple contraction, and can be relieved without section. If, however, the deformity persists, contracture has taken place, and tenotomy or rupture of the shortened tissues is demanded."

The most valuable part of the book to the general practitioner, is that devoted to the consideration of the various methods of dressing to be employed, either with or without tenotomy, as the case may require. The *roller bandage, gypsum bandage, sole-leather or gutta percha splints*, and the *adhesive plaster*, either alone or with added *india-*

rubber tubing, are considered with their several advantages. Though the ordinary *roller bandage* is simple, "and by constant observation and readjustment of the dressing a cure may sometimes be effected; yet this plan of treatment is applicable to a very limited number of cases, is very liable to get out of order, and therefore demands constant care, and has an objection, in common with all which permanently cover the limbs by bandages or splints, that it interferes with the necessary application of frictions and galvanism. The *gypsum bandage* possesses the advantage over the last plan that it does not change its form. * * * * The objections are, the weight of the dressing, the impossibility of inspecting the limb and of applying to it friction, electricity, &c. * * * * Both *leather* and *gutta percha* are superior to *gypsum*, in that they can be daily removed for personal inspection, manipulation, friction, shampooing and electricity. * * * * A large majority of congenital deformities, if taken *immediately* after birth, can be easily retained by the simple application of *adhesive plaster*. * * * * Although this plan is frequently successful, cases do occur in which the muscular rigidity is too great to yield to manipulation, unless continued for a longer time than can be generally given. A constant tractile force then becomes necessary, and the plan suggested by Mr Richard Barwell of London, is by far the best." In this plan (Barwell's) india-rubber cords are so attached to the leg and foot as to counterbalance the action of the apparently contracted muscles; in other words, the work that can not be done by muscles now paralyzed, is done, and more perfectly than might be expected, by elastic bands. "The advantage of this plan is, that it is in imitation of the natural action of the parts, permitting and promoting the constant movement of the muscles and joints, thereby increasing the circulation in the same, and necessarily improving their development and power." Respecting the advantage, in fact the necessity, of motion, Dr. Sayre says: "I can not too frequently urge the necessity of motion as a means of permanent cure, or too strongly deprecate the use for any length of time of any form of appliance which shall prevent or materially limit the proper movements of the foot. Without motion the muscles can not be restored to their normal degree of development, consequently the talipes will be cured only in form, and not in reality, and relapse will be the natural sequence of such incomplete treatment. Motion is the essential element of cure; and I think the chief value of galvanism and faradism, as promoters of muscular growth, lies in the muscular contractions which they pro-

duce. The growth is the result of action." Of the very simple plan of treatment adopted by Henry Neil of Philadelphia, in 1825, ("to fasten the child's feet to a board made to fit the soles of the feet, and joined together opposite the ankle-joints,") the writer remarks that "the restraint is of course irksome to the child, and, in his efforts to kick himself out of the bandages, he brings into action all the muscles of the legs—accomplishing the very object desired—and in the graphic language of Dr. Atlee, kicks himself straight."

In order that the movements at the medio-tarsal articulation may be preserved, and at the same time advantage be taken of Barwell's india-rubber muscles, Dr. Sayre has had made a "club-foot shoe," jointed in the middle of the sole. This "shoe" (solely to recommend which, some have said, the work under consideration was written), seems to answer very well the indications which must be met by any satisfactory apparatus. The elastic cords supplement and develope the atrophied muscles, and the hinge between the heel and sole allows the shoes to be adapted to the foot, and the necessary after-motion to be made. The record of cases treated, to which nearly one-half the book is devoted, shows the beneficial effects of "Sayre's shoe," at least in the Doctor's hands.

The mechanical execution of the book is excellent, as might be expected of anything issued by the "Appletons." P. S. C.

EDITORIAL AND MEDICAL NEWS.

THE CHAIR OF OBSTETRICS AND DISEASES OF WOMEN in the Medical College of Ohio, having become vacant by the resignation of the Editor of this journal—his acceptance of a chair in the Louisville University being the cause of this resignation—has just been filled by the election of Dr. C. D. Palmer, of Cincinnati. Dr. Palmer has lectured with acceptance in the summer school connected with the Miami College, is a gentleman of excellent professional attainments, and is an industrious student; and we anticipate for him in the new and honorable position to which he has been called, conclusive evidence of the wisdom manifested by the Faculty and Trustees in his selection.

The severance of a connection with the Medical College of Ohio which has existed for five years, does not abate our desire for the pros-

perity of this venerable institution, nor our regard for the hundreds of young men to whom we have had the honor of lecturing in it.

QUITE POSSIBLY the American Profession had no representatives at the recent meeting of the British Medical Association: an extract from a letter just received from Dr. Hibberd will explain the reason of the failure of at least two of our delegates to be present:

"Here I am, a victim to my faith in the immutability of British institutions. I came down from the Alps at a run to be at Leeds in time for the meeting of the British Medical Association, and arrived there according to programme to find myself just one week too late. Within the last few weeks they changed the day of meeting from the usual and adjourned time to the preceding week, on account of local considerations about Halls and Assizes. This was well enough for the members of the Association, for they all learned of the change in time; but foreigners could only know of it by chance, and such luck came neither to Dr. Pinckney, U. S. N., nor myself, for we met there last Tuesday with our credentials as representatives of the American Medical Association, and condoled with each other over our wild goose chase. There may have been other Americans ditto, but I did not see them.

"After seeing Teale do Ovariotomy next day, I left, and at Edinburgh had a pleasant afternoon with Dr. Bennett, who showed me one of Brown-Sequard's epileptic rabbits. This gentleman had a basket full of them at the Leeds meeting, and having spent a day or two with Prof B., in Edinburgh, gave him one. As you have seen an account of these rabbits in the journals, I will not say more than that it is both curious and instructive to see the little fellow take on his fit at the pleasure of the operator."

THE BOSTON MEDICAL AND SURGICAL JOURNAL, August 19th, in an elaborate notice of the Prize Essays of the Massachusetts Medical Society, on "the Part performed by Nature and Time in the Cure of Diseases," speaks of Dr. Hibberd's as "a model of elegant and forcible diction, and of terse expression"—a compliment well deserved, and coming from a most worthy source.

WE SEND out bills to all delinquent subscribers; and, of course, in making them, where more than a thousand names must be examined, some mistakes have probably occurred: all such mistakes will be promptly rectified when made known to us. We find more than three thousand dollars due the *Journal*. Ought not the greater part of this amount to be paid within the next month?

FOR SALE.—An order for an artificial limb can be had at much less than the usual cost. Address the Editor.

THE WESTERN JOURNAL OF MEDICINE,

(*Formerly*, "CINCINNATI JOURNAL OF MEDICINE.")

Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

VOL. IV. - INDIANAPOLIS, NOVEMBER, 1869. No. X.

A CASE OF PROLAPSE OF THE FUNIS UMBILICALIS.

BY LEVIN J. WOOLLEN, M. D., MOOREFIELD, IND.

About two years ago, I was called to attend Mrs. S——, a middle aged lady, the mother of several children. On examination, *per vaginam*, I found the head presenting and the *os* fully dilated—the membranes protruding in the form of a pouch. They were immediately ruptured, and during the next pain I detected the cord prolapsed to the extent of two or three inches. I practised reposition, but found that each pain forced it down as before. Having but little confidence in the many complicated and impracticable plans suggested by some authors on midwifery, I did not attempt anything of the kind; but believing that if the mal-position of the cord could be changed it might not again descend, I determined to move it from the position it occupied above the superior stait.

Finding it difficult, if not impossible, to follow the suggestion of Merriman and place it at the junction of the sacrum and illium, I determined to move it in an opposite direction. I therefore, in the absence of a pain hooked it upon the points of my index and middle fingers, and carrying it towards the symphysis pubis, I described the fourth part of a circle and let it remain in that position, gently withdrawing my fingers. On examination during the next pain, I was happy to find that the cord did not prolapse, and from that time I had

no further trouble with it—a living child being born a short time afterwards.

I have not since had a chance to try the same expedient, but would suggest that in such cases it may be well for physicians to practice this method before resorting to any of the difficut and dangerous plans proposed by some writers on obstetrics.

Further trials are necessary in order to ascertain whether or not it be adapted to many cases of prolapse of the funis.

A CASE OF POLYPOUS TUMOR OF THE WOMB, TREATED BY DRS. ELLIS, GAINES, FLAGG AND CRAIG.

REPORTED BY A. G. CRAIG, M. D., GHENT, KY.

Uterine tumors, according to their structure, are denominated fibrous, cellular, fibro-cellular, vesicular, vascular, and encysted. The fibrous, the most dangerous of all benign tumors of the womb, is, unfortunately, the variety the physician is most frequently called on to treat. When the tumor remains imbedded in the uterine walls, causing the growth of all the tissues in its proximity, it is denominated intramural; when the point of origin is near the peritoneal surface, and it increases in size, pushing the peritoneum, which invests it, into the cavity of the abdomen, it is denominated extramural; when the nucleus is nearer the mucous membrane, and the tumor descends as it grows, into the cavity of the womb, it is denominated a polypous tumor. These tumors are not penetrated by nerves, but are well supplied by blood-vessels. The arteries and veins supplying the intramural are small, but very numerous; while those supplying the extramural and polypous are comparatively few but larger. The following brief report of a case of a polypous tumor of the womb may not prove uninteresting to the readers of your excellent journal:

HISTORY.—About noon, on the 20th of June last, Mrs. H——, a widow, aged forty-four years, was suddenly attacked with uterine hemorrhage, and, according to her statement, lost about one gallon of blood. She was seen by Drs. P. C. Ellis and T. W. Flagg, but the bleeding had ceased before their arrival. They prescribed drachm doses of the wine of ergot every four hours. On the following morning I was called to see her, in consultation with Dr. Ellis. We found

her in a very weak condition from the loss of blood. Originally of a feeble constitution, and for years obstinately anæmic, liable to obscure uterine troubles since the birth of her last child, now twenty years of age. She stated that for two years past, at each menstrual period, the loss of blood had been greater than the normal quantity. For several years there had been no regularity in her periods—she would frequently go three months or longer without menstruating. At times the loss of blood was so great as to alarm herself and friends. About five years ago the abdomen commenced enlarging, and had gradually increased in size up to the present time. She had been under the treatment of several physicians, without any apparent benefit.

PRESENT CONDITION.—She is a woman of medium size, considerably emaciated, and very pale and weak. She has scarcely strength sufficient to turn herself in bed—*decubitus dorsal*. Her skin is cool and dry; pulse ninety, small, quick and feeble; breathing slow and somewhat labored; tongue rather dry, and covered with a yellowish coat; no thirst; some appetite; bowels regular; urine scanty and high-colored. She desires frequently to make water, but can pass very little. She slept badly last night, and feels drowsy this morning. Complains of vertigo whenever she raises her head. Says she has considerable pain "low down in the womb." Upon an examination of her abdomen, it was found to be hard and greatly enlarged, the swelling extending several inches above the umbilicus. In short, she presented very much the appearance of a woman seven months advanced in pregnancy. Upon making a *per vaginam digital* examination, we found a large fibrous tumor projecting through the cervix uteri, and filling up the entire vaginal cavity. The tumor was in several distinct lobes. By passing the finger between the walls of the vagina and the tumor, which was quite painful to the patient and accomplished with consididerable difficulty, the os uteri was found to be higher than normal, and tightly constricting the tumor. There was considerable heat in the vagina, and a slight muco-purulent discharge. The following treatment was agreed upon: Teaspoonful-doses of the wine of ergot every four hours, iron and quinia, together with hygienic and supporting measures, such as fresh air, stimulants, beef-essence, etc.

The case was seen on the 22d and 23d of June by Drs. Ellis and Gaines. No change in treatment.

June 24—I saw the patient this morning, in consultation with Dr. Ellis. She states that she has had "regular labor pains" frequently since I last saw her, evidently induced by the ergot. The tumor is

lower, making some pressure on the perineum. The discharge is more profuse, somewhat offensive, and there is greater heat in the vagina. She is stronger and in better spirits than she was at my first visit. Has slept very little, on account, she says, of the "labor pains." No change in treatment, except the ergot was directed to be taken only three times in the twenty-four hours.

June 25—I saw the case this morning with Drs. Ellis and Gaines. Patient rested badly during the night, and is very low-spirited. Tumor not so hard—discharge freer and more offensive.

June 26—The tumor is evidently undergoing decomposition; it is much softer, and the discharge is profuse, and so offensive that it is very unpleasant to remain in the room with her. No change in the treatment, except cloths wrung out of a solution of carbolic acid are to be applied to her vulva.

June 27—Saw the case to-day, in consultation with Drs. Ellis and Gaines. She is much weaker—pulse small, quick and feeble. Her appetite, strange to say, is improving. Desires frequently to go to stool and to void her urine. At times she is unable to make water, except when the tumor is held up, and then only in a small quantity. The tumor is decomposing rapidly—discharge profuse and very offensive. She complains of "bearing down pain." Abdomen is not so large or so hard. She was brought under the influence of chloroform, the tumor was seized with placenta forceps, and an attempt was made to bring it down, so that the chain of the ecraseur could be passed around it; but it so completely filled the cavity of the vagina that this was found to be impossible. A portion of the decomposed tumor, weighing, perhaps, four ounces, was brought away with the forceps. Ergot omitted—other treatment continued.

June 28 and 29—Saw the case with Dr. Ellis. Condition much the same; continued treatment.

June 30—Saw the case with Drs. Ellis and Gaines. The patient has slept none scarcely for forty-eight hours. She is very weak, and at times hysterical. We found a portion of the tumor protruding through the vagina. Its attachments were broken up, and it was removed. It weighed three-fourths of a pound. Her left leg is slightly œdematous. She was ordered, in addition to other treatment, anodynes sufficient to control pain and produce sleep, and an injection of a weak solution of carbolic acid into vagina.

July 1, 2 and 3—Patient is weaker, and very low-spirited. Left leg is swelling rapidly, and pits on pressure. Treatment the same.

July 4—Met Drs. Ellis and Gaines in consultation. We found our patient weaker. Appetite, however, continued good. We removed one-half pound of the tumor, the patient being under the influence of chloroform. The discharge is profuse, but not so offensive. Her left leg is greatly swollen. It was punctured with a needle, allowing considerable fluid to escape. Continued treatment.

July 5—No particular change since yesterday. She was again brought under the influence of chloroform, and three-fourths of a pound of the tumor removed.

July 6—Patient feels stronger. Pulse is better, and her appetite is very good. The discharge is not so profuse or so offensive. To-day, by means of a long trocar and canula, passed through a speculum, we introduced chloride of zinc into the tumor. Continued treatment.

July 7, 8 and 9—Chloride of zinc was introduced into the tumor each of these days, and several sloughs were brought away. The left leg is more edematous, the swelling extending up in the thigh. It has been punctured daily since the 4th inst. Her right leg is also slightly edematous. In addition to former treatment, she was ordered the acetate of potassa.

July 10—Saw the case to-day, with Drs. Ellis and Gaines. The tumor can not be felt through the walls of the abdomen, and all that portion that was in the vagina has been brought away. There is not more than one-third of the tumor remaining, all of which is in the womb. The os uteri is considerably dilated, and there is no difficulty in introducing the chloride of zinc into the tumor. The discharge is small and slightly offensive. Her general health is improving rapidly. Her appetite can scarcely be satified. She feels able to get up, but was advised to remain in bed.

July 11 and 12—Improving; no change in treatment.

July 13—Met Drs. Ellis and Gaines. The sound was passed into the womb, and the tumor was found to be adherent by an extensive attachment to the anterior wall of the neck and body of the womb. She is improving rapidly, and to-day was allowed to sit up for several hours. The swelling of legs is rapidly diminishing. Treatment continued.

July 14 and 15—Continues to improve.

July 16—Visited the patient with Drs. Ellis and Gaines. She continues to improve; sleeps well; appetite good, and says she "feels

quite comfortable." Left leg still quite dropsical. To-day all treatment was discontinued, except the tincture of the chloride of iron.

July 19—I visited the case again to-day, and found her sitting up, and in fine spirits. The swelling has gone out of her legs; her abdomen is soft and smaller, she states, than it has been at any time in ten years. The os uteri is not larger than a silver dollar, and, in my opinion, there is nothing remaining of the tumor except the neck.

August 2—To-day I called on Mrs. H——, for the purpose of getting some instruments I had left at her house, and found her ironing some clothing. She stated that she felt stronger and better than she had at any time in twenty years. Her appetite could not be satisfied. She was able to do her housework. I could scarcely realize that she was the same woman who, a few weeks ago, looked more like a corpse than a living being.

REMARKS.—There is still a portion of the tumor in the womb—perhaps only a part of the neck remains. The questions arise, will the tumor be reproduced? or, will the portion remaining disappear spontaneously? What caused it to decompose? Was it strangulated in the os uteri? ulceration, inflammation, or what? How large was it originally? Is it advisable to attempt a removal of it? I would be glad to hear the opinion of some of your surgical contributors on these questions. It is my opinion that the tumor will be reproduced. The putrescence, I think, was caused by strangulation in the os. The tumor probably weighed, originally, not less than six nor more than ten pounds. Several pounds were removed in putrefied condition, and several pounds, as it decomposed, came away in putrilage, pus, and shreds, while a portion remains in the womb. It would certainly be jeopardising the life of the patient to attempt a removal of the remaining portion of the tumor.

SUCCESSFUL TERMINATION OF A CASE OF ABSCESS OF THE LIVER.

BY D. W. LAMME, M. D., EL PASO, ILL.

On June 23d, 1867, I was called upon to visit Mrs. Martin, who was living ten miles from El Paso. I found her suffering with a severe pain in her right hypochondriac region, her tongue slightly furred, her pulse quick and small, with some headache. On examination,

I found her liver very much enlarged and hard, curling up, so to speak, over the edge of the lower rib, and extending almost to the crest of the ilium.

I put her on blue mass and saline cathartics sufficient to produce at least one operation of the bowels every day—her bowels being in a state of obstinate constipation. I found, after about ten days, that the tumor had not decreased, and that all the other symptoms were aggravated, the pain being much more severe than before. I then put her on the following prescription: calomel, grain i; opium half a grain every four hours. After taking six doses, she showed evident signs of ptyalism that I discontinued the treatment. I had also blistered her repeatedly from the beginning over the region of the tumor. It was evident, now, after treatment of two weeks to induce resolution, that an abscess had formed and was pointing to the surface. I now resolved to resort to anodynes and hot fomentation, to relieve the pain and hasten the termination, with an occasional cathartic.

On July 19th, 1867, I visited her in company with Dr. D. Lewis. We opened the abscess about midway between the crest of the ilium and the lower margin of the ribs, and evacuated a large quantity of dark, thick, grumous fluid, smelling like sulphureted hydrogen. We did not allow the abscess to empty itself all at once, but left directions with the husband to evacuate it by degrees. I judge that the abscess contained not less than one quart of this offensive matter; her husband told me that he thought not less than three pints.

She recovered rapidly. When I called to see her a few days after, she was visiting at one of her neighbor's. She is now as well as she ever was, and is living at Covington or Newport, Ky.

One point in this case, I think, is worthy of attention. It has been claimed that abscess in the liver is sufficient to protect the patient from the influence of mercury. Annesley says: "There can be no doubt that the system will not be brought under the full operation of mercury, or that ptyalism will not follow on the most energetic employment of this substance where abscess exists." He repeats this opinion more than once, and considers resistance to the action of mercury as conclusive evidence that abscess does exist. Budd sanctions this opinion, and remarks: "It is, then, before suppuration has taken place that mercury can do any good."

It is evident that this doctrine does not maintain in all cases. It

was so short a time after having produced the most marked symptoms of incipient ptyalism, that abscess was diagnosed, and even so short a time elapsed before it was opened, that it must, beyond a doubt, have existed at the time of the administration of the mercury.

REMARKS ON THE THERAPEUTIC VALUE OF BROMIDE OF POTASSIUM.

BY LUNSFORD P. YANDELL, JR., M. D.,

Professor Materia Medica and Clinical Medicine, University of Louisville.

No medicine, at the present time, is probably attracting so much attention as the bromide of potassium. Besides being a very fashionable drug with the profession, it has become a popular favorite, and now occupies the same rank in domestic medicine that the tincture of arnica has so long held in domestic surgery. While a very wide difference of opinion exists among writers and practitioners in regard to its curative powers and its behavior in the human system, the mass of testimony is undoubtedly in its favor. During the past two years my experience with it has been somewhat extensive both in hospitals and private practice; and the result of my observations is, that while it is by no means the panacea which some have deemed it, it is a most valuable medicine, capable of doing great good in many morbid conditions, and nearly destitute of all power for evil when properly administered, even in very large doses. Its failure to produce the effects attributed to it, which is reported in the hands of some practitioners, is due, I suspect, to one of three following causes: Either its administration in improper cases; or its being given in insufficient doses; or being given not sufficiently diluted. When the latter error is committed, pain in the stomach and bowels, sometimes severe, is not an uncommon consequence. And this is easily accounted for when it is remembered that bromide of potassium will blister the tongue when applied to it in substance for a short time. Given internally, in a concentrated form, in large quantities, it might unquestionably develope serious symptoms.

Having become convinced of the harmlessness of this medicine by experiments upon myself, I have not hesitated to administer it freely to others. It is a remarkable fact that, though in drachm doses, it

has frequently relieved me of sick-headache, and has never failed to overcome the insomnia induced by coffee, excessive mental labor, anxiety, etc., it has often failed to produce any appreciable effect upon me when in health, although taken in large and repeated doses. On one occasion I took in the morning, on an empty stomach, three drachm doses, at intervals of an hour, and during the day swallowed four similar doses, without experiencing vertigo, drowsiness, or any unusual sensation save a fullness of the head, and a tendency to stare at objects, which may or may not have been due to the drug. Again, during a forenoon, I took six drachms in divided doses, at intervals of less than an hour, without any sensible effect. And on another occasion I swallowed one hundred and twenty grains at a dose, with the same result. I conclude, therefore, that when this medicine does no good, it is not productive of any mischief. But it is proper to add, that I have had female patients occasionally who charged it with exciting headache; and one lady who said it even produced in her troublesome nervous twitchings. They were probably imaginary; for a young lady, who was suffering intense pain in the back and hips from dysmenorrhea, took, in the course of a single night, an ounce of the bromide, in doses of a drachm every hour, not only without the effect of inducing any nervous symptoms, or sleep, or drowsiness, but without allaying the pain. In this case, the remedy proved totally ineffectual for good or evil. Another lady sometimes takes as much as four or six drachms, and occasionally even more, for sick-headache, during the day, and while relief is generally obtained, unpleasant symptoms never follow this large medication. This lady buys the bromide by the pound, and for the most part takes it by guess, as she does the carbonate of soda. In several cases I have given drachm doses three times daily for three weeks in succession, without any toxical effects. But in others I have found vertigo, staggering, and an uncontrollable propensity to sleep brought on by forty grain doses repeated three times a day.

The following brief notice of some of the cases of disease in which I have employed this remedy will illustrate my experience of its capabilities:

A woman with severe locomotor ataxia of six weeks' duration, accompanied by great pain in the head and lower limbs, insomnia, and excessive nervousness, took a scruple of bromide of potassium three times a day, for a length of time, and then thirty, forty and sixty grains, three times daily. She got, also, the citrate of iron and strych-

nia, and such other medicines as the symptoms seemed to demand. The improvement in her condition was marked. She had been unable to walk—under the use of the remedies she was able to resume her domestic duties, to which she had not attended for a month before she entered the hospital. Her improvement, to my mind, was clearly attribuable to the use of the bromide.

An aphasiac took twenty grains, then thirty, then forty grains, thrice daily, for six weeks, with decided improvement in the power of speech, and with the removal of an intense hemicranize attendant upon the disease. At one period of the treatment this patient took a drachm of the medicine three times a day; but the dose was diminished after a few days, because he declared that it made him sleep all the time.

A delicate young printer, who had suffered in childhood from epileptic convulsions, came under my charge, complaining of terrible headache, which recurred with marked regularity on Tuesday or Friday, each week, and sometimes on both days in the same week. They were usually preceded by loss of appetite, swimming in the head, chilliness, numbness of extremities, and sometimes by faintness. The attacks generally passed off with severe billious vomiting, and left him much exhausted. Their duration was two days or more. Though many excellent physicians had prescribed for him, none had done him any good. As he had used anti-periodics faithfully, I ordered him scruple doses of the bromide before each meal, and sixty-grain doses hourly when the paroxysms were present. He derived benefit at once from the remedy. In a short time his attacks became less frequent, and in two months he was apparently relieved. This patient got, with the bromide, ferruginous and other tonics. The bromide in drachm doses made him so drowsy that he was unfitted by it for business while on its use.

In epilepsy and epileptiform troubles, bromide of potassium has exerted the happiest influence upon all the cases that have come under my observation.

In what are popularly known as sick-headaches, the medicine has proved in my hands a sovereign remedy. I should hardly state the case too strongly if I said that I had found it almost infallible. A medical gentleman, aged sixty-seven years, had suffered nearly all his life with sick-headache, having attacks generally once a week or oftener. Indiscretions in diet, mental or physical fatigue, loss of sleep, etc., were pretty sure to bring one on, and frequently they came on without any assignable cause. In his case, after half a century of

suffering, he has found the bromide a cure, and now no longer dreads his old tormentor. He keeps a supply of the drug on his mantelpiece, and on the approach of headache, which is now comparatively rare, takes from forty to sixty grains, and generally is relieved by a single dose. This case is one of many of the same intractable affection in which I have prescribed the bromide successfully. In the headaches, and the nervousness following a debauch, it acts like magic; and no medicine is so efficacious in securing rest and sleep in *delirium tremens*, according to my experience. In hysteria and hypocondria, it does good, and its effects are most happy in the insomnia of infants and old people, as also in that condition arising from the pruritus of lichen, from excessive mental exertion, anxiety of mind, the nervousness following frights, &c. A female patient in the early stages of pregnancy, was terribly frightened. She was rendered painfully timid and nervous by day, and was kept awake at night. She took, for a fortnight, a drachm of the bromide at night, and is relieved.

Two cases of cerebro-spinal meningitis in my practice have apparently been cured by the bromide of potassium. One was a child, aged three weeks. It took four grains at intervals of two hours when able to swallow, which, owing to the frequency of the convulsions, was not always the case. The second was six months old. It took eight grains, at intervals of three hours. Both patients continued to get the medicine in those doses at these intervals for several days; and after that the doses were given three times daily for a week. A brother of the second child died of the same affection, about the same age, a few years since, under my care, and several male children in the family have been carried off by it.

In drunkards I think I have seen the bromide of potassium diminish the craving for spirits, and even for a time destroy the propensity to drink. In pure cases of neuralgia, not dependent upon syphilis, malaria, or inflammatory trouble, I have found it to act admirably; but in the delirium of typhoid fever, in the pains of syphilis, of variola, and of erythema nodosum, immense and continued doses of it have afforded no results. I have also found it impotent in preventing chordee, and destitute of all anaphrodisiac power. I have never seen it do good in lumbago, or dysmenorrhœa, and in malarial and inflammatory affections, it seems to me to be wholly without remedial efficacy.

The drowsiness, confusion of thought, and unsteadness of gait, which sometimes follow the use of large doses of this medicine, soon

pass off. The diarrhœa which now and then attends it is not troublesome.

My practice is to administer to adults, for headache, wakefulness, and, in truth, in every case where a prompt effect is desired, drachm doses of the bromide, in a tumbler, or not less than half a tumbler of cold water, hourly, till the wished for effect is attained. Where the medicine is to be continued for length of time, smaller doses are better, at least to begin with. To quiet infants, or to make them sleep, three, five, or even seven grains may be given with safety.

RETENTION OF BLIGHTED OVA IN UTERO—SECOND PAPER.

BY DR. W. HOBBS, CARTHAGE, IND.

The July number, current volume, of the *Western Journal of Medicine*, contains a paper written by me in relation to the retention in utero of blighted ova. Since its publication, some additional facts in reference to the same subject, have come to my knowledge, which further confirm the propositions there stated, and which may be of interest to others.

Dr. J. J. Watts, personally a stranger to me, but, as I learn, a veteran of nearly thirty years in the profession, and a graduate of the Louisville University of Medicine, in its early days, has very kindly communicated to me the report of two cases, as follows:

"FAYETTE, MISSOURI, AUGUST 5, 1869.

"W. HOBBS, M. D., Carthage, Ind.—*Dear Sir:* In the July number of the *Western Journal of Medicine* I have just read a very interesting paper by you, upon the "Protracted Retention of Blighted Ova."

"Your case was particularly interesting to me, because many years since a very similar one in many respects occurred in my practice, and as a report of it, which was never published, may be of some interest to you, I will now proceed to give it from notes taken at the time.

"Mrs. B——, aged about twenty-seven years, five or six of which she had been married, but never pregnant, had an attack of remittent fever in the early part of October, 1844. During her convalescence, about the 20th of that month, she menstruated, to which fact my attention was called at the time.

"About five weeks afterward her husband consulted me in reference to the case, stating that her menstrual period had passed without any flow, and that she was suffering considerably from nausea and other unpleasant symptoms. I told him

that she had probably conceived, and declined to prescribe any medicine for her, as the indications were not distinct.

"About the middle of the following March—five months afterward—in the intervening time not having heard from her, her husband, much pleased with the prospect of a family, told me that my conjectures in reference to his wife's case had proved correct, as she had quickened, and could then very perceptibly feel the fœtal motions.

"From this time the pregnancy progressed with no unusual characters, until about the 1st of August ensuing, full nine months or a little more from the date when it was expected the conception occurred. The patient assured me that the movements of the child were strong up to this period, when they ceased, and were never afterward felt. There was a copious secretion of milk which continued several weeks.

"After this the health of the patient remained remarkably good, and she attended regularly to her domestic duties until about the 15th of February following—six months and a half from the date when the fœtal movements were last felt, and from the time of her expected confinement—sixteen months from the supposed date of the impregnation—I was sent for to see her, as the long-expected labor had begun. I felt greatly relieved upon an examination, when I ascertained that it was really a case of uterine pregnancy; for having never been permitted to use the vaginal touch until that time, I was fearful it might be extra-uterine. The labor-pains continued feeble and at long intervals for several days, producing but little effect. Five days after they began, the os uteri, although soft, was not dilated larger than a silver dollar. She was so much exhausted by the loss of sleep, &c., that I determined to deliver her artificially—had tried ergot, and its only effect was to put her to sleep.

"I decided to perform craniotomy, as the child was certainly dead. Upon rupturing the membranes, the usual quantity of liquor amnii was discharged, of rather a dark color, but entirely free of putrefactive odor.

"The child was delivered without difficulty, with the crotchet, and measured twenty-two inches in length, but appeared emaciated. The placenta had rather a *scorched* appearance, and was much smaller than usual at full term. The child's skin was much darker than natural and rather tender. No fetid smell was perceptible during the delivery, nor was there any hemorrhage.

"The patient made as good recovery as is usual after first labors, and has since enjoyed tolerable health, but has not conceived again.

"Whilst upon the subject of "blighted ova," I will give you a few points in the history of another case which occurred in my practice some twenty years ago.

"Mrs. H——, a very delicate lady, was married when about forty-five years old. She became pregnant soon afterward, and her gestation proceeded without unusual symptoms until almost the sixth month, when she ceased to feel the movements of the fœtus and began to be troubled with nausea, which increased to such an extent that a teaspoonful of the blandest fluid was ejected almost immediately after being swallowed. This state of things continued about six weeks, notwithstanding the use of the best means of help which could apply. By this time she was very much emaciated—something had to be done for her relief. As a last re-

sort, *immediate* delivery, if possible, was decided upon. Her symptoms at this visit were so urgent that counsel seemed out of the question, there being no physician of experience within twenty-five miles of me.

"I proceeded at once to rupture the membranes, and tried artificial irritation and ergot to induce pains, but without effect. After waiting an hour or two, the os uteri being soft and dilatable, I determined to deliver without pains. Fortunately for me and the woman, as I then thought, the feet presented, both of which being easily secured, no difficulty was experienced in the delivery until it came to the head. At this juncture there was entire arrest, as the skin was so tender that any considerable traction was attended with tearing, and the lines of the under jaw so imperfectly ossified that no traction could be applied to it.

"Decapitation was then performed, and by the use of a pair of blunt scissors the scalp was removed. The bones of the cranium were extracted separately by a pair of straight tooth forceps, the only instrument at my command on that occasion except the scissors, which I found at the house.

"There was no hemorrhage. The fœtus and placenta presented about the same appearances as in the first case which I gave you. There was not an expulsive pain from the beginning to the end of the delivery. The lady recovered rapidly without any unpleasant symptoms of any kind, but has had no subsequent conception.

"These cases occurred long ago; but they were of such extraordinary character as to so fix themselves in my mind that from my notes, taken at the time, I am able to give the above account of them, upon which you may rely in all particulars. Yours truly, J. J. WATTS."

With the above cases, communicated by Dr. Watts, I desire to present another of my own, which has fallen under my observation since the publication of my former paper.

About the middle of last June Mr. L—— consulted me in relation to his wife, informing me that she was about six and a half months "gone"—that the motions of the child had been more active than ever before, (fourth pregnancy), until a few days before, when, after a day's house-cleaning, they had suddenly ceased, and had not since been felt. At that time her breasts were tense and had some milk in them, and her health was uninterruptedly vigorous. He desired to know what conclusions these facts suggested, and whether they threatened danger to mother or child.

From that date until the 3d of August the same story was often repeated to me—the breasts now subsiding and regaining their virgin color and appearance—the abdomen no longer increased in size, but about stationary—the child hung like a dead weight in the uterus, and made no motion except a passive slide from side to side as she changed her position in bed—her health vigorous as it ever is.

On the morning of the 3d of August I was called to see Mrs. L——,

and found her in labor. By the touch I discovered the vertex presenting—a few hours afterward, when the *os* was well dilated, I ruptured the membranes, which discharged about the usual quantity of fluid, with normal characters so far as I could determine. Soon afterward the whole fœtal mass was expelled at a single effort, making the delivery complete. Each of her former labors was tedious—this occupied but about eight hours. On the former occasions she had suffered terribly from post partem hemorrhage, which was followed by excruciating after-pains. This time the only blood stains were from old dead blood—even the lochia was of such, and the expulsive effort which delivered the ovum was the last "misery" which she had.

The child by its growth showed that it had attained about six and a half months, the time assigned it. The flesh was firm as though it had been compressed, the skin dusky-brown and so tender that by a little force the cuticle would slip—the chord about the size of a crow's quill, the exterior showing no signs of vessels—the placenta small, compressed, and looked as though it had been about half dried and then smoked. The membranes were nearly natural in appearance.

The ovum presented no signs of putrefaction except the tenderness of the skin—it had no fœtid odor—the only odor which gave any signs of petrefaction was from the dead blood discharged from the uterus before, at and after the delivery. Mrs. L—— convalesced very satisfactorily.

It will be observed that the signs of the death of the child in this case occurred at the middle of the seventh month of gestation, and that it was born about the first of the ninth month—six weeks after the death.

Let us now recapitulate the four cases reported—two by Dr. Watts and two by me:

Period of gestation at which death of the fœtus occurred—one at nine months, retained six and a half months—one at six months, retained twelve months—one at six and a half months, retained six weeks—and one at six months, retained six weeks.

In these cases the mothers suffered no interruption of good health by the dead child—in the fourth forcible delivery was necessary to save the mother's life.

In three cases there was no stain of fresh blood at the birth. The report of the fourth does not mention the facts in this respect.

The convalescence of the mothers was unusually quick and easy in three cases, and in the fourth about as common.

The ovum was perfectly preserved from putrefaction in all except that in the two discharged at six weeks, the skin was more tender than in life. The general appearance was the same in all—the membrane entire—amniotic liquor pure and sufficient in quantity—the placenta and fœtus condensed, presenting the appearance of having been dried and smoked—mummified. These changes the greater in those longest retained. Dr. Watts reports that both of his patients were afterwards sterile—my first one was so—the last is too recent to furnish any evidence in this respect.

Other interesting reflections relative to this interesting subject occur to me, but I can not express them now.

COMPOUND FRACTURE OF THE INFERIOR FOURTH AND CONDYLES OF THE FEMUR, WITH DISLOCATION OF THE PATELLA UPON ITS EDGE, BETWEEN THE CONDYLES.

BY A. J. IRWIN, M. D., FORT WAYNE, IND.

About sunset, on the 31st day of October, 1868, John Wycoff, Esq., aged forty years, while assisting at the raising of a grain-house, was struck by a falling timber.

The frame had been raised in sections, each of which consisted of three posts, and a plate—posts six by six inches and ten feet; plates six by eight inches and sixteen feet. The last section was forced up rapidly and fell inwardly, while Mr. W. was in the act of crossing a sill directly under one of its outer posts.

The stroke was received an inch below the great trochanter, and swept down the lateral posterior surface of the thigh, within three inches of its outer condyle, while the lateral anterior surface of its inner condyle was fixed upon the margin of the sill.

I visited the patient about three hours after the accident. Found him much depressed. Diagnosed the following rare form of fracture:

Four inches above the knee a double oblique fracture of the shaft, with division of the condyles into the articulation, and dislocation of the patella upon its edge between them, in which position the latter was so deeply impacted as to be quite obscured.

As motion produced insufferable pain, I adjusted the lint as comfortably as possible; prescribed opiates and cold-water dressings.

November 1—Anæsthetized the patient; proceeded to elevate the patella, which was difficult to accomplish, as anticipated. Having made extension to release the sections from the soft parts. The leg was raised about twenty degrees above the plane of the thigh, thoroughly relaxing the quadriceps, in which position it was held by an assistant. The wedge-like extremity of the superior fragment was then pressed up between the condyles, the inner condyle depressed, and lateral motion made upon the patella, which completed its reduction.

The partially dislocated condyles were adjusted.

The limb was bandaged while well extended, and immediately placed upon a "double-inclined-plane splint," from the superior plane of which a crescent had been excised. This apparatus was made especially necessary by the necessity of local treatment to the contused lateral posterior surface of the thigh; short splints were applied to prevent separation of the condyles. A weight was suspended to the limb to *assist* in preserving extension.

Cold-water dressings and full doses of morphia prescribed.

November 2—Fever; parts much swollen. Prescribed Dover powder; leeches to knee; cold-water applications continued.

November 3—Fever abating; more leeches to knee. Treatment continued.

November 4—Less fever; slough forming over the contused surface six by twelve inches.

November 5—Free of fever; swelling abating. Prescribed carbolic acid in linseed oil, one drachm to eight ounces, to be applied to sloughing surface; sulphate of quinine ℈i.; aromatic sulphuric acid, ʒss., in ʒviii brandy; a teaspoonful to be taken every hour. Restoratives being demanded, opium at night to procure rest and allay spasm of limb. This treatment was continued until November 10th, at which time the slough separated to the depth of the integument only, exposing partially occluded puncture, made by point of external condyle; general condition improved. Treatment continued, omitting brandy. Synovitis subsiding.

November 20—Slough entirely detached; denuded surface doing well; dressing prescribed in half the former strength. Other treatment suspended. Extension preserved with great difficulty—the pa-

tient being of an irrascible temperament, frequently *persuaded* his wife to interrupt the tension, notwithstanding positive orders to the contrary.

November 26—Was unduly anxious concerning farm matters; demanded his wife to loose his limb from the splint—which she did—changed position frequently, resulting in the rupture of adhesion, and displacement at the point of fracture in the shaft. The condyles being firmly united—found the thigh shortened two inches; inferior fragment riding the superior; leg inverted, swollen and painful. Patient almost exhausted. Re-adjusted the limb, secured it firmly; renewed cold water dressing. Prescribed Dover powder.

December 1—Pain and swelling abated.

December 10—Health improved. Denuded surface mostly healed; bones united.

December 15—Union strong; splints removed; pillow placed under the knee; a lighter weight suspended to the foot.

December 20—Patient was taken home—a distance of four miles, after which I did not visit him. He was obliged to remain in bed most of the time for two months, later on account of hyperæmia and pain of foot and ankle when depended.

April 1—Mr. W. called at my office. I examined the thigh; found it one and a fourth inches shortened, otherwise in good state. Patella adhering somewhat to the condyles; leg could be flexed about twenty degrees; use of joint improving, though still quite stiff. Shortly afterward he moved westward. The bad condition of the patient, in consequence of intemperate habits; the frequent interruption of extension, and finally, the displacement, doubtless delayed recuperation, and assisted in shortening the limb.

His *atonic* habit accounted for the early subsidence of acute inflammatory action, and continuance of an asthenic febricula and malaise. The synovitis abated without disorganization; the adhesions resulting were principally between the patella and condyles, anchylosis of which was prevented by passive motion of the patella. Motion of the joint was necessarily delayed until the bones had united. Leeches and cold water were exclusively the topical treatment of the synovitis.

I have understood recently that he has fair use of the knee.

CRITICISM OF THE ACTION OF AMERICAN MEDICAL ASSOCIATION AS TO SPECIALISTS.

BY DR. JAMES THOMPSON, OF HARRISON, O.

Some time has elapsed since the last meeting of the American Medical Association, and I have waited in vain, expecting to read some comments or criticisms in regard to the measures adopted and laws enacted by the same.

Shortly after the meeting of the above Association in 1868, not a few were the comments and strictures which appeared in the various medical journals of the land concerning the proceedings of said Association. Most of the writers then contended that the valuable time of a learned, liberal and dignified Association should not be spent in conviviality, but that it should have been spent in the discussion and elucidation of occult subjects. But now, after said Association has discussed subjects and enacted laws which are calculated to affect the well being of thousands now in and yet to enter the profession, not one word of comment or criticism do we hear.

We find, on perusing the August number of your journal, that on the first day of the meeting Dr. E. L. Howard, chairman of the "Committee on Specialties in Medicine, and the Propriety of Specialists Advertising," reported, and made the special order for Wednesday, at twelve M. Accordingly on Wedensday, Dr. L. P. Yandell, Jr., of Kentucky, introduced the following resolution:

"*Resolved*, That private handbills addressed to members of the medical profession, or advertisements in newspapers, calling the attention of professional brethren to themselves as specialists, be declared in violation of article —, of section — of the Code of Ethics of the American Medical Association."

Dr. N. S. Davis of Chicago, said:

"It had been the practice to publish cards in medical journals for the purpose of informing the medical fraternity that the advertiser devotes himself to special diseases. These cards were not so much for the information of the public as for the medical fraternity. He hoped that now the question was up, it would be discussed fully."

Dr. L. P. Yandell, Jr., of Kentucky:

"We have allowed physicians to violate the code of ethics by advertising in the medical journals that they are specialists in the treatment of certain diseases. In Europe they are stricter in regard to specialists than here. There, where a physician wins a reputation in the treatment of certain diseases, his professional brethren send cases to him for treatment; but advertisement is prohibited. If we are allowed to resort to advertisement, not as a question of merit, but of money, the

Association should so declare. I am sure I am right in this principle, and want an expression from this Association."

Dr. Sayre, of New York:

"Let those who understand the best mode of treatment in special diseases, instruct their professional brethren through the proper channels, as the honorable way of preferment, not by advertising as a matter of dollars and cents. Let us look the matter square in the face and sustain the resolution of Dr. Yandell. May my hand be paralysed if I make any attempt to profit by advertising knowledge I have gained in my profession."

"Dr. Mussey, of Ohio, moved to amend by inserting or in medical journals."

Said amendment was accepted.

Dr. Yandell:

"The question is, shall we associate with professional prostitutes and medical outlaws?"

"Dr. Yandell's resolution was unanimously adopted."

The resolution of Dr. Yandell is so worded that, at first glance, it looks partly reasonable; but when we refer to his comments subsequently, the objectionable features are apparent. He first speaks of "private handbills or advertisements in newspapers." To this portion we take no exception; but when he states that "We have allowed physicians to violate the code of ethics by advertising in our medical journals that they are specialists in the treatment of certain diseases," the question arises, what reasonable objection can be urged against either of the following modest advertisements?

"E. Williams, M. D., Eye-Surgeon, north-east corner of Fourth and Race streets, Cincinnati, O."

This is copied from the *Lancet and Observer*, 1861.

"Dr. Edward L. Holmes, 28 North Clark street, Chicago, Illinois. Special attention to diseases of the Eye and Ear."

The above appeared in the *Chicago Medical Journal*, for 1861, 1862 and 1863. Or to this one:

"Drs. Taliaferro & Buckner, treat diseases of the Eye and Ear, north-west corner, &c."

Many more similar advertisements could we add from the various medical journals of the land.

Is there an unprejudiced member of the medical profession, who will agree with Dr. Yandell in branding and ostracising such men as "professional prostitutes" and "medical outlaws," who resort to such advertisements "not as a question of merit, but of money?"

Permit me to state that in your journal for the month of August, I noticed the following:

"L. P. Yandell, Jr., M. D., Professor of Materia Medica and Clinical Medicine."

Is it a "question of money" with him?

The next gentleman whose name we notice in connection with this subject is Dr. Sayre of New York, who embellishes the subject after the manner of Holy Writ:

"May my hand be paralyzed if I make any attempt to profit by advertising knowledge I have attained in my profession."

Pardon me for digressing in this place. The case of paralysis reminds me so much of the many eloquent *bores* who are constantly jumping from their seats to explain something. We meet them in every walk of life, in the most insignificant township caucus of the rural district, as well as in the legislative halls of our country; in our county medical societies, as well as in the American Medical Association. Our desire is that their tongues instead of their hands may be paralyzed.

I notice in a back number of the *Chicago Medical Journal* the name of

"Lewis A. Sayre, M. D., Professor of Orthopedic Surgery."

Is it a "question of money" with him, also?

Next comes Dr. Mussey of Ohio, who was not content with the original resolution, but "moved to amend by inserting 'or in medical journals.'" In your journal for August I notice the following advertisement:

"W. H. Mussey, M. D., Descriptive and Operative Surgery."

Is it a "question of money" in his case?

If I mistake not, Prof. Gross had a good deal to say on "specialists" at a former meeting of the Association, and then and there contended that he was just as competent to treat the eye as were those who made it a specialty.

It is the opinion of your humble servant that, notwithstanding his claim to competency to treat the eye, his writings do not corroborate his statement; for, although an excellent writer on Surgery in *general*, he makes terrible blunders when writing on the eye.

In support of the above, let us take a cursory glance at Dr. S. D. Gross' writings on the eye, in vol. II, published 1864, page 197:

"In either case the pupil must be dilated with atropia in the proportion of

one-twentieth of a grain to the ounce of water, a small quantity of which is applied several times to the eye a few hours before."

The experience of specialists is, that in a great majority of cases it is at least twenty times too weak, unless we have time to drop it in every few minutes for several hours; but that a single drop of a solution containing from one to four grains to the ounce of water is usually used.

Page 222. Recommends nitrate of silver, oxide of zinc, &c., to cases of ulcerative keratitis. Would the Doctor be responsible should his students cause permanent metallic deposits between the laminæ of the cornea? "Specialists" particularly avoid using such dangerous articles. Page 231—Iritis:

"Mercury, then, is the great remedy *par excellence*."

"Specialists usually cure their patients in a shorter period than three weeks by the use of anodynes, local and constitutional, and contend that mercury is not needed except in syphilitic cases.

Page 235. Recommends the hook in Iridectomy—says nothing about iridectomy forceps. Is there less danger of wounding the lens with the hook than with the forceps?

Page 247. In speaking of the various methods of operating upon hard cataract, the Doctor remarks:

"It is said of Wenzel that he spoiled a whole hatfull of eyes before he had learned the art of extracting, which affords an excellent illustration of the difficulties which attend this operation, and reason why so few practitioners are found who are ready and willing to undertake it."

He still prefers couching in cases of hard cataract. "Specialists" almost invariably *extract* hard lenticular cataracts, and if these cases are well chosen, their successes preponderate over their failures in the proportion of five to one. They look upon *couching* as an abominable operation, owing to the retained lens remaining in the eye; for so long as it remains we never know what irritation it may cause.

Page 289. "Diseases of the Lachrymal Apparatus." He recommends the old and almost obsolete method of inserting the style into the nasal duct through an opening made below the lid. "Specialists" usually insert the point of a scissors into one or other puncta lachrymalia, usually the upper, slit up the canal, and pass the style through the natural passages, thereby making a much more elegant and useful operation.

Page 285. Speaks concerning the operation for Entropion, as follows:

"Much judgment is required in order accurately to proportion the amount of substance to be removed; the great danger generally is, that the operator takes away too little, thus favoring speedy relapse."

"Specialists" caution operators against taking away too much of the integument, contending that it is far more easy to repeat the operation than it is to remedy the ectropion or the inability to close the lids, which often follows the operation for entropion, where such advice is given by Dr. Gross is adhered to. I will add that several such unfortunate cases have come under my observation after having been operated upon by surgeons for the relief of entropion.

Page 292. While speaking of the division of the internal Rectus for the relief of *Convergent* Strabismus, he says:

"The moment this is accomplished, the eye, from the traction exerted upon it by the hook, springs towards the nose, and the muscle retracts within its sheath, especially if it has been thoroughly liberated from its connections."

The question arises: If the muscle retracts within its sheath, or the Capsule of Tenon, how does it get back again?

"Specialists" carefully avoid such retraction, knowing as they do, that if such retraction takes place, *divergent* strabismus usually results, a complication which is anything but desirable. That which they aim to produce is simply a setting back of the muscle on the globe *outside*, but never *inside* the Capsule of Tenon.

We will notice but one more error and pass on.

Page 270. In describing the anomalies of *refraction*, the Doctor confounds with it a natural failure of *accommodation*. After describing *Myopia* or short-sightedness, he speaks of *Presbyopia* as follows:

"Presbyopia, foresightedness. In Presbyopy the *converse* of *Myopy*, objects can be discerned distinctly only at a considerable distance; hence the person, in reading, holds the book or paper at arm's length."

He states that it is the result of a

"Gradual flattening of the *cornea*, thus causing divergence of the rays of light before they reach the retina."

Is not his description just as "clear as mud?" *Presbyopia* is not the converse of *Myopia*. It is simply a failure of accommodation, occasioned by an increase of hardness of the *crystalline lens*, so that its form can no longer be readily changed, and its convexity increased by the action of the *ciliary* muscle.—(*Donders.*)

Hypermetropia, instead of *Presbyopy*, is the anomaly of refraction

which may be said to be the converse of *Myopy*. It is, "Specialists" inform us, a condition like Myopy, which generally depends on defect of construction of the globe; the antero-posterior diameter being too short, so that parallel rays are brought to a focus at a point behind the retina.—(*Donders.*)

Many more errors could be found in the writings of Dr. Gross on Ophthalmology; but as I do not wish to tire your readers, have simply spoken of those which are so obvious.

Having digressed slightly from our subject, in order to show that the ablest and most eminent men of the *general* profession sometimes make sad blunders, when writing on, or discussing subjects which are usually better handled by "Specialists," we now return to our subject by reviewing the men and their motives.

Who are the parties so afraid of being "prostituted" and contaminated by "medical outlaws?"

Professors Yandell, Sayre, Mussey, and, formerly, Gross—all of them Professors and eminent members of the profession, who advocate this exclusiveness solely for the benefit of others; who would rather have their hands paralyzed than to make a few "dollars and cents" by their knowledge. Was ever such disinterested philanthrophy exhibited since Brutus and other Roman senators so befriended their countrymen?

In order to throw additional light on the subject, permit me to state, that about two years ago, I had the honor of a short interview with Dr. Blackman of Cincinnati, and while then conversing on the subject of Ophthalmology, he remarked good temperedly, that Drs. Williams and Seeley had left him no eye cases to operate on, but that it was right; for the above named gentlemen had worked hard for, and had well earned their reputation.

Can it be that envy and jealousy prompted the above distinguished Professors to endeavor to exclude equally if not more worthy men?

What effect will such resolutions have upon members of the profession, and upon the public?

It has already had the following effect upon the profession: But a short time ago I noticed upon the signs of Drs. Williams, Seeley and others, Oculist and Aurist, but now the specialties are obliterated, and their signs at this date simply bear their names.

In regard to the public: In the place of being benefited by the change, they will be put to a great deal of inconvenience in searching

for aid in their afflictions, and many will resort to pretenders, who have eyes and ears painted on their signs as large as the head of a barrel.

Dr. Sayre informs us that in the place of any card or sign, or advertisement in medical journals, or anything visible, whereby the Professor or the public can see at a glance what we propose to treat, we are to "instruct our professional brethren through the proper channels." Does he mean that we are to seek to become Professors in "clap trap" colleges? If so, we answer that we have too many seeking such positions already.

Let us "look the matter square in the face," as the gentleman remarks; and when we do so, we find that a vast majority of the men now in and entering the medical profession, are *poor*. Most of them have been school-teachers, who have by dint of frugality and perseverence, laid up a small amount in "dollars and cents," just sufficient in most instances to take them through college, and purchase the necessary instruments needed to prosecute their calling; and in numerous instances the poor fellows can not command ten dollars cash to start on, and in some instances it is their desire to practice in some special department.

How would such an one prosper were he to wait for his "professional brethren to send him cases?"

But, on the other hand, let the son of a banker, or of some distinguished professor, who has both money and friends, and who has made a trip to Paris—and, by the way, we will here remark that it has become fashionable for those who wish to attain eminence, to visit Paris, even if they have not acquired a sufficient knowledge of the language to understand the lecturer. I repeat—let such an one start by the side of the poor physician; and, we ask, to whom would the professional brethren send their cases? Would they not send them to the banker's son?

In conclusion, let me ask: Will the "rank and file" of the profession be dictated to by men holding superior positions in the eyes of the public? Shall a coterie undo that which has existed for years, and hear no remonstrance? I sincerely hope that all who *think* so, will *say* it shall not be, and that the matter be thoroughly ventilated.

THE TREATMENT OF MALIGNANT TUMORS BY ELECTROLYSIS.

BY W. NEFTEL, M. D., NEW YORK.

Although I am preparing for publication my researches on the continuous galvanic current, where remarkable illustrations of the electrolytic treatment will be given in extenso, I consider it my duty to give at once a preliminary account of the following case, which may contribute to save the lives of many sufferers deemed incurable:

Hon. Th. T. D——, a highly accomplished gentleman, fifty-eight years old, consulted last year several celebrated surgeons in London and Paris (among others, Nélaton) with regard to a tumor in the left mammary region. They all advised him not to undergo any surgical operation, as they considered the tumor a malignant one, the removal of which would only hasten the fatal termination of the undoubtedly constitutional disease. The patient, nevertheless, insisted upon the extirpation of the tumor, and our great surgeon Dr. Marion Sims, quite successfully performed the operation in Paris. Soon after the cicatrization of the wound, however, the axilliary glands of the same (left) side began to enlarge, and in January last presented a tumor of the size of an egg, consisting of a conglomeration of enlarged and indurated glands. Dr. Sims again extirpated this second tumor, the microscopical appearance of which was that of a real cancer (carcinoma of the axillary glands). The specimen was presented to the New York Pathological Society and examined by distinguished histologists.* The wound this time healed very slowly, as it was accompanied by dangerous complications, an extensive erysipelas, high fever, (107.8° Fahr.) rigors and delirium. Scarcely had the wound healed, when a new scirrhus tumor began to grow in the right mammary region, and very soon attained the size of an orange, or more. It now became evident that another surgical operation would be useless, for it could only call forth, as before, an immediate relapse, and perhaps in a more dangerous locality. As nothing remained to save the patient, who was perfectly aware of his condition, and whose constitution was broken down, I proposed the eletrolytic treatment, expecting, as the best result, merely the local destruction and absorption of the tumor; for, in the present state of our knowledge, I could not have entertained any hope of producing by electrolysis the least favorable change in the constitutional disease.

On the 27th of April, and the 4th and 7th of May, in the presence of Drs. Metcalfe, Nott, and B. Howard, I performed the electrolysis by means of the large apparatus of Krüger and Hirschman, with elements of Siemens, subdividing, at the second and third operation, the cathode into three and four branches, connected with the needles by serres-fines. The latest improvements of the apparatus afforded the possibility of gradually increasing the quantity of the current,

*Medical Record, March 1, 1869, No. 73, p. 17.

without interrupting the circuit, and of diminishing it in the same way, so that the circuit was broken only by the extraction of the last needle. Not a drop of blood escaped. The first operation last two minutes, using ten elements; the second five minutes, with twenty elements; and the third ten minutes, with thirty elements. After the operation the tumor increased considerably in size, but became softer and more elastic. No febrile or other local or constitutional symptoms followed. On the contrary, the patient who before was weak, anæmic, and cachectic, began to gain strength and flesh; the tumor at the same time diminishing slowly but constantly. A month after the first sitting the tumor was found a great deal softer and smaller; at the end of the second month it had almost disappeared, and a fortnight later no trace of it remained. The general condition of the patient is now in all respects excellent, and new deposits can nowhere be detected. In his last letter he writes to me as follows: "I am not able to discover any new deposits anywhere, nor would the tumor in the right breast be detected by any ordinary observer. I hope the old devil who took lodgings there and was ejected, took all his baggage with him."*

The above-related case presents the following points of interest:

1. The patient has been examined by a number of celebrated physicians in Europe and America, who have all considered him affected by a constitutional cancerous disease; and the extirpated tumors, being real cancers, have proved the correctness of the diagnosis.

2. The described case brings me to the conclusion that the electrolysis must be considered not only as a local agent, as thinks Althaus,† but as one capable of modifying, and even curing, the constitutional diathesis. I explain it in the following way: It has already been established, by experimental researches, that the electric current affects powerful protoplasmatic structures.‡ Hence it is possible and probable that the cells (which have to be considered as bearers of the contagion and the cause of the generalization of the disease) get their protoplasma altered in such a way by electrolysis, as to lose its specific infectious properties, and make it incompatible with the existence and propagation of the cancerous new formation.

3. Finally this is the first authentic case of cure of a real cancer in a subject affected with constitutional diathesis. I think that if Althaus, to whom we are indebted for the improved electrolytic method, did not succeed in curing a single case of malignant tumor, it§ is owing only to the imperfection of the apparatus with which he works. I have had one like it imported from London, and have ascertained, by the feeble deflection of the needle of my galvanometer, and by the weak muscular reaction it produces, that Althaus' apparatus generates a very small current-quantity. This explains also why he is obliged

* The patient has since returned to the city, and been seen by some of the physicians abovenamed.

† *On the Electrolytic Treatment of Tumors.* London. 1867, p. 10.

‡ Vide KOHNE: *Lehrbuch der physiologischen Chemie*, p. 333. GOLUBEW: *Wirkung electrischer Schläge auf die farblosen Formbestandtheile des Blutes.* Cent. f. med. Wiss. 1869. No. 5.

§ *Medical Times and Gazette.* 1868, p. 469.

to have recourse to so numerous and prolonged sittings (half an hour), whilst, with the excellent apparatus I am in the habit of using, incomparably better results can be obtained in a much shorter period.

With regard to non-malignant tumors, I will give in my next paper an account of what I have attained by electrolytic treatment. Especially the soft tumors, nævi, etc., yield very rapidly to it. A large goître of eighteen years' standing has completely disappeared in the course of two months. So far as I can judge from my experiments on animal (rabbits), the electrolytic treatment of varicose veins and aneurisms, promises to be highly successful. Examining microscopically the thrombi, I could repeatedly convince myself, in opposition to the assertions of Tschaussoff,* that the organization of a thrombus really does take place, a fact which had been already experimentally demonstrated by the classical researches of Virchow,† as far back as 1846. Again, it is not difficult to follow up the gradual transformation of the colorless blood-corpuscles into connective tissue-corpuscles, which was likewise accepted by Virchow.

But the most surprising effect can be produced, by the electrolytic treatment, on organic strictures of the urethra. The only case I have had is a gentleman who is yet under my observation. He has been suffering for about ten years from organic strictures impermeable even for the thinnest bougies. He told me that, though he had been under the care of many distinguished surgeons, no one could ever succeed in introducing a catheter into his bladder. On the 20th of July I introduced a French catheter, No. three, up to the principal stricture, situated in the prostatic part of the urethra, the prostate itself being enormously enlarged, and by a very simple contrivance, directed the electrolytic action of the negative pole upon the stricture during two minutes. Immediately, to my great astonishment, the catheter passed within the bladder, and an immense quantity of turbid and decomposed urine was discharged. Since this the patient has been able to pass urine easier than he has ever done before. On the 24th July I repeated the operation with the same result, but using catheter No. six of the French scale; and I can now introduce Nos. eight and ten without resorting to electrolysis. So far as I can ascertain, the prostate itself does not seem to be enlarged any longer.

In spermatorrhœa this mode of treatment can not be surpassed. I have had several cases of inveterate spermatorrhœa, which all yielded to a single or to repeated electrolytic treatment of the prostate part of the urethra. I am sure that those who have once tried this method, will find it far superior to all the others, which are comparatively tedious and uncertain.

The first discoverer of the electrolytic treatment was Crussel,‡ of St. Petersburg, Russia. Already in 1839 he demonstrated experimentally the different effects produced by the different poles, and used electrolysis in the treatment of strictures, exudations, tumors, and ulcers. A number of others followed him, amongst whom one of the

* Archiv fur klin. Chirurgie. xi. 134.

† Gesamelte Abhandl., p. 323.

‡ CRUSSEL: *Die electrolytische Heilmethode.*—Medic. Zeitung Russlands. 1847-48.

most successful is undoubtedly my friend Dr. Moritz Meyer,* of Berlin. Dr. Althaus has quite recently improved the method and shows the great importance of the negative pole in the treatment of tumors. Certainly every observer will agree with him that electrolysis, besides annihilating the pain, acts in a threefold manner,† viz: 1. Through mechanical disintegration of the tissues by the nascent hydrogen; 2. Through the dissolving action of the accumulated free alkali (potash, soda and lime); 3. Through the local modification of nutrition (by means of the vasomoter nerves) of the parts brought under the immediate influence of the current. To these local effects I can now add, from my own experiments and observations, the constitutional effect of electrolysis, which latter especially makes this method invaluable in many hitherto incurable diseases. One of its great advantages is that it is never followed by inflammation, suppuration, sloughing, or other disturbances, and that the patient can continue his usual occupation and mode of life.

The electrolitic treatment is called to open a large field for surgery, and will be applied very soon to a variety of surgical diseases, to the advantage of the profession and the benefit of suffering humanity. The surgeon now, besides his biological knowledge and the use of his mechanical appliances, will acquire and appropriate to himself the knowledg of physics, electro-physiology, and the management of the complicated galvanic apparatus.—*Medical Record.*

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TRANSACTIONS OF THE INDIANA STATE MEDICAL SOCIETY AT ITS NINETEENTH ANNUAL SESSION, HELD AT INDIANAPOLIS MAY 19 AND 20, 1869.

The most noticeable feature of these "Transactions" is extreme poverty.

Comparing them with similar productions from neighboring societies, we are painfully impressed by this feature.

It is not within our province to account for this state of affairs. Certainly this result does not indicate any lack of talent, or even an ebb in the tide of medical enthusiasm amongst our professional brethren. It may have been from some impairment of the machinery of organization. Some neglect in the application of forces. "Some one

*Moritz Meyer: *Die Electricitat in ihrer Anwendug auf practische Medicin.* Aufl. 1868, p. 406, 407.

† *Op. cit.*, p. 441.

(may have) blundered." Be that as it may have been, the publication is before us, and is what it is.

The first paper in order is the President's address. Subject:

"THE TROUBLES AND RESPONSIBILITIES OF THE MEDICAL PROFESSION."

The subject is trite, and the matter "commonplace" to an extreme. It has never been our privilege to enjoy an acquaintance with the worthy President, and we beg his pardon in all due humility while dissenting from the view which he has taken of the profession in this formal repetition of the chronic grumble of men who have failed to receive, because they have failed to merit, that exalted appreciation which the intelligent, educated, generous, manly and sincere lover and practitioner of medicine never fails to receive from whatever people he may labor for and amongst.

We confess to a weakness on this subject—a weakness amounting to weariness, of this self-pitying complaining on the part of "regular" practitioners, of the hardships, abuses, ingratitudes, indignities and want of appreciation to which they are constantly subjected. For ourself, we desire no "high protective tariff," to prohibit "old women" from overruling our opinions, or suspending our prescriptions; or to protect us from the humiliation of being superceded by quacks of whatever denomination. The people, however ignorant, in this country of free institutions, measure men, public and professional, much more accurately than we are willing to acknowledge. Sheer quackery, unless it be harmless, (as Homœopathy,) is short-lived in any community. That it is encouraged, temporarily, and often repeated experimentally, is a suggestive commentary upon the merits or success of the "regular practice."

The worthy President closes his address with a few sentences cheerful, inspiring and full of truth, contrasting agreeably with the general burden of his speech—asserting in one sentence that which should stand in the place of all which precedes it; a brief summary of the whole matter, to-wit: "If his course (the physician's) has been upright and honorable, he will have the approval of his own conscience, and the praise of all good men!"

What more can any man desire?

"WHY DOCTORS DISAGREE,"

Is a paper by Dr. Kersey, of Richmond, who is well known to the profession as a gentleman of more than ordinary ability and research.

The paper is written in vindication of the rule of ethics "prohibiting intercourse at the bedside with doctors of other so-called systems"—and is intended to remove the impressions "that the rule is founded in arrogance and works cruelty toward the sick." It contrasts the "broad basis," with its "boundless wealth of appliances," of the "Regular" with every other "so-called system" of medicine, declared to be "partial, distorted, dogmatic or unscientific." It indulges in the usual ridicule of Homœopathy, stating some of the most absurd of Hahnemann's speculations, as constituting the body of the system, and asserting "dogmatically" that the "system amounts to absolute expectancy in every condition of disease." The design and spirit of the paper are undoubtedly excellent. The intelligent reader, not himself "partial, distorted, dogmatical or unscientific," can not but feel the limitation of the author's thought, and regret the weakness common to us all, which disqualifies us for seeing beyond the narrow orbit of our own intellectual motions. Is it not time, and were it not better, more impartial, symmetrical, philsophical and scientific, to look at these schools of medicine, which we deem "irregular," yet which have so far found favor in the public estimation as to be recognized as "Systems," commanding and enforcing respect, in the light of what they suggest; accepting and appropriating whatever may be significant to us, by way of criticism of our errors, or of improvement made manifest by experiment and demonstration? We may laugh at our leisure, with our heels complacently elevated on our office tables, at the "little pill doctors," and facetiously quote until we grow gray witty illustrations of the "lunacies," and "infinitesimal nonsense" of Hahnemann's doctrines, yet we can not by any possibility defend our own practice as it was, even as it is, to a great extent, to-day, from the "huge criticism," the unsparing commentary which the result of this system of "Expectancy in all cases" has passed upon it; an indubitable benefaction to the human race. The true physician—the man whose mission it is to alleviate and to heal the woes and wounds inflicted upon his fellow-mortals, from whatever circumstance of life, should be so broad and high in love and wisdom, in charity and truth, as to embrace and comprehend not only his own more cherished "system," but, also, all that is valuable in all other "systems of cure." This does not imply "fellowship with a vast herd of doctors, specially trained in prejudice, error and credulity;" for we agree with Dr. Kersey in the assertion with which he closes his paper, that it were "far better to pursue an upward bearing, compelling incompetent and un-

worthy graduates and natural charlatans, foisted into nominal fellowship by mercenary teachers, to fall out of the ranks, where a high grade of positive merit should alone secure a permanent place." But it does imply that in our investigation of, and reference to, the "systems" of medicine, professed by, no matter whom, if so dignified by success as to compel recognition as a "system," we should not reverse our glasses so as to see things remotely and in diminutive proportions; but we should look at them brought closely, and so magnified, if need be, as to expose their most intimate structure to our observation and comprehension.

GENERAL ANASARCA.

The next paper in this collection bears the above title, and was presented for the consideration of the Society by Dr. John Moffitt of Rushville. It is the history of "a case, with remarks."

No better illustration of the propriety of understanding and appropriating whatever is valuable in other "systems" of medicine, especially the Hahnemannic, could be found than is presented in this "case" of Dr. Moffitt's. Uncertain of the pathological condition manifested by very slight symptoms in the beginning of the "case;" doubtful respecting the treatment to be adopted, as the Doctor evidently was, we can not but think and believe, from experience and observation, that it would have been infinitely better for both doctor and patient, to have accepted the suggestion of safety in pure "expectancy," and have left this case to the "rational" efforts of nature, rather than to have subjected it to the "irrational" and "unscientific," because doubtful and purely experimental treatment, which was adopted and persisted in to the "closing scene." In this light, and this only, we regard this as an important paper.

We are here presented with "a case" of a young man, a farmer, who had "never had much sickness," well developed and muscular. Nothing wrong in general health could be detected. There had been for several days some tumefication of the integuments of the neck. Appetite good, bowels regular, nervous system unimpaired, &c., &c., &c. He was put upon a course of "alteratives," to-wit: Calomel and Dover's powder; three doses each day. Five days of this treatment did not impair the general functions of the body to a noticeable degree, but there was no improvement of the local condition, and so the medicine was renewed, and the size of the dose so increased as to exhibit the violence of the drug upon the bowels. For a time, not sta-

ted how long, there was apparent improvement in the local condition; but at the end of a week all of the phenomena became suddenly aggravated—the effusion over the surface becoming general. The Doctor endeavored faithfully to "ascertain, if possible, the real seat and nature of the complaint, *as a foundation for a rational plan of treatment*; but was ever disappointed. None of the recognized causes of effusion were to be found "in the present or past history of the patient." "*Therefore*," the Doctor gave *more calomel*, adding quinine. Five days more of this treatment, and "the circulation became involved," which, up to this time, had been normal.

Dr. Sexton was now called in. The symptoms were now, in addition to the general effusion, "fever—pulse one hundred, full and not resisting; *tongue red, inclining to dryness*; secretions of mouth adhesive; thirst and general suffering; urine scanty and high colored; bowels rather torpid, and the skin harsh and dry." *Three weeks of calomel* not having accomplished satisfactory results, it was determined to continue the drug, with sufficient antimony tart. *to effect moderate but constant nausea!*" The antimony did not nauseate, but produced catharsis, which seemed to drain the body for a time, and febrile symptoms subsiding, the doctors were flattered with hope. A week longer, however, found the patient not only not cured, but growing worse; and it was determined "to give cream of tartar a fair trial;" but the Doctor dared not risk it without continuing his favorite calomel. Dr. Sexton came again and "cordially approved" of the plan—with the addition of friction applied to the lower extremities, with salt, vinegar and mustard! From one to two ounces of the cream of tartar were given daily, and also drink of cider holding in solution horse-radish, juniper berries, &c., was allowed. Morphine was administered at night to allay the pain produced by the other drugs taken during the day! Ten days of this treatment (added to all that had gone before), and *the patient chilled!* and the Doctor found him hot with fever, with pain in the right thigh, the surface tender and swollen, with a blush simulating erysipelas. This rapidly extended downward to the ankle, upward to the umbilicus, including genitals, and right abdominal regions. The doctor now concluded that an abscess would form in the thigh, "and that its completion would be salutary."

Dr. Helm saw the case, and expressed an opinion "that the present imperfectly formed erysipelatous action would, in all probability, result in a collection of semi-organized pus, and such an occurrence would be highly beneficial, working a crisis in the case; that it was

one of nature's efforts to form a crisis, to get rid of the large amount of morbid material effused into the cellular tissue." The Doctors agreed in the opinion, "*and were anxious that nature would accomplish it.*" But nature, alas, like Mrs. Dombey, was too far spent to make "the effort," and the Doctors were left in their dilemma, with no alternative but more calomel, with the addition of squills. The inflammatory phenomena began to recede and disappeared; but there followed, or "arose a very curious state of the skin, corresponding to the seat of inflammation." We omit the Doctor's description, but can not omit his conclusion, that it was a varicose state of the capillaries of the integuments." "The kidneys *now* failed to do their duty." "It became evident that effusion was taking place in the abdomen." "*The function of digestion* exhibited signs of interruption." "Flatulency, griping, pains," &c., &c., &c. "Having *satisfactorily* persisted in the last course of treatment, and thoroughly convinced it was effecting no good,"—the Doctor wisely concluded that "Some *other* agencies must be sought for and applied." "*Calomel and squills were suggested, and the patient put upon their use.*"

At this juncture Dr. Arnold was called in, "and after careful consideration of the history of the young man, suggested the use of the inf. digitalis." The patient then took, for two weeks, without intermission, calomel, squills and digitalis. Then, unfortunately, a malignant attack of "diphtheria" complicated the case. The treatment was now changed to meet the new invader, consisting of "muriated tincture of iron and quinine, with free exhibition of chlorate of potash," constitutionally—nitrate of silver, per-sulphate of iron, vinegar, salt, soot, &c., as locals—together with animal broths, wine and brandy.

THE YOUNG MAN DIED!

The "remarks" accompayning this "case" contain nothing novel or suggestive. We forbear comment on the "case," beyond the suggestion, that where "the seat of the disease is not clear"—in other words, where the doctor does not know anything about the morbid phenomena transpiring beyond their mere external and unexpected appearances, it would be prudence, if not wisdom, to adopt such a course of medication, if medicine *must be administered*, as would not of itself prove fatal if continued, ordinarily in a shorter period than this young man survived.

The medical ratiocination in this case seems to have been: "As the

morbid condition is not understood, an alterative is indicated—good may result from any change—calomel is an "alterative," hence calomel."

Symptoms of chemical violence are mistaken for aggravations of an obscure disease, and the drugs are multiplied and increased. The patient dies; and the doctor stands with arms folded, oblivious alike to the cause and the consequence. We do not say that this young man would have recovered, if he had been left to nature while nature was yet competent to make an effort. But we do say, with a burning blush upon our cheeks, that the same course of medication administered to a young man, beginning with a physilogical condition, would, in nine cases out of ten, result in death.

DIGESTIVE ASSIMILATION OF MEDICINES.

This is a paper by Dr. W. J. Elstun of Indianapolis, one of our younger but more promising of the profession. This paper indicates both reading and reflection, and a disposition to penetrate the arcana of medical science—humbly, yet earnestly, carefully measuring every step, and making sure of the ground on which he treads. We give the Doctor's propositions. He says:

("Remembering that a perfect organ consists of itself as a whole, its nerves, its blood vessels, and its glandular or other structures; either or all of which being affected, may change the functions of the organ.)

"I. Medical substances are assimilated by the ultimate tissues of the various organs in the same manner as the nutriment is assimilated from food. The organs are affected by aliments; they are toned up, strengthened, stimulated; or the activity of organs may be depressed by the effects of ordinary kinds of food. So with medicines, but in a more active and greater degree.

"II. Medicinal substances are assimilated by the same selective or physiological affinity, through which each organ selects from the blood the particular food material required for its own support, nourishment or vitality.

"III. Medicinal substances may be either selected by an organ through direct affinity (for the substances), or the substance may be combined so intimately with the nutriment, or aliment, appropriated by an organ, as to be taken with the food material independently of any affinity for the medicinal substance."

Well does Dr. Moffett say in the discussion which followed the reading of this paper: "If the position of the paper be true, we commit a great many errors in the application of remedies."

Now, therein consists the great value of such inquiries. If sincerely made and considered, they open our eyes to this important fact, more important than any other fact relating to medicine, and that is:

that "*we commit a great many errors in the application of remedies*," in our blind empyricism. Remember Dr. Moffett's "case of Anasarca," just before us—remember a large proportion of cases, in which we have prescribed "drugs," and test the "application of the remedy" by what we know and are certain of, respecting the action of the remedy, its specific force, and the condition of the organs to be influenced, and who of us is not ready to confess that his blows have been dealt in doubt and in darkness more frequently than otherwise?

We do not propose to discuss these propositions of Dr. Elstun's in this connection; but we hope that every practitioner into whose hands these "Transactions" may fall, will read the articles and so discuss them in his own mind as to awaken inquiry respecting the power, adaptability and use of drugs; and conduce toward an improved practice. There is room for it in Indiana. We are far in advance of Eberlie to-day. We are moving in the direction of Truth. But our progress is retarded by indolence and timidity, if not by stupidity or stubbornness.

CASE OF DISLOCATION OF FEMUR, REDUCED BY MANIPULATION.

Dr. Sexton of Rushville, presented a case of dislocation of femur, upwards and backwards, reduced by manipulation, describing method and movements. This paper gave rise to considerable discussion, and "Jarvis Adjuster" came in for some criticism—the balance of opinion being in favor of "manipulation" in all cases of dislocation.

Dr. Harvey of Plainfield, introduced the subject of

PUERPERAL CONVULSIONS,

Stimulating an animated discusion, eliciting various opinions respecting cause and treatment, leaving the general impression, however, that but little is known definitely and clearly respecting the disease; and no rule of treatment can be safely adopted, applicable alike to many cases. One regards the condition of pregnancy as essentially *anemic*, another as essentially *plethoric;* and they account for the convulsions upon opposite theories. One thinks the convulsions result from poison incident to perverted elimination during pregnancy; another attributes them to eccentric irritation, &c., &c. Dr. W. F. Harvey condemns the use of chloroform, just now the popular remedy in these cases.

The reports of officers and business committees seem to be satis-

factory. There were, however, no reports from committees on scientific subjects whatever.

The following standing committees were announced for the ensuing year:

On Prize Essays—Drs. Bobbs, Curran, of Huntington, and T. B. Harvey.

On Ethics—Drs. Curran, of Jeffersonville, Morgan, Moffett, Rooker and Weist.

On Arrangements—Drs. J. J. Wright, Todd, Chas. E. Wright, Avery and Gaston, all of Indianapolis.

On Finance—Drs. Athon, Oliver, Harding, Hobbs, and Pugh.

On Publication—Drs. Waterman, W. F. Harvey, Woodburn, and the Secretary and Treasury of the Society.

REPORTS AT THE NEXT MEETING.

The President appointed the following gentlemen to report at the next meeting:

Dr. J. S. Bobbs, of Indianapolis, on Diseases of the Prostate Gland.

Dr. J. H. Woodburn, of Indianapolis, on the Symptoms and Treatment of Incipient Insanity.

Dr. D. Morgan, of Evansville, on Resections.

Dr. G. V. Woolen, of Indianapolis, on Syphilis.

Dr. R. Curran, of Jeffersonville, on any subject he may select.

Dr. W. H. Wishard, of Southport, on the Best Treatment of Scarlatina.

Dr. J. A. Comingor, of Indianapolis, on the Pathognomonic Signs of Nephritis.

Dr. R. A. Curran, of Huntington, on any subject he may choose.

Dr. T. Parvin of Indianapolis, on Medical Education.

Dr. J. S. Athon, of Indianapolis, on Ovarian Diseases.

Dr. G. W. Mears, of Indianapolis, on the Most Effective Remedies for Arresting Uterine Hemorrhage.

Dr. W. Lomax, of Marion, on the Auscultatory Signs of Valvular and Ventricular Diseases of the Heart.

Dr. L. M. Martin, of Clinton county, to take his choice of subject.

Dr. H. V. Passage, of Peru, on the Influence of Malaria in the Production of Diseases.

Dr. P. W. Payne, of Franklin, on Intestinal Digestion.

Dr. W. T. S. Cornet, of Madison, on the Recent Improvements in Medicine.

Dr. M. Sexton, of Rushville, on Tetanus.

Dr. F. J. Vanvorhis, of Stockwell, on Mental Influence in Disease.

The following officers were elected for the ensuing year:

For President—Geo. Sutton, of Aurora.

For Vice-President—W. P. Ayers, of Fort Wayne.

For Secretary—G. V. Woolen, of Indianapolis.

For Assistant Secretary—W. J. Elstun, of Indianapolis.
For Treasurer—W. B. Lyons, of Huntington.
For Librarian—H. F. Barnes, of Indianapolis.

Resolutions of interest to the profession were adopted, as follows:

"*Resolved*, That the Secretary be instructed to issue certificates as delegates to all members in good standing who desire to attend the next meeting of the American Medical Association.

"*Resolved*, That, in the judgment of this Society, the practice of advertising proprietary medicines is fit only for wholly mercenary publications; that it is essentially out of place and degrading for all periodicals designed to promote the public good, and above all for enlightened medical journals.

"*Resolved*, That auxilliary societies may refer any papers they deem worthy of publication, to this Society for its consideration, and publication in the Transactions, if approved.

"*Resolved*, That a committee of three be appointed by the President, for the purpose of taking into consideration the propriety of petitioning the State Legislature to provide by law for the appointment, by the Governor of the State, of a "Board of State Charities," whose duty it shall be to investigate the whole system of public charitable and correctional institutions of the State, and recommend such changes and additional provisions as they may deem necessary, in order to secure to the inmates of these institutions more efficient, humane and hygienic influence, than in many cases now obtain.

"*Resolved*, That this Society will give its influence and support to the Indiana Medical College, and requests the physicians of the State to co-operate in the enterprise to the extent of their ability.

"*Resolved*, That the report of Dr. Bobbs, Chairman of the Committee on the Necessity and Utility of a State Hospital, be adopted as the memorial of the Indiana State Medical Society, and as such be presented to the General Assembly of Indiana at their next meeting, by this Committee; and that every member of the profession be earnestly solicited to labor for the establishment of a State Hospital at Indianapolis, separately or in connection with the present City Hospital."

A TREATISE ON DISEASES OF THE EYE.

BY J. SOELBERG WELLS,

Professor of Ophthalmology in King's College, London, &c., &c. First American Edition, Philadelphia. Henry C. Lea. 1867.

Following close upon the first English edition, we have an American reprint of "Soelberg Wells on Diseases of the Eye," edited by Dr. J. Minis Hays, of Philadelphia.

The long-time complaint that an American, unacquainted with Ger-

man and French medical literature, could not satisfactorily familiarize himself with the advances in Ophthalmology, made during the past fifteen or twenty years, was well-founded, so long as we had only such works as Lawrence, Mackenzie, Dixon, Jones, &c. The Hackley-Roosa translation of Stellwag has recently made us familiar with the doctrines and practice of the eminent oculist of Vienna; and now Wells gives us the result of his training and service in the specialty. Familiar, of course, with the literature of his subject, and having an extensive hospital and private practice, his connection with King's College and the Royal London Ophthalmic Hospital, adds to the weight of his opinions upon questions of pathology and treatment.

The "Treatise" is clearly and concisely written, and deserves the careful consideration of students and general practitioners. In one respect at least, it is preferable to "Stellwag"—its type is uniform, and there are not to be found in it those many pages of fine print that in "Stellwag" make us wish the translators had either given us three volumes, or judiciously edited and condensed.

MEMORANDA OF UNIVERSITY CLINIC AT CHARITY HOSPITAL, NEW ORLEANS, SESSION 1868–9.

We are indebted to Professor Joseph Jones, M. D., for "Memoranda of University Clinic at Charity Hospital, New Orleans, Session 1868–9, by Professors Joseph Jones, Frank Hawthorn, T. G. Richardson, S. M. Bemiss, and Warren Stone; reprinted from the *New Orleans Medical Journal*, October, 1869." In a future No., we hope to have a review of this exceedingly interesting collection—at present, we will give two extracts from Dr. Richardson's contribution to it. The remarks on *Spermatorrhœa* are worth more than half the volumes that have been written on the subject:

"SPERMATORRHŒA.—As usual, quite a large number of cases of this misery-making complaint have applied for relief, but not one in the presence of the class. The shame which such patients almost universally exhibit is of no little value in a pathognomonic point of view.

"There is scarcely a doubt—in my own mind at least—that the complaint has its seat in the moral nature, and is seldom productive of local organic changes, except these which arise from excessive secretion, such as atrophy of the testicle. The treatment should therefore be directed not to a fancied irritation in the pro-

static urethra, but to the correction of the morbid sentiments and imagination of the individual.

"An occasional emission occurring in an otherwise healthy individual under the influence of a lacivious dream—to which even the most virtuous are more or less liable—is strictly physiological, and any attempt to prevent it is as unwise as to endeavor to prevent the return of menstruation in females. Marriage is the only legitimate treatment, and is usually effective in both instances.

"So also the emission produced by the filthy vice of masturbation, is in itself physiological—that is to say, it is the natural response to the genital excitement, although the latter has been produced in an unnatural way. But a secretion, which is purely physiological, may become morbidly abundant by frequent repitition of the exciting cause, and the over-taxed organs by which it is furnished may fall into a state of atrophy, which may be considered pathological.

"But the precise line between what is physiological and what is pathological, is here, as in many other instances, difficult to define. An involuntary emission occurring once in ten days or two weeks might be strictly physiological in a strong, vigorous, highly animalized individual, but in one of an opposite temperament it would deserve to be considered as the result of a morbid state of the nervous system.

"Extreme cases, in which the seminal fluid escapes without any erection of the penis, whenever the patient goes to stool, and without any special sensation, pleasurable or otherwise, are frequently described in books, but seldom occur in practice. It is true that patients often make such statements themselves, and honestly believe them, but upon a strict surveillance, such as requiring the patient to go to stool in an adjacent room, and providing him with a suitable vessel to catch the seminal discharge, it will be found that such instances are rare.

"*Treatment*—The seat of the difficulty in so-called spermatorrhœa being the brain, efforts at amelioration must be directed to the latter organ. One of the first things to be done is to persuade or assure the patient that his case is entirely curable; that he is not impotent as he imagines; and that involuntary emissions are not evidence of a loss of vitality, but, in many instances, result from a superabundance of animal life.

"2d. The next, and a very long step towards relief, is a strict watch and control over the "thoughts and imaginations of the heart." This is not to be gained at once, but only after persistent efforts, and may be much aided by suitable mental occupation, avoidance of stimulants and other means of dissipation, regular habits, the society of ladies, etc., etc.

"3d. The administration of such remedies as are known to exert a calmative influence upon the venereal desires. Of these only two have proved of any avail in my hands, namely—the bromide of ammonium and the bromide of potassium. Either of these may be employed in doses of a drachm, dissolved in half an ounce of camphor water, on going to bed.

"4th. Applications to the prostatic portion of the urethra are sometimes of very great service, but I am almost quite convinced that their effect is wholly moral. The simple introduction of a large sized bougie or catheter, a No. ten or twelve, will be often followed by marked improvement, especially if the surgeon

is successful in impressing its great remedial value upon the mind of the patient. If this operation has been already performed without any good effect, the *porte caustique* or, what is still better, the catheter syringe, containing a weak solution of nitrate of silver, may be resorted to, the precaution being taken to obtain the confidence of the patient in the result. Either of these means may be repeated in course of a few days if the patient's faith has not been too much shaken.

"5th. But after all, the grand remedy for this distressing complaint is matrimony; and in an experience of more than twenty years, I have yet to see a case that has not been entirely cured when the remedy was applied. The great difficulty is to persuade the unfortunate sufferer of his ability to perform marital duties. He is like a youth upon a brink of a stream in which his fellows are swimming and disporting themselves, and calling to him to leap in and show himself a man. He hears the challege, he feels the reproach, and he sees the ease with which the necessary movements are performed; but, distrustful of himself, he shrinks back and hesitates to make the venture. As in this case, so in the other, has it often seemed to me that if some one could but come unawares behind the trembling doubter and push him in, he might flounder for awhile and make many ineffectual attempts, but with proper encouragement he would ere long, and suddenly as though by magic, obtain the requisite self-control, and all difficulty at once disappear."

"VESICAL OR URINARY STAMMERING IN A FEMALE, WITH RETENTION OF URINE; CURED BY OPERATION.—In an article entitled "Stammering in other Organs besides the Tongue," Mr. Paget, in a recent number of the *British Medical Journal*,* calls attention to a not unfrequent difficulty, whose essential nature consists in a want of harmony between the ejaculatory or extrusor muscle of the bladder and the sphincter muscle of the same. He describes it as occurring only in the male, and as manifesting itself ordinarily in an inability to empty the bladder, except under very peculiar circumstances, often of a moral character, in which alone the patient has found by experience that the sphincter of the organ will yield to the contraction of the muscular coat. This condition has been long familiar to surgeons, but no one has heretofore conferred upon it a definite name, hence its non-appearance in systematic treatises. But now that it is publicly and satisfactorily christened, it will doubtless attract more attention. Indeed, I have been only awaiting such an introduction to present the following account of a case, which it will be seen, does not belong to the Clinical Memoranda of the past season, and has been heretofore kept out of print simply for want of a name.

"At one time I called the affection Urethrismus, in consequence of some points of likeness which it presented to that condition of the vagina denominated by Dr. Marion Sims, Vaginismus, but this did not satisfy me wholly. Again, I called it paresis of the bladder, but as the defective power in the muscular coat was not positive but only relative, this name was rejected. I submitted the question once to my distinguished friend and former preceptor, Prof. S. D. Gross, M, D., but he denied the individuality of the affection, and expressed the opinion that the case was one of hysterical retention. I also submitted it to the New Orleans Medical Association, but did not obtain the assistance that I required. Whether I have

* The article referred to is copied into the *New Orleans Medical Journal* for January, 1869.

done right in claiming for it a place under Mr. Paget's denomination, I must leave others to judge. The principal object I have in view in bringing it forward is to illustrate the difficulties which are not unfrequently encountered in making a correct diagnosis.

"*History*—The patient was an unmarried lady, aged eighteen, sent to me from an adjoining State by her family physician, with the following history:

"'I saw Miss G. for the first time in October, 1861. She was then laboring under fever, pain in the region of the left kidney extending down the corresponding thigh, great irritability of the bladder, and sympathetic disturbance of the digestive organs. I was told that two months previously she had received an injury of the back by the upsetting of a carriage, and had the symptoms just enumerated, but was soon relieved of all except the vesical irritability. The case was regarded as one of inflammation of the left kidney, with sympathetic disturbance of the bladder. The urine was very variable as to quantity and quality, but was generally loaded with mucus, very offensive and acid. With the decline of the fever there was no improvement in the condition of the bladder, which continued irritable without the power of emptying itself, the constant use of the catheter being required. This state of things continued until the following April, about five months, when, under the use of tonics, antispasmodics, cold bath, etc., her general health improved, and she was able to urinate without the use of the catheter.

"'From this time until November, 1865, a period of more than three years, she enjoyed tolerable good health, complaining, however, more or less, at different times, of pain in the left side and thigh, and uneasiness in the region of the bladder, and difficulty in urinating. About the time last mentioned she again lost the power to micturate, and as I failed to afford her any relief after a few weeks trial, I sent her to New Orleans.

"'During all my acquaintance with the patient, her menstruation has been regular and healthy. She has frequently suffered from intermittent fever, rheumatic pains, and croupy colds; and in view of her strong family tendency to rheumatism, I have been inclined to believe that her urinary troubles arose from this source. The urethra has all along been tender, and the introduction of the catheter was frequently attended with great suffering.'"

"Miss G. came under my care in December, 1865. Her general health was much impaired by protracted suffering and frequent attacks of intermittent fever; and in consequence of weakness and pain in her left hip and thigh, she was unable to walk. She was of a sanguineo-nervous temperament, but had become accustomed to confinement, and manifested no great desire to leave her couch. The urethra was sensitive, and the introduction of the catheter attended with considerable pain. The urine generally presented a healthy appearance, but was sometimes mixed with mucus, and when allowed to accumulate in the bladder to the amount of more than eight or ten ounces, produced great distress. Judging from the stream of water as it flowed from the catheter, the expulsive power of the bladder seemed to be somewhat diminished, but, as may be well understood, this was a very difficult point to determine. As the secretion of urine was not very abundant, the use of the catheter three times a day sufficed to keep her comfortable; and

it may be well to mention that she had never employed the instrument herself and persistently refused to learn how to introduce it.

"The determining cause of the retention not being apparent, but suspecting it to be hysterical, I directed my efforts immediately to the improvement of her general condition, and by means of tonics and generous diet soon succeeded in building up her strength. In the meantime, I gently cauterized the urethra from time to time, and applied extract of belladonna to the vaginal surface of the canal, with the effect of diminishing the sensitiveness of the lining membrane, but without producing any impression upon the real trouble. I now made a thorough exploration of the interior of the bladder, but discovered nothing beyond an unnatural degree of sensitiveness of the anterior wall. Suspecting that there might possibly be a circumscribed chronic inflammation of the organ in this locality, I injected a solution of nitrate of silver, ten and twenty grains to the ounce of water, directing the syringe toward the anterior wall. This was repeated several times, gave rise to no great suffering, but accomplished no appreciable good.

"Having now thoroughly satisfied myself that no organic disease existed, I recurred to my original impression, that the case was one of hysteria, and treated it accordingly, but except that now and then during the defecation there would be a sudden flow and an equally sudden stoppage of the urine, no improvement followed. At the end of five weeks she returned home, her general health almost entirely restored, but still obliged to have the catheter introduced three times a day.

"After the lapse of three months, say, in April, 1866, she came to me again, her general health broken as before, and the local affection wholly unchanged. I put her upon bark and iron, ordered a liberal diet, and she again rapidly improved. I now watched her more closely than ever, interrogated her in regard to every influence, moral and physical, that could by possibility give rise to the state of things that existed, but utterly failed to obtain the slightest clue. I tried systematically to make a diagnosis by exclusion; summoned the several affections in the long catalogue of known causes of retention and brought them one by one to trial, but with no better success. I called in the aid of my distinguished colleague, Professor Stone, whose skill in diagnosis is not exceeded by that of any one I ever knew, but although he fully appreciated the existing condition, he could not discover any satisfactory cause.

"As the case now stood, the whole difficulty seemed to consist in a want of proper balance between the sphincter and the muscular coat of the bladder. Whether there was an excessive development of power in the sphincter, or a diminution in that of the muscular tunic, I could not positively determine, but it was quite evident that the organ could empty itself quite thoroughly if the excessive contraction of the sphincter was overcome. To this end, therefore, I addressed my efforts, and began by dilating the urethra by means of graduated bougies. This was continued only a few days, when, in consequence of the apparent suffering of the patient and the resistance which she made, I was compelled to desist. But one other resource presented itself, which was to incise the urethra including the neck of the bladder. This I resolved upon at once, and the next day, the patient being under the influence of chloroform, I introduced a grooved director, and with a probe-pointed bistoury divided the whole thickness of the upper or anterior wall of the

urethra from the neck of the bladder to the external meatus. A large-sized catheter was then introduced, and worn for three or four days, when the patient found, to her great joy, that she could empty her bladder without the instrument, and therefore laid it aside. At first considerable effort was required and the urine flowed off slowly, but there was an evident improvement day by day. Unfortunately, in less than a week from the time of the operation, she was seized with an atrocious intermittent fever, which resisted treatment for not less than twenty or twenty-five days, when, upon being removed to her home, she recovered quite rapidly. During this time she continued to urinate, although with some effort, but with the subsidence of the fever, the bladder recovered its tone and no farther difficulty was experienced. It has now been nearly three years since the performance of the operation, and up to last accounts, only a few months since, there had been no relapse.

"*Remarks.*—What was the nature of this case originally I am unable to determine, but from the history it seems probable that it was a peri-nephritis, which, although not a common affection, and, so far as I am aware, not mentioned in systematic works on medicine, is occasionally met with in practice—a case being at the present time under my advice. However this may be, there evidently existed at a subsequent period, an irritability of the neck of the bladder with spasmodic contraction of the same. This continuing for some time seems to have resulted in an unnatural development, a slight hytertrophy, of the sphincter muscle. The irritability having passed off, the neck of the bladder was left in this condition, while on the other hand, the organ having been for some time daily emptied by means of a catheter, had lost somewhat of its normal tonicity. The muscular tunic was therefore unable to overcome the increased power of the sphincter, except occasionally, when the latter was off its guard, as during defecation, it would admit the passage of a stream of urine for an instant or more. Such at least was my reasoning and conclusion in the matter, and the result of the operation in a measure confirms the diagnosis."

HYGIENE, IN ITS RELATIONS TO THERAPEUSIS—A PAPER READ BEFORE THE NEW YORK MEDICAL JOURNAL ASSOCIATION.

BY ALFRED CARROLL, M. D.,

Member of the National Institute of Letters and Sciences, Corresponding Member of the Gynæcological Society of Boston, etc.

Dr. Carroll has produced here a suggestive little work, which all the young members of the profession may read with advantage, for although, as he remarks, the practising physician is seldom called for until the period of prevention is past and active disease is before him, still in the management of disease, a knowledge of many of the principles of hygiene is essential to success. In the limits of a single

address, like the one before us, all that the author could attempt was simply to indicate the points to be kept in view by the practitioner, without going into details in regard to any. If he has pressed the claims of hygiene with more ardor than physicians generally would approve, it must be remembered that this is the error into which we are prone to run when one idea has possession of the mind. The prejudice of the tanner in favor of leather as the best material for fortifying his town, is a very natural one. Paracelsus appears to Dr. Carroll as the "prince of quacks," because he underrated the remedial excellence of the *vis medicatrix naturæ*, and insisted on antagonizing disease with active drugs. Now, according to our views, both drugs and the curative powers of nature are valuable in medical practice. Neither is to be dispensed with, nor either one more than the other. Paracelsus insisted too much on active medication. Dr. Carroll, perhaps, would rely too much on hygiene. Medicines, unquestionably may be abused; but is there not some danger of estimating their power too low? By all means let us accomplish all that can be done by the curative energies that reside in all living bodies, but let us, at the same time, avoid the error of bringing our materia medica into discredit. While regarding "nature as the great active verb, and drugs, as at best, auxiliaries, only aiding, not giving the full meaning," we must not forget that the auxiliaries are as essential as the principals, and that there are cases in which the active power is sometimes exerted in favor of disease rather than of restoration. It is by no means true of all disorders, that their tendency is to a healthy termination.

Dr. Carroll divides diseases into three classes: 1. Those which may be treated by drugs exclusively, unaided by hygiene. These, he thinks, are few, and are cases of poisoning, of mechanical obstruction, &c. 2. Those requiring drugs and hygienic agents combined, neither of themselves being sufficient. To this class he refers most diseases. And, 3. Those which may be treated to hygienic measures alone. This is a large class, and embraces not the self-limiting diseases, but nearly all functional disorders, and the complaints arising from deranged nutrition.

Practical medicine has derived signal aid from the discoveries of modern physiologists concerning the process of assimilation. One part of the body may be starved, while the system generally is amply nourished—some element of food being absent which is necessary to its nutrition. Muscle may suffer inanition, while the fatty parts of the body receive sufficient aliment. The brain is starved if phosphorus is

withheld, and the blood is impoverished if the necessary salts are not supplied, though the muscles are furnished with the requisite nitrogen. Disease involves, in most cases, either "defective supply or assimilation, or else excessive waste of one or more of the essential elements" of the system. The indication of cure is either to increase the supply or to diminish the waste. Upon our ability to fulfill it depends largely our success as practitioners of medicine. An indication of the highest value, in such cases, is not unfrequently the longing of the patient for some article of diet. This, as Dr. Carroll justly remarks, is often "the still small voice of some suffering tissue, urging its wants above those of its fellows." This is a principle never to be overlooked in practice.

The opposite mode of dietic treatment has not been practiced with the same success, though there are diseases in which its necessity is still insisted upon. Regimen is held to be of the utmost importance in glycosuria. It may be important in other morbid conditions, but the process is too nearly akin to the irrational *cura famis* of the ancients ever to obtain much footing with the physician again. The "starvation diet" of Galen will never be revived, any more than the restriction of dropsical patients to solid food. But in rheumatism, where lactic acid abounds in the system, it may be proper to avoid vegetables which are converted into that acid by fermentation.

The suggestions of our author on the subject of ventilation and exercise are judicious, but he seems to us to be in more dread of overdoing the matter in respect to exercise than there is occasion for. Some young men, doubtless, carry their gymnastic feats too far. Disease of the heart may result from violent exertion. But thousands die of disease resulting from inaction, where one dies from overexertion. The thing to be insisted upon, especially with the female native of society, is exercise. This is the great want of most females. Insufficient exercise is the root of most of their ailments. We hail roller-skating as an invention which promises them incalculable blessings. It is the greatest benefaction, in our judgment, conferred upon the sex in modern times. A more robust race of women, we have no doubt, will appear in the next generation in consequence of the introduction of this pleasing exercise.

Dr. Carroll is no friend to darkened chambers for the sick. Light is essential to development—to health; and recovery is accelerated by its influence. Sunlight, he insists, should be freely admitted into the rooms of the sick and convalescent, except where there is disease of

the eyes or brain. Clorosis, scrofula, in a word, all affections characterized by deficiency of vital power, demand light

The correctness of all this will not be questioned, but we are not prepared to accept the principle upon which the practice is based. We doubt whether it is owing to iron in the sun's rays that the light of the sun is so necessary to health, and so instrumental often in its recovery. Is there any "vapor of iron" in the solar spectrum? What are the constituents of the sun? is another question. That body may consist largely of iron, but the vaporization of that metal, and its transmission in the solar rays to the earth, through the cold space which they traverse, may be well questioned. It has been affirmed that light, if it possessed the billionth part of a grain of metal inertia, would be easily detected by delicate balances. The vapor of iron could hardly impinge upon them without giving evidence of its presence. We doubt, therefore, the truth of the remark of Dr. Forbes Winslow, "that the iron vapor detected in the sun's beams" is the agent which effects such changes in the color of plants and animals brought out of darkness into the light of the sun. We have no faith in the hypothesis that iron thus makes its way into the general circulation.

But we have not space or time for the pursuit of such speculations. The little work before us is practical in its character, and we recommend it to our readers as one which points out a profitable line of study.

MISCELLANY.

ON THE PATHOGENESIS AND TREATMENT OF STERILITY IN THE HUMAN FEMALE.

BY WM. C. ROBERTS, M. D., OF NEW YORK.

In May last, I read before the New York Academy of Medicine a paper on the causes of sterility in either sex, based mainly upon physiological relations.

Subsequently, Dr. Kammerer read a paper on the pathological conditions causing sterility, based upon a review of four hundred and eight cases, two hundred and one of which had occurred in his own, and two hundred and seven in clinical practice (*Trans. N. Y. Ac. of*

Med., vol. III, p. 7). These cases, which embraced the numerous descents, deviations, and diseases to which the uterus and its appendages are liable, were treated with more or less success, according to the usual methods; the proportion of success, so far as the removal of the sterility was concerned, being about one-third of the cases treated. One case in particular, however, deserves to be mentioned (No. twelve); that of a woman whose inner uterine orifice was dilated at one session just after menstruation, and who conceived, after a barrenness of four years, immediately after; whether *propter hoc*, can not perhaps be exactly determined. The physiological causes of sterility are not alluded to in Dr. K.'s paper, unless indeed the dilatations of the uterine orifices were intended to allow of an easier admission of the spermatozoa to the cavity of the uterus; and the intra-uterine injections employed to remove the noxiousness of the secretions.

In the paper which I read before the Academy, I showed:

1. That the generative apparatus of both sexes must be in a healthy condition. In the male, the penis must be capable of erection and ejaculation, and of emitting healthy semen.

In the female, the uterus and its appendages must exist, and be perfect; the ovaries contain fecundible ova; the tubes be pervious, the lining membrane of the cavity and neck healthy, and the os uteri externum and internum, hymen and vagina pervious.

2. That it was by no means necessary that there should exist, at the moment of coitus, any orgasm on the part of the female, or a complete introition of the male organ *intra vaginum;* a very slight peri-vulvular congressus depositing the semen upon the vulva, sufficing for impregnation.

3. The ripe graafian vesicle, secreted either just before, during, or after menstruation, and even, though not often, during the intermenstrual period, must, in some part of its course into the uterus, come into direct and immediate contact with one or more living spermatozoa, in order to be fecundated.

4. Semen contains, as its most important constituent, animalcules, spermatic cells, zoospermes, spermazotoa, or zoids, as they are variously called according to the idea which is formed of their nature. In the field of the microscope, they are seen to move about with varying activity, and whether or not they be endowed with true vitality, life, or be or be not organized animals, which last seems generally now to be believed, their volition is seemingly directed by instinct, towards, and in spite of all obstacles, the ovum which they are to impregnate. In a natural temperature, they live for forty-eight or seventy-two hours; are found living even in the cadaver, after twenty-four hours, and in bitches have been seen to move seven or eight days after copulation. Acids, urine, electricity, strychnia, narcotics, and certain vagino-uterine secretions destroy them; but of this last hereafter. Probably they are reproduced; they are certainly nourished: strange creatures, which, by union with an ovule, are capable of communicating to it, not only the physical resemblance, but the temperament and constitution of the parent. They appear in the semen at puberty; are found afterwards at all periods of life; and in men of

advanced age (eighty-two) have been found as numerous as in the adult.

4. The material contact of the semen and the ovule, both animated by their vitality, and perfect in themselves, is the essential condition of fecundation, and the intimate fusion of these two elements is alone capable of giving birth to the new being. *If any obstacle* impedes the immediate contact of the two germs, conception on the part of the female is impossible. Upon an accurate knowledge in regard to these causes depends the successful treatment or cure of sterility.

5. The *aura seminalis* alone is insufficient. Filtered semen is equally so. No part of the semen but the animalcules suffices.

6. The fecundating power of the animalcules seems connected with their vitality, for it diminishes, and is completely extinguished with their movements. Semen is infecundible without living spermatozoa; and it is certain, however they enter it, that they get within the vitelline membrane of the ovule, and have been seen in immediate contact with the yolk, when they part company and disappear by liquefaction.

7. The merest drop of a high dilution of the semen of a frog, directly applied to the egg of the female, suffices to fecundate; but more than one spermatozoid is required. Two hundred and fifty-five, in the experiments of Prevost and Dumas, impregnated sixty eggs out of three hundred.

8. Neither the movements of the vibratory cilia, nor an aspiratory spasm, nor capillarity, can account for the progression of the spermatozoa. It is to their own motility, and to their power of overcoming obstacles, that this is wholly due. The passage of the spermatozoa from the uterus into the tubes occupies eight to ten hours; arrived at the free extremity of the tube, they reach to, or upon the ovary, by means of the fimbriæ which unite the *pavillon* to that organ. If there they meet with a mature ovule, fecundation may result. Twenty or thirty minutes are required to enable them to enter the uterus. The tubes take from two to six days to transmit the detached ovule to the uterus, where, if previously fecundated, or when fecundated, it stops and is developed, embedded in decidua. If not, it escapes with the decidua in ten or twelve days, or at the end of menstruation. The period most favorable for impregnation, then, is immediately before, or during, or soon after menstruation ceases. The flow of menstrual blood does not impede, but rather accelerates the progress of the spermatozoa. But how are we to account for fecundation during inter-menstrual periods, unless we suppose that coition hastens the development and detachment of a mature ovum? Fecundation and coition are separated at least for the time which is required for the spermatozoa to pass through the uterus and tubes, and reveals itself by no special signs. A single act of coitus may suffice for impregnation, of which many instances are known. If, now, we attempt to assign the causes of infecundity from a physiological point of view, we shall find that men are infecunds because they are impotent or aspermatic, *i. e.*, incapable of erection or ejaculation; and even when capable of emission, are aspermatozoic, that is, secrete a semen

or fluid which contains either no or no living spermatozoa. Eunuchs possess for awhile an incomplete power of erection and an ejaculation which must be aspermatozoic, which for the lack of the stimulus of venereal appetite, they gradually lose. Impotence is not necessarily associated with either aspermatism or aspermatozoa. It is sometimes purely nervous, and when cured, the power of fecundation may exist or return. It occurs among the newly married and in the old. But very old men are not necessarily infecund, as we have seen, and the case of old Parr is in point. The only way in which aspermatozoa can be positively ascertained, is by submitting the semen to the microscope soon after its emission.

But it is chiefly with infecundity in the female that we are concerned, and allowing that there is no fault in the generative faculty of the male, it behooves us to inquire into its causes. Admitting that no physical defect of organism occurs in her, and that, as we so often see, she is robust, healthy, menstruates more or less perfectly, and is free from organic uterine malformation or disease, why is it that the spermatozoa do not reach and fecundate her ova? Ill-health may, I think, possibly prevent this from occurring, by impairing the fecundity of the ova, or faults in the ovary or ova may have a similar effect. Dysmenorrhœa, though often associated with infecundity, does not necessarily cause it, and the reason of the association is probably purely a mechanical one. The cause which prevents the easy escape of the menses, and renders it painful, may equally prevent the access of spermatozoa to the uterus, tubes, and ovaria. To these we shall presently advert.

But these are not the only causes for infecundity on the part of the woman. There is another and a principal one, to which passing allusion may be found in authors, but it has by no one been so markedly assigned and scientifically considered as by Donné, and our countryman, Dr. Sims, to whom Surgery and Science are alike both deeply indebted.

I allude to the *destruction of the spermatozoa* by the vitiation or peculiar constitution of the vagino-uterine secretions, by which fecundation is rendered impossible.

In Donné's "*Cours de Microscopie*," &c., the work of a zealous, cautious, and candid observer, we find much that is interesting and important on this subject. Acetic acid instantly kills the spermatozoa, but leaves them perfectly intact for years. Blood and milk exert upon them no deleterious influence, saliva kills them rapidly, urine instantly. Pus and the *muco-purulent matter of uterine leucorrhœa* does *not* affect them by its contact. They live perfectly well in the mucus secreted by the vagina in a normal state, which is slightly acid; but, and this observation is most important, the acidity of the mucus secreted by the vagina becomes such in some circumstances, as when there is congestion, acute irritation, or inflammation of this organ, that the zoospermes *seem unable* to live in it more than a few moments. He has even seen them, particularly, give no sign of life, in less than two minutes, in the vaginal mucus of a woman of twenty-two, affected with

an extremely acid discharge. "Can this, then," Donné says, "be considered as the cause of sterility in some women?"

Vaginal mucus is white, opaque, creamy, not viscid, and always *acid*. *Uterine* mucus, on the contrary, is transparent, stringy, tenacious, like albumen, sometimes clouded with purulent matter, but always *alkaline*, turning litmus paper blue, whilst the mucus of the vagina always reddens it.

The action of this (uterine mucus on the animalcules, varies according to circumstances. Generally the spermatozoa brought into contact with uterine mucus do not suffer. But *certain kinds of uterine mucus* kill the animalcules with the greatest rapidity. Nor is this mucus distinguished from others by any appreciable characteristic, microscopic or otherwise, being either pure and transparent or opaque. An excess of alkali seems to be the only probable cause of its deleteriousness, litmus paper becoming instantaneously intensely blue.

No possible means of ascertaining the fact seems to exist, except that of submitting the spermatozoa to the action of uterine mucus of various kinds or qualities. "Do not," says Donné, "the facts related lead to the belief that alterations of the vaginal and uterine secretions play an important part in causing sterility, by killing the fecundating liquid; and is not some light thrown on its hitherto obscure causes, and a suggestion made of a rational and efficacious remedy?"

It is but doing simple justice to our countryman, Dr. J. M. Sims, to say that he is the first among us to revive those ideas, and give to them a practical application (On Mic. in Diag. and Treat of Sterility, *N. Y. Med. Jour.*, Jan., 1869). In this paper he lays it down: 1st, we must have spermatozoa in the semen; 2d, they must enter the utero-cervical canal; 3d, the state of the secretions must be favorable to their vitality. In the absence of the second of these conditions only is any operation to be thought of. How are these facts to be ascertained? By examining the condition of the vaginal and uterine secretions after coition. A little of each is to be withdrawn with a syringe, and placed under the microscope; and to do this accurately, the fluid must be retained for some time after in the vagina. He thinks the best period for making the investigation is the fifth or sixth day after the menstrual flow. Dr. Sims, in one respect, differs from Donné. He says, "the vaginal (normal) mucus, by its natural acidity, kills very quickly *every* spermatozoon, and seems to be a perfect poison for the superabundant ones." If this were true, fecundation would very seldom, almost never occur. Donné, more correctly, I think, says its slight natural acidity is not noxious to the spermatic animalcules, *but is only so when excessive*. The cervical mucus is to be carefully separated and distinguished from the vaginal, and withdrawn with a syringe for examination. Dr. S. thinks it possible to obtain a second specimen from higher up the canal, or even from within the os internum, which I should think would be difficult, and finds in the one sometimes living, in the other, dead spermatozoa. Donné does not carry his researches so far. He is content to take the mucus which hangs out of the os externum, or can be withdrawn from within the neck. Dr. Sims thinks that if the cervical secretion contain little

opaque spots of milky whiteness, and when it is very thick and albumino-purulent (as also when perfectly clear), it is poisonous. Donné's observations *generally* (p. 293) oppose this assertion:—*A certain quality of mucus necessary to produce this effect*, which can not be told from its natural or microscopic appearances: *too alkaline* (?) if uterine: *too acid* if vaginal. Be all that as it may, there is a peculiar condition of either of these secretions, whatever it be, which does kill the spermatozoa, and occasion sterility; and the great point is to remedy it. Dr. Sims justly says, it is not every woman who has dysmenorrhœa (and I add, or leucorrhœa), who is sterile, nor every man who may be vigorous and enjoy good health, who is capable of procreation. He has known half-a-dozen husbands—in one place he says many—whose semen had no spermatozoa. Dr. Sims' paper proves, and he frankly acknowledges, that the operation of incising the cervix is seldom necessary or proper, often quite uselessly performed; and he no longer thinks that the most common obstacle to conception is a more or less contracted utero-cervical canal (p. 24, lib. cit.) I quite agree with Dr. S. that the necessary investigations into this interesting and practical subject, by which alone a true and scientfic knowledge and basis of action can be obtained, involve neither indecency nor sacrifice of self-respect on the part of either surgeon or patient.

If, then, it should be asked, What necessity, then, exists for dilating the two orifices and neck of the uterus, we answer, 1st, because of its allowing of a more easy escape for the menstrual blood; and, 2d, because it allows an easier access to the spermatozoa. Although neither an aggravated dysmenorrhœa, nor a very contracted os uteri, internum or externum, are necessarily fatal to, they are unfavorable to impregnation, and should, as a part of the treatment, be remedied. I can not, for my own part, imagine that flexions, however great, of a part so short and so flexible as the neck of the uterus, which are so readily restored by the introduction of a long and suitably-sized speculum, and which, morever, I so seldom encounter, can offer any serious impediments to fecundation. But the contractions of the orifices are real and unmistakable, often obstinate, and contribute, I doubt not, to this result; but even then very partially, for, as Dr. Sims justly observes, cases are recorded where conception occurred when the os barely admitted a small-sized probe, and that spermatozoa now and then pass along the Fallopian tubes, which ordinarily admit a bristle. It is, then, to the state of the vaginal and uterine secretions, the semen being healthy, that we must look for the great cause of infecundity in the female. The remarks of Joulin on this subject are worthy of repetition:—"The contraction which has its seat at the internal orifice of the uterine neck is one *of the most common causes of infecundity;* and particularly among multiparæ. But women who have borne children sometimes exhibit this disposition, which oftenest coincides with an extreme narrowness of the neck of the womb and imbrication of the folds of the *arbor vitæ*. This cause of sterility, which is usually accompanied with the phenomena of dysmenorrhœa, was until lately unknown.

"The treatment consists in dilating the constricted region. I pre-

fer a cylinder of prepared sponge, small to begin with. I have obtained two successes with this proceeding;" Becquerel four, and Meisteler seven, out of nine; McIntosh twenty-four out of twenty-seven, eleven of whom bore children; and Corty several followed by conception (four hundred and ten). This certainly shows that, although closure of the uterine orifices does not necessarily prevent, dilatation exerts a considerable influence over the subsequent fecundity of the patient.

"The first sponge," says Joulin, and Corty repeats him, "does not pass through the internal orifice; each one penetrates a little further than the first, and simply dilates the neck; but later, the inner orifice becomes permeable. The sponge applied swells immediately, and the woman can attend to her business without feeling the least inconvenience." This is only partially true. It sometimes produces pain and irritation within twenty-four hours, and requires removal. I once saw frightful results from the thrusting of a sponge-tent into the uterine cavity. Corty says an interval of two or three days should elapse between each introduction. Joulin says, if not removed, generally about the third day a discharge takes place of a clear, abundant, *fetid* fluid, which disappears on its removal. "I renew," he says, "these applications twice a month—ten days before and after menstruation. When the dilatation is sufficient, I suspend their introduction, and recommence if the stricture tends to reappear, for often the amelioration is only temporary. It supplants the incision, which, unless the sponge-tents are used simultaneously, cicatrizes and contracts, leaving things as they were. It is simpler and less dangerous, and women, at least, if they have not patience to follow out the plan, *are often relieved of their dismenorrhœa.*" "Uterine deviations," says Joulin, "are not causes of sterility, for the semen need only to be deposited in the vaginal cavity, not projected into the os. Unless, then, when very intense, and the angle of flexture very great, displacements of the uterus do not offer any serious obstacles to conception." Tents of sea-tangle (*Laminario digitata*) are preferable to prepared sponge, because they can be longer retained without producing irritation and fetid discharge, and do not rot and break; but I do not find them as easy of introduction. Corty repudiates them.

Other means of dilatation are employed. Dr. McIntosh used flexible metallic bougies. Bennet prefers wax or gum-elastic ones. Simpson uses metallic stems of graduated sizes left in the uterus for various lengths of time, and sometimes changed daily for days together, or left in permanently. With the gum-elastic French bougie, fine or olive-pointed, varying in diameter above the point (bougie à ventre), all my own successes have been attained. Generally, the point reaches to and strikes firmly against the os internum, and irritates it spasmodically. After a time, if not too large, with a little management, it enters the stricture and passes up to the fundus with little or no pain. The next time, again, perhaps, nothing will pass, and so on, until sufficient dilatation is effected to admit a larger size.

(To be continued in the November Number.)

Name.	Age.	Nativity.	Of what College a literary graduate.	Courses of Lectures attended, Schools and date.	Of what College a graduate.	Term of Practice.	Of wh't Medical Society a Member.	Post Office Address	Remarks.
Bates James H	29	United States	None	One c'rse Rush Med. Coll. in 1867 and 8	None	1 year	Grant Co	Jonesboro	
Charles Henry	46	Wayne co., Ind.	None	None	None	8 years	Grant Co. & Ind. State	Fairm'nt	Read with Dr. R. G. Brandon, New Garden, Ind., and commenced practice in Grant co.
Corey Lavanner	34	Rush co., Ind.	None	One in Chicago Med. 1864 and 5	None	12 years	Grant Co. & Ind. State	Warren	Studied with Dr. D. Palmer, Warren, commenced practice in present location, and has continued without change.
Egbert George	46	Preble co., O.	None	Three c'rses in Rush Med. College, Chicago	Rush Med	8 years	Grant Co. & Ind. State	Jalapa	A pupil of D. W. Taylor, M. D., in Jalapa.
Friermood E. K	24	U. S. A.	None	Rush Med. two courses, 1867 and 8 and 1868 and 9	Rush, 1869	5 months	None	N. Grove	A pupil of A. D. Kimball, M. D., Xenia, Ind.
Good Jonas	37	Perry co., O.	None	One in Rush, 1868 and 9—one in Chicago, 1867 and 8	Chicago, 1868	11 years	Grant Co	Warren	A pupil of Dr. D. Palmer, Warren, practiced in Hartford City one year, and then removed to Warren, where he has continued in gen'l practice to the present.
Gorrell Cyrus V	26	Ohio	None		None			Fairm'nt	
Henley Alphens	32	North Carolina	None	Starling	Starling	4 years	Grant Co	Fairm'nt	Pupil of D. S. Elliott, M. D., of Fairmount.
Hess Luther Pleasant	27	Grant co., Ind.	None	One in Cin. College Med. and Surgery, 1858 and 9, and pt. of course in 1864, Iowa University in 1859 and 60	None	10 years	Grant Co. & Ind. State	Marion	Pupil of Dr. L. W. Hess, Cadiz, Ind., has practiced in Xenia, Jalapa, and Marion.
Horne Samuel S	58	Scotland	Univ'r., Edinburgh	One c'rse Coll. Surg. Edinburgh, one in University, Louisville, Ky	None	Occasi'nally 12 y'rs, regularly 22 ys	Grant Co. & Ind. State	Jonesboro	
Horne Samuel S., Jr	24	United States	Wabash Col	Med. Coll. Ohio 1867 and 8 and 9	Med. Coll. Ohio, 1869	3 months	Grant Co	Jonesboro	Pupil of Dr. S. S. Howe, Jonesboro', Ind.

Irwin Albert Clark	26	Pittsburg, Carroll co., Ind.	None	One course Cin. Coll. Med. and Surgery, 1864 and 5	None	4 years	Grant Co. & Ind. State	Jalapa	
Jackson L. M	47	North Carolina	None	None	None	17 years	Grant Co.	Upland	Pupil of C. A. Otwell, M. D., and E. Potter, M. D., Greenville, O., practiced in Darke county, O., and Randolph and Grant, Ind.
Kilander Wm. Jefferson	30		None	One in Med. Depart. University Michigan, 1868 and 9	None	2 years		Marion	Pupil of Dr. D. Palmer, Warren, Ind.
Kimball Abner D	30		None	Three in Rush Med. 1858–'9–'60–'1–'2–'3, and in Bellevue Hos. Med. Coll. in 1868–'9	Rush '61; Bellevue '69	16 years	Grant Co.	Xenia	Pupil of Dr. M. D. Frazer, Xenia, Ind.
Kimball Thomas C	26		None	Rush, 1866, 7 and 8	Rush, 1868	1½ years	Grant Co.	Xenia	Pupil of A. D. Kimball, M. D., Xenia, Ind.
Lafollet T. J	33	Warren co., O	None	None	None	8 years	None	Warren	
Lomax Wm	56	Guilford co. N. C	None	Ohio Med. 1836–'7, Ind. Med. 1847–'8, Univ. N. Y. '49–50.	Ind. Med., 1848; Univ. N.Y. '50	32 years	Grant Co., Ind. State, & Americ'n Med. Association	Marion	Commenced practice in present location, and has continued to the present time.
Lomax Constantine	54	Guilford co. N.C.	None	Ind. Med. Coll. 1845–'6–'7–'8, Ohio Med. 1851–'2	Ind. Med. 1848; Ohio Med. '51	20 years	Grant Co. & Ind. State	Marion	Began and has continued to practice in present location.
Meek John A			None	None	None		Grant Co. & Ind. State	Jonesboro	Received no answer to letter of inquiry.
Neal James Clinton	26	Grant co., Ind	None	Two courses Univer. Mich. 1867–'8–'9	Univ. Mich. '69		Grant Co.	Marion	Pupil of Drs. Lomax, graduate of Department of Pharmacy University Mich. June, 1869, with title of Ph. C.
Owings E. J	30	Ohio	None	College of Med. and Surg. 1867–'8	None	2 years	Grant Co.	Upland	Pupil of J. W. Pugh, M. D., New Cumberland, Ind.
Palmer David	47	Morgan co., Va	None	One Ind. Med. 1847–'8—one Ind. Central, 1850–'51	None	19 years	Grant Co. & Huntington Co.	Warren	Pupil Drs. Mills & Chadwick, Warren, Ind.; com. practice and con. in same location.
Pugh Mahlon	33	Grant co., Ind	None	One c'rse Ohio Med. 1866–'67	None	4 years		Upland	Pupil of J. W. Pugh, M. D., New Cumberland, Ind.
Pugh Branson	26	Grant co., Ind	None	One course in Cin. Med. Coll. 1866–'7.	None	6 months	None	Trask	Pupil of Dr. Wm. Wheeler, Hartford City, Ind.
Reasener H. D				Ohio Medical	Ohio Med.		Grant Co. & Ind. State	New Cumberland	Received no answer to letter of inquiry.
Reasner W. M								New Cumberland	Received no answer to letter of inquiry.
Riggs C. E							Grant Co.	Rigdon	Received no answer to letter of inquiry.

A PERSONAL REPORT OF THE REGULAR PHYSICIANS OF GRANT COUNTY, AND GRANT COUNTY MEDICAL SOCIETY, INDIANA—*Continued.*

Name.	Age.	Nativity.	Of what College a literary graduate.	Courses of Lectures attended, Schools and date.	Of what College a graduate.	Term of Practice.	Of wh't Medical Society a Member.	Post Office Address	Remarks.
Runyan J. Y	36	Ohio	None	Ohio Med. Coll. 1858 '9, Cin. Coll. Med. and Surg. 1862-'3, Bellevue Hos. Med. Coll. 1868-'9	Cin. Coll. Med. and Surg. 1863; Bellevue 1869	9 years	Grant Co. & Patholog'l Soc'ty, Cin	Xenia	Pupil of Dr. H. Kirby, Granville, Ind.
Shiveley James S	54	Morgantown, Monongahela co., Va	None	None	None	32 years	Grant Co., Ind. State, & Americ'n Med. Association	Marion	Engaged in general practice 32 years, in Marion, devoting more especial attention to Obstetrics,
Sullivan John T			None	Univ. Mich. 1868-'9.	Miami		Grant Co	Alexandria	A pupil of Drs. Lomax, Marion, Ind.
Thomas A. M			None				Grant Co	America	
Williams Lewis	44	Clinton co., O	None	Two courses Miami Med. Coll.	Miami	12 years	Grant Co., Ind. State, & Americ'n Med. Association	Marion	Commenced practice in present location.

Names.	Nativity.	Age.	Literary Institution.	When.	Medical College.	When.	Post Office.
William Bracken	Indiana	52			Fifth Indiana Medical District	1836	Greensburg.
C. A Covert	Pennsylvania	37			Cleveland Medical College	1857–8	Greensburg.
E. B. Swem	Ohio	57					Greensburg.
John Y. Hitt	Kentucky	36	St. Joseph's College, Ky	1848–9	Louisville University	1852–3	Greensburg.
L. C. Bunker	New York	48					Greensburg.
J. J. Flemming	Ohio	41					Greensburg.
A. S. Remy	Indiana	50			Medical College of Ohio	1857–8	Greensburg.
James Bracken	Indiana	26					Greensburg.
John L. Wooden	Kentucky	43			Medical College of Ohio	1859–60	Greensburg.
John M. Craig	Indiana	24			Medical College of Ohio	1865–6	Greensburg.
Wm. F. Bailey	Kentucky	41			Medical College of Ohio	1857–8	Sardina.
Jno. H. S. Bailey	Kentucky	30			Medical College of Ohio	1866–7	Sardina.
Alex. Underwood	Vermont	55	Lamoil College	1833			St. Paul.
F. M. Howard	Indiana	28			Cincinnati College Med. and Surg	1864	St. Paul.
N. N. Shipman	Louisiana	39			Medical College of Ohio	1862–3	St. Paul.
R. J. Depew	Kentucky	51			Transylvania College	1840	St. Paul.
W. H. Webb	Indiana	42					Adams.
R. M. Floyd	Indiana	25			Medical College of Ohio	1868–9	Adams.
Lot V. Miller	Ohio	49					Westport.
R. J. Owens	Indiana	26	Miami University	1864	Miami Medical College	1868–9	Waynesburg.
S. M. Ryker	Indiana	41	South Hanover	1851	Castleton, Vermont	1852–3	Forest Hill.
D. A. Thompson	Indiana	25			Medical College of Ohio	1868–9	Forest Hill.
Uriah Price	Maryland	53					New Pennington.
T. Johnson	Indiana	45					Clarksburg.
C. Cain	Delaware	61					Clarksburg.
J. H. Alexander	Illinois	42					Clifty.
M. G. Reeves	Ohio	48					Clifty.
E. W. Leech	Pennsylvania	38					Clifty.
I. B. Weed	Maine	39			Medical College of Ohio	1862	Kingston.

METEOROLOGICAL REPORT OF THE INDIANAPOLIS ACADEMY OF MEDICINE,

BY G. V. WOOLEN, M. D., COMMITTEE.

SUMMARY OF ALL OBSERVATIONS FOR THE QUARTER ENDING AUGUST 31, 1869.

SUMMER, 1869.		JUNE.							JULY.							AUGUST.							Means and Totals, Season 1869.	Means and Totals, Season 1868.
		Day.	7 A. M.	Day.	2 P. M.	Day.	9 P. M.	Day.	Means and Totals.	Day.	7 A. M.	Day.	2 P. M.	Day.	9 P. M.	Day.	Means and Totals.	Day.	7 A. M.	Day.	2 P. M.	Day.	9 P. M.	Day.	Means and Totals.		
Barometer, reduced to freezing point	Max	7	29.57	6	29.49	6	29.53	6	29.52	31	29.53	31	29.47	31	29.50	31	29.50	7	29.54	2	29.53	7	29.51	7	29.52	.....	.....
Barometer, reduced to freezing point	Min	13	28.81	13	28.77	13	28.87	13	28.81	3	29.09	3	29.05	10	29.12	3	29.12	5	29.16	4	29.10	4	29.11	4	29.14	.....	.....
Barometer, reduced to freezing point	Mean	...	29.28	...	29.24	...	29.19	27	29.23	...	29.31		29.20	...	29.26	...	29.26	...	29.30	...	29.30	...	29.31	...	29.30	20.26	29.29
Thermometer	Max	20	78	19	86	25	78	6	80.3	3	83	16	91	10	83.5	15	84.3	20	80	20	90	14	81	20	83.3	.....	.....
Thermometer	Min	6	46.4	15	57	5	46	...	53.1	30	56	21	71	20	60	30	63	31	55	7	68.5	7	57	7	60.3	.....	.....
Thermometer	Mean	...	66.7	...	75.4	...	66.3	...	68.5	...	70.4	...	79.8	...	71.8	...	73.5	...	70.6	...	81.6	...	70.5	...	74.2	72.0	73.1
Force or Pressure of Vapor	Mean	...	0.505	...	0.509	...	0.503	...	0.506	...	0.597	...	0.642	...	0.565	...	0.601	...	0.634	...	0.665	...	0.678	...	0.655	0.587	0.585
Relative Humidity, (100 being saturation)	Mean	...	74.3	...	59.9	...	75.8	...	69.3	...	78.8	...	60.2	...	75.9	...	71.6	...	85	...	61.2	...	83.9	...	76.7	72.5	68.8
CLOUDS—No. of times invisible	.....	...	3	...	0	...	8	...	11	...	9	...	6	...	15	...	39	...	3	...	1	...	13	...	17	.....	.....
No. of times partially cloudy	.....	...	18	...	25	...	11	...	53	...	17	...	23	...	13	...	53	...	21	...	27	...	14	...	62	.....	.....
No. of times entirely cloudy	.....	...	16	...	5	...	6	...	17	...	5	...	1	...	3	...	9	...	3	...	2	...	2	...	7	.....	.....
Whole days without cloudiness	.....	...	.....	...	.....	...	.....	...	0	...	.....	...	.....	...	.....	...	4	...	.....	...	.....	...	.....	...	1	.....	.....
Mean amount of cloudiness (scale 10.)	.....	...	4.25	...	5.66	...	3.66	...	4.52	...	4.40	...	4.60	...	2.50	...	3.80	...	3.90	...	5.30	...	2.70	...	3.90	4.07	4.33
No. of times rain fell	.....	...	.....	...	.....	...	.....	...	12	...	.....	...	.....	...	.....	...	6	...	.....	...	.....	...	.....	...	6	24	22
Amount of rain in inches	.....	...	.....	...	.....	...	.....	...	4.37	...	.....	...	.....	...	.....	...	3.44	...	.....	...	.....	...	.....	...	1.39	9.20	8.93
WINDS—No. of times from	W	...	3	...	8	...	3	...	14	...	13	...	6	...	4	...	23	...	1	...	2	...	0	...	3	.....	.....
No. of times from	N. W	...	1	...	1	...	2	...	4	...	0	...	0	...	3	...	3	...	0	...	3	...	0	...	3	.....	.....
No. of times from	S. W	...	13	...	12	...	10	...	35	...	7	...	18	...	5	...	30	...	9	...	14	...	1	...	24	.....	.....
No. of times from	E	...	0	...	0	...	0	...	0	...	1	...	1	...	2	...	3	...	6	...	2	...	2	...	10	.....	.....
No. of times from	N. E	...	0	...	0	...	0	...	0	...	0	...	0	...	1	...	2	...	2	...	5	...	2	...	9	.....	.....
No. of times from	S. E	...	2	...	4	...	0	...	6	...	2	...	1	...	3	...	6	...	1	...	1	...	1	...	3	.....	.....
No. of times from	N	...	0	...	0	...	0	...	0	...	2	...	3	...	2	...	7	...	4	...	1	...	1	...	6	.....	.....
No. of times from	S	...	3	...	2	...	4	...	9	...	1	...	0	...	1	...	2	...	1	...	0	...	2	...	3	.....	.....
No. of times from	None	...	6	...	3	...	9	...	18	...	4	...	2	...	9	...	15	...	5	...	3	...	21	...	29	.....	.....
Prevailing winds	.....	...	.....	...	.....	...	.....	...	S.W.	...	.....	...	.....	...	.....	...	S.W.	...	.....	...	.....	...	.....	...	S.W.	S.W.	S.W.

EDITORIAL AND MEDICAL NEWS.

THE EDITOR owes an apology to many correspondents for apparent neglect in replying to them. For several weeks he has not only been in poor health, but during much of the time confined to a sick bed; and now he has been compelled to seek a few weeks rest and quiet in the country, hoping that his strength and health may be restored, and be permitted soon to resume his labor, in a profession to which his life has been consecrated. His friends will please accept this explanation of the delay in replying to their letters.

It is no easy thing to bear physical suffering—no easy thing, when work not only invites but commands, while Time hurries away with our days and years, to sit quietly down and do nothing: O, the irksomeness of this enforced pause in life's labor! Good old Gideon Gray accepted the charge of the waif left at his hitherto childless home, among other reasons, for this, that he wanted to "make some remarks on the childish diseases, which, with God's blessing, the child must come through under my charge;" but we suspect that Gideon Gray would not have cared to study disease in his own person.

And yet, after all, probably we physicians may become better fitted for our work, as we certainly should better men, for the very physical sufferings we may be called to endure. Will not our sympathy with fellow-sufferers be more profound, and our zeal for their relief be more active and intelligent? It was the agonizing suffering which he endured in his last illness, that led Sir Benjamin Brodie* to exclaim, "O, that physicians would study *pain* more, and the means for its relief."

* In Lord Bacon's *Advancement of Learning*, the following interesting passage occurs: the direct relation of a part of it to the wish of Sir Benjamin is obvious:

"Nay, further, I esteem it the office of a physician not only to restore health, but to mitigate pain and dolours; and not only when such mitigation may conduce to recovery, but when it may serve to make a fair and easy passage: for it was no small felicity which Augustus Cæsar was wont to wish to himself, that "euthanasia;" and which was specially noted in the death of Antonius Pius, whose death was after the fashion and semblance of a kindly and pleasant sleep. So it is written of Epicurus, that after his disease was judged desperate, he drowned his senses and stomach with a large draught and ingurgitation of wine, whereupon the epigram was made, "*Hinc Stygias ebrius hausit aquas;*" he was not sober enough to taste any bitterness of Stygian waters. But the physicians, contrariwise, do make a kind of scruple and religion to stay with the patient after the disease is deplored; whereas, in my judgment, they ought both to inquire the skill, and to give the attendances, for the facilitating and assuaging of the pains and agonies of death."

Besides, the disease which comes now, and from which we recover, is the fore-runner—it may be months or many years in advance—of another disease which shall be unto us mortal: with steady step the fatal hour comes unto each one of us. Are we, who are called to stand at *janna vitæ et mortis*, sufficiently mindful of the interests of those dependent upon our daily labor, sufficiently thoughtful in regard to higher interests, in view of our own inevitable mortality? Noble as our profession is, in its exalted, ever rising, ever widening range of scientific knowledge; noble as it is to every true physician, not to the trading and huckstering politician, in its daily exercise of God-like philanthropies, in its loving sympathies and benevolent deeds, but even this should be unto no man an *end* of life, but only the golden runnels of a ladder whose foot is on the earth, but whose top reaches the heavens, and upon which we should ever be ascending until earthly existence terminates in celestial.

THE CRITICISMS upon the action of the American Medical Association as to Specialists, and of the Transactions of the State Medical Society of Indiana, are not such, in all respects, as the Editor would have written: much as he respects the ability and personal character of the authors, he dissents from some of their views.

In this connection he wishes also, to state that the author of the review of the Transactions need not have hesitated to mention the "somebody who blundered," and in consequence of whose blundering the volume is so miserably meagre. A president of a State Medical Society who can devote his address largely to the discussion of the feasibility of establishing a medical journal in the State, and so far forget his position, *though not himself*, as to ignore the existence already of a medical journal in the State, known and respected by every intelligent physician in the United States, most appropriately followed this blunder—for which he deserved the Society's rebuke—by another, neglecting to appoint committees to report at the next annual meeting, and thus the small volume of Transactions for 1869: his address in 1868 and this volume of 1869 are his worthy monuments.

MARRIED—On the 16th of last month, Dr. John E. West, of St Clairsville, Ohio, to Miss Anna H. Wood, of Martinsville, Ohio.

WE are indebted to Dr. Wm. Lomax of Marion, for the report of Physicians of Grant county; and to Dr. J. M. Craig for that of Decatur county.

THE WESTERN JOURNAL OF MEDICINE,

(*Formerly*, "CINCINNATI JOURNAL OF MEDICINE.")

Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

VOL. IV. INDIANAPOLIS, NOVEMBER, 1869. No. XI.

THE PROGRESS OF MODERN MEDICINE—AN INTRODUCTORY LECTURE, DELIVERED IN THE UNIVERSITY OF LOUISVILLE, OCTOBER 4, 1869.

BY DAVID W. YANDELL, M. D.,

Professor of Clinical Surgery.

GENTLEMEN—The first medical lecture heard by a student of medicine forms an era in his life to which he will recur with interest as long as he lives. He has, in most instances, left home with all its endearments, and is in the midst of strangers, associated with fellow-students eager like himself for knowledge and ambitious of excellence. He has taken a decided step forward in the profession which is to be his future calling. He has entered upon a race, and knows that the eyes of all he loves are upon him. He has struck the first blow in a battle which he expects to wage until he dies. When he shall return home at the close of the lecture term, he is aware that he will be styled "Doctor" by his acquaintances, and be expected to know much about medicine. There is an excitement growing out of the novelty of the occasion which he can never experience again. At the threshold of medicine, where most of you stand this evening, it is important that you should conceive just views of the character of your profession. No man, it has been justly said, is likely ever to attain to greatness

who has not a feeling that there is something in him great. It is quite as true that no physician will ever rise to eminence in his profession who has not exalted conceptions of its worth. If he regards it as a trade, by which he proposes simply to earn a living, he will be pretty sure to pursue it in the spirit of a tradesman. If, esteeming it something lower than that, he adopts it as an art by which he may practice upon the credulity of the people, he sinks into the character of the charlatan. But if, on the other hand, he looks upon it as a science, broad and liberal, and an art at once benign and efficacious, he will enter upon its study with a spirit that is likely to carry him to a high place among its votaries.

The return of this anniversary of the University of Louisville, the opening of its thirty-third session, affords a suitable occasion for taking a brief survey of medicine and determining what progress it has made in this third of a century. The retrospect is one which must gratify the pride of every physician. I trust it will inflame you with a noble ambition, not only to master what is already known in the profession, but to improve and extend its resources. I deem this review the more proper at this time because it has been rather the fashion in certain quarters of late to deplore the decadence of medicine—to speak of it as less respectable than it was at some former period of its history—to express doubts of the efficacy of drugs in controlling disease, or, at least, whether we have improved upon the practice of our forefathers. So far from retrograding, it will be my purpose to show you, in the following remarks, that the profession never made such progress in all the ages since the times of Hippocrates as it has made in our own times, and never stood in an attitude to command so much of the respect and gratitude of men as it does to-day; and that as to the skepticism concerning the curative power of medicine, there never was so little foundation for it as now.

When your fathers were students of medicine, "theory and practice of physic," and "theory and practice of surgery," were the phrases in use. We use the terms science and art of medicine, and science and art of surgery. The meaning of the terms is the same, and they imply that there is a science and an art of medicine and of surgery. They are not the same thing, nor do they necessarily go hand in hand together. Science may exist unapplied; art may be pursued without the guidance of science. Art, it has been said, furnishes hands, and science eyes; and "as science without art is inefficient, so art without science is blind." It is in blindness, if this be true, that the practice

of physic has been for the most part pursued. A few practitioners, in all periods of medical history, have applied themselves to the cultivation of the science of medicine, some with but little reference to the art; but by far the larger number have busied themselves with the art without any concern about the science. And thus it happens that at almost every period of the profession, its art has been far in advance of its science. Remedies were prescribed successfully in many diseases when the functions of the animal economy were still a mystery, and little was known of the morbid states for which medicines were administered. But the case stands quite otherwise in our day. The science of medicine now is far in advance of the art, insomuch that while comprehending fully the nature of the morbid change, we have often to confess that our remedial resources afford no cure for it.

In a single lecture it will, of course, be impossible to do more than mention a few of the more remarkable contributions which, in the last thirty years, have been made to medical science.

Of vast tracts of disease witnessed daily in the practice of Cullen, we fail to find anywhere in his works the least sign of recognition. He knew nothing, for example, of diseases of the heart. He could have given us no positive knowledge of his method of determining whether a patient had pleurisy, pneumonia, or pericarditis. There are many medical men now alive who passed through their pupilage in renowned medical schools without ever hearing the name of Lænnec. Among those who were content with the conjectures of Sydenham, and who were compelled to grope in the dark with Cullen, the announcement of mediate auscultation, through the stethoscope, was deemed simply a vagary. The youngest physician of to-day, enlightened by a knowledge of auscultation and percussion, may pronounce with certainty upon diseased actions that would have baffled Sydenham in the full meridian of his medical powers. The stethoscope has borne a prominent part in the revolution, some of the leading features of which I am endeavoring to portray. A knowledge of it is indispensable. Without it the practitioner can never attain to accuracy in a long catalogue of diseased processes, nor select remedies appropriate for their relief. In an extensive field of most important diseases, it would be better to turn the physician loose among patients without medicine than without training in auscultation and percussion.

It is a fact familiar to all practitioners, that a patient may be shivering with cold, and to the most delicate touch feel cold, while the real temperature of the body is considerably exalted above the natural

standard. DeHaen, of Vienna, was among the first who taught that the hand could not be trusted to determine the heat of the body, and that the thermometer must be called to our aid. He had wonderfully correct conceptions of the value of exact knowledge of the varying temperature of various diseases. We know what problems he strove to solve. We know what results he saw would follow their solution, but the mechanical skill of his day was unable to furnish an instrument adequate to the purposes of his thoughtful mind. The realization of the splendid conceptions which filled his brain was reserved for our times. The pathological lessons which he vaguely hinted at have now passed into the daily teachings of the schools.

The physician of every age has counted the pulse and the respirations of the sick; he now, with the thermometer, measures their temperature as well. The stethoscope and the thermometer alone have placed the science of modern medicine far above the medical science of all the preceding ages. The illustrious Chomel, one of the greatest of French physicians, and among my earlier teachers, devoted himself with singular assiduity to the study of the elementary features of typhoid fever, whereby to determine positively its existence. After years of survey of the various phenomena, he reached this conclusion: If certain conditions show themselves in a certain order of occurrence, and persist through a period of time comprised within from three to four weeks, we may conclude that the disease is typhoid fever. Such were the teachings of one who was esteemed a consummate master of his art—of one over whom the grave has but recently closed. In 1855, Dr. Parkes, in his lectures on the "Proximate Cause of Fever," said: "I shall have to allude to inexplicable phenomena, to vast spaces still unfilled by solid facts, to spots unknown to observation, and to regions lighted only by the dim and treacherous ray of speculation." We ofted had, in typhoid fever, worse than these perplexities. But the evils which beset the illustrious Chomel have been wholly removed from our path. We are no longer misled by the treacherous lights which confused him. We are able to avoid the quagmires in which he sank, and through the aid of the thermometer, advance with certainty to the goal of positive diagnosis. Nor is it in typhoid fever alone that the thermometer is of such decided value. The discovery abounds in valuable fruits in nearly every field of pathology, indeed in all pathological tissue-changes. The variation of a single degree above, or a single degree below, the healthy standard of the body, if it but persist for a time, invariably denotes mischief. If the mercury

rises above, it indicates one form of diseased action. If it falls below, it points to another and a very different character of disease. Each pathological state has its determinate temperature. On this law all the rest hinges. This is our point of departure. From it we proceed to ascertain the typical temperature. The thermometer, while thus enabling us to recognize the special disease before us, is equally valuable in determining what progress the disease is making—whether it is stationary, or moving toward health, or toward death.

Another important element of modern progress, at which I can only glance, is the recognition of the existence of certain diseased actions which are self-limited. A conspicuous example of this class of affections is furnished by intermittent fever. Each of the three stages has a determinate set of phenomena, consuming a definite amount of time. They run their course. The cold stage is succeeded by the fever—this is followed by the sweat, and with its termination the paroxysm is over. This paroxysm of intermittent is typical of the self-limitations of a variety of diseased actions. Typhoid fever is another example. Before the discovery of this law of self-limitation, the practice in typhoid fever was active. The physician labored to cut it short, and the mortality was one in three cases. Under the guidance of modern research the mortality has been reduced to one in twenty-two cases.

The results of the modern methods of studying both physiological and pathological phenomena are not limited to the mere enlargement of the domain of knowledge in these departments of life. There is a precision and accuracy of our facts in vast territories of human interest, where in former times men groped in darkness or wandered in doubt.

When the microscope made possible the Cellular Pathology, as expounded by Virchow, it added another to the long catalogue of obligations under which it has placed the science of medicine. But a little over a generation ago, the whole doctrine of inflammation was in a most loose and confused condition. The term was applied to diverse and incongruous phenomena. The entity, which it was held to represent, was regarded as an evil, as an enemy, which must be subdued at all hazards; against which a relentless war must be waged. We have now come to look upon it as often the best ally that nature has in her service to prevent what would otherwise be irreparable. We now regard it as an elevation of the two processes of nutrition—growth and disintegration. And on these in their normal state all healthful life

depends. When their elevation is in exact parallelism, the processes of inflammation are benign. Their proper management enables us to avert disaster and prevent wide-spread evils. The suffering connected with the reparation of a fractured bone, for example, may make a severe draft on our comfort; but it is small indeed compared with the evils of an ununited fracture. This American discovery of the true relations of inflammation and of the processes of the movement by which nature "educes good from evil," constitutes one of the most important developments ever made in this department of science. For instance: Under the most skillful management of the best practitioners, when the object and the method were to fight pneumonia as though it were a tiger to be destroyed only by successive blows, the recorded loss was one in every three cases. Under the beneficent methods inaugurated by the present enlightened views of inflammation, the loss is not over one in twenty-five or thirty cases.

The question naturally arises here, what are the signs of these improvements in medical science? Has the general tenure of life been increased? Has life, when compared with former epochs, been lengthened among human beings? If neither of these events has accompanied the march of medical science, it may be a march but it is not progress. Our boasted advance is as nothing if it does not show an improvement in the health of communities, an increase of the general hold on life. Such, however, is the fact. The improvements in medical art and medical science have done both these things. Men live now in better health and for more years on the earth than they did in former times.

There are those of our brethren who, shutting their eyes to the dazzling achievements of the present, point to some remote past as the golden age of medicine. They seem to forget that their very work is a standing refutation of the truth of the picture they would draw. "There is constant improvement because there is constant discontent. If we were perfectly satisfied with the present, we should cease to contrive, to labor, and to save with a view to the future." Had not Louis been discontented with what Broussais called "Medical Science," we should not now be enjoying the rich fruits of Louis' philosophical methods. If Bright and his co-laborers had been satisfied with the confused and unsafe tenets of what was called renal pathology, the world might not yet have been enriched with a contribution which is justly esteemed among the most inestimable in medical science.

I might continue this branch of my subject very much longer, and

still leave it unexhausted, but time admonishes me that I must pass on. I have said nothing of what sanitary science has done to increase the comfort of living and add to the length of human life. And yet sanitary science has been created in the half century in which we live. Nor have I time to do more than allude to statistical medicine, a field of never-failing interest, in which the laborers are bringing out most important results; and can only stop to mention Life Insurance, the creation of vital statistics, itself a vast science—productive of incalculable benefits to society. Many other contributions made to medical science in recent times I must, for the want of time, pass by unnoticed. Enough has been said to show to you something of that gratifying progress which it has made in the memory of physicians still in their prime.

But this great increase of our knowledge concerning the nature and results of disease is by no means necessarily attended, as I have already had occasion to remark, by augmented power over disease. The character of the morbid processes may be accurately defined, and yet we may be wholly unable to correct them. Nay, the very perfection of our knowledge may only render us more hopeless as to the result of all remedial efforts. That which our fathers treated as a disorder of function, we often, under the clear light of modern pathology, recognize as a disease of structure. Diseases of the liver and of the brain in which they bled and purged with great hopes of success, we regard as cases of disorganization, which afford no ground of hope. Nor in the utmost improvement of our therapeutics can we ever expect to find a cure for all the morbid conditions which may be revealed by pathology. A boundary has been set to the operations of the human body. Its machinery must wear out and run down. Age obstructs and deranges its organization. The days of our lives have been limited to three-score years and ten, and though by reason of uncommon vigor they may be occasionally extended beyond four score years, still, from the very nature of the frame, it must at last experience decay; and alchemy there is none by which it can recover its healthful action. But apart from this natural decay of the organs of our bodies, we are servile still to those "skyey influences," as they have been termed, which have long waged so successful a warfare against our race. Through them intractable diseases continue to find their way into our systems. Unwise marriages, too, aid in maintaining the list of incurable disorders. The unhealthy organization of parents is entailed upon their offspring, and the free-will of fathers

and mothers becomes the fixed fate of their children. Cancer, consumption, insanity, and mental imbecility are among the diseases thus transmitted from one generation to another. Added to the rest, sensual indulgence comes in still further to swell the catalogue of hopeless maladies, developing cirrhosis of the liver, degeneration of the kidneys, induration or softening of the brain, and other perversions of structure as irremediable as the changes of organization wrought by age. By all these causes morbid states of the organism are induced, which, in the present condition of our art, we have no power of correcting, and which, to the end of time, must remain incurable.

But, while we are obliged to admit that the practice has not kept pace with the science of medicine, and can easily see that from the nature of the case it can never attain to that state of completeness of which the science is capable, still it is flagrant injustice to our therapeutics to affirm, as some are known to do, that they have not advanced at all. Concede to ancient medicine all that is claimed for it by the most ardent admirers of antiquity. Grant that the physicians of the age of Homer, the earliest of whom we have any report, were men of real skill, and made great cures among the soldiers of Agamemnon. I do admit it freely, for the reverence, approaching idolatry, in which they were held, proves them benefactors of their people. I grant, also, that Hippocrates was a great physician, as well as a true philosopher. I admit the claims of Galen and Dioscorides to having administered medicines wisely and well. I give full credit to Paracelsus, who was not content to sit patiently by the bedside of the sick and trust their cure to the *vis medicatrix naturæ*, but insisted on coming in with his heroic chemicals and dispelling disease by their force. I can believe that Basil Valentine, mounted on his *currus triumphalis antimonii*, though he may sometimes have driven it too fast, and not always safely, yet made important cures by his active remedies. I heartily admit the practical skill of the learned Boerhaave, and that the observant Sydenham was a safe, a judicious and a successful practitioner. All this is conceded to the art of former times. Medicine, in a word, I believe, has been in all its stages a boon to mankind.

Further than all this, I concede to the skeptics, who call in question the value of curative medicine, that many diseases which were formerly thought to be amenable to treatment are self-limited, and run a determinate course, uninfluenced by drugs. I agree that medicines have been many times given injudiciously, and that they may be still sometimes abused. I readily grant that, in many cases, the only ra-

tional course for the physician is to assist nature in her curative efforts. My old friend, once an eminent practitioner, of this city, was, I have no doubt, often right when he said to his hypochondriacal patients, "*Take good advice*," in answer to their daily question, "What shall I take?" He justly esteemed words to be quite as efficacious as bread pills or homœopathic pellets, and saw no need for active medication in their cases.

But, with all these concessions, I hold firmly to the remedial powers of our art. Cures are no less a fact than disease and death. As well say that steam has not sped the commerce of the world, or electricity quickened communication among the people of the earth as to dispute the usefulness of medicine. We of this school believe in curative medicine. We are persuaded that there is an unequivocal potency for good in many of our remedial agents, and that the number of these is constantly increasing. We repudiate utterly the notion, that the proper proceeding in practice is to leave nature to herself in her contests with disease. We entirely agree with the old writer on medicine, who held that it "is scarce honorable to physicians, and would be very disgraceful to the science of physic, if it afforded no better assistance than looking on to see whether life or death is to be the result of their coming twice a day, and receiving so many guineas." We entertain no doubt of the ability of physicians, as well to arrest disease in its fatal march, as to avert its incursions, and to mitigate and alleviate its suffering. Never, in any former age, we are persuaded, was the healing art so effective, as, assuredly, it was never before so enlightened, as now. Like medical science, though not so rapidly, it is still steadily gaining upon the darkness. The remedies we prescribe are not, in one sense, so active as those that were in vogue half a century ago. They disturb the systems of our patients less; but they are administered with far more precise knowledge of all their effects. The power of remedial agents over disease is greater than ever it was before. The good accomplished by them was, at no time, ever so great, and, what is hardly inferior praise, the mischief done by them was never so small. The practice of physic, while it is gaining in certainty, is also fast putting off the repulsive mein which its harsh medication long compelled it to wear, and is assuming a guise that renders it "a pleasure and a strength" to the sick. Our remedies are as numerous as ever they were, and some of them we still give in herculean doses; but they are not so nauseous as those which formed the *materia medica* of our medical forefathers. We battle not so much with

disease as they did, but attend more to the diatheses and the vital forces of our patients. Discriminating between diseases which are amenable to treatment, and those which tend always to death; between those which may be cut short by medicine, and those which run a determinate course in spite of medicine; the physician of our day has learned when to interpose with active remedies, when to wait upon nature and only attempt to aid her recuperative efforts, and when nothing is reserved for his art but "to soothe the victim no device can save."

Rheumatism, which it was for a long time believed no remedies could cut short, we now arrest with great certainty by appropriate treatment, and, in addition to this, those dreaded heart complications which formerly constituted its most serious danger, are effectually obviated by the modern methods of cure. Life has been lengthened in phthisis many years, and the results of recent efforts at arresting the disease in its incipient stage justify the hope that the diathesis in which it has its origin may be finally overcome, and so the complaint, which now carries off so large a proportion of the human race may be practically abolished. Epilepsy, which has always been regarded as one of our most intractable disorders, is now cured in many instances. The same may be said of tetanus. Great improvements have been made in the treatment of asthma, and of all nervous affections. In alleviative medicine we have witnessed in our own times achievements which border upon the marvelous—discoveries which, in importance to the human family, rival anything in modern science or art. For will not anæsthesia compare favorably with the electric telegraph, the great invention of our century, and, I may add, of our country? The telegraph, indeed, had been foreshadowed by cumbrous instruments, and we were in some sort prepared for its final triumph, by which continents are enabled to speak to each other across the ocean as if face to face. But when the surmise was ventured by Dr. Rush, that an agent would in time be discovered by which all pain would be annulled, while the necessary processes of parturition should go on undisturbed, his prediction sounded like a dream. No one seemed to be looking for its realization, and yet all, and more than he predicted, has been fulfilled. Pain is held in abeyance by our anæsthetics. Operations from which torture was formerly inseparable are now performed while the subject is asleep. Children in convulsions are at once made tranquil. Dislocations are reduced by easy efforts, of which the sufferer is scarcely conscious. Throes the most painful known to the human frame are endured while the patient

is the subject of pleasant dreams. Limbs are amputated, calculi are extracted from the bladder, great tumors are removed with so little disturbance, that patients are continually waking up after the terrific operation is over and asking the surgeon, "Are you ready to begin?"

I might go on for a long time remarking upon the improvements of modern medicine, but I should weary the patience of the audience which honors us with its presence; and, besides, this is the less necessary to you, since, in the several courses of lectures before you, it will be the business of your teachers to instruct you in these discoveries. The thermometer in disease, hypodermic injections as a means of medication, the ophthalmoscope, the laryngoscope, the microscope, the atomization of medicines, the sphygmograph, the improved methods of treatment in epilepsy and asthma and in all other maladies, all will come up in their proper places, and I may with propriety pass them by this evening. When you shall have heard all that is to be said of medicine as it now stands, you will be prepared to form a just estimate of the progress which it has made in the years since most of you were born.

This rapid advance in medical and surgical science and art is due mainly to the wiser methods by which they have been cultivated in modern times. For, while it is true that in every age of medicine some have pursued it in a philosophical spirit, with the mass of medical men the worst processes have obtained. All, for centuries together, was blind devotion to authority, mere guess, vague conjecture, wild speculation.

"Did Marcus say 'tis fact, then fact it is;
No proof so valid as a word of his."

That Galen said it was so, was proof enough of the fact with medical men for more than a thousand years. He dissected monkeys, and inferred from their anatomy what was the structure of the human body. When human subjects were at last dissected, and it was ascertained that Galen's descriptions did not apply to them, the inference with his disciples was that the human body had changed. Nature might vary in her course, but their great master could not err.

For many centuries the work of our fathers in medicine was but little else than system-building. A disciple of the old philosopher of Cos now and then made experiments and observations, and multiplied facts which have come down to us; but the large body of those whose names remain were dreamers. They spun out theories in their closets to be adopted, and sworn by, and practiced upon, by the multitude of

their followers. The chief business of every physician who felt himself capable of advancing medical science was to frame a theory of disease. This was deemed the great desideratum in medicine. To this hard problem the medical mind of all nations was laboriously directed, from the age of Galen down to the times in which we live. Each medical philosopher had the task before him, first to overthrow the theory of his predecessor, and then, upon its ruins, to erect one of his own. These wire-drawn speculations, more futile than the reveries of the alchemists, the work of scholars surrounded by their libraries, constitute the body of the medical literature in which the history of our art is written. First came the hypothesis of hot and cold, moisture and dryness, explaining by their reciprocal influence all morbid action; and this theory had an enduring reign. Then was proposed a theory of relaxation and overbracing, which accounted for all the phenomena of disease. Later, the fiery archæus of Van Helmont and the rational soul of Stahl, watching over the human body, were created to explain all the functions of the animal economy, and the origin of all the ills that flesh is heir to. Then appeared the mechanical theory of "lentor and morbid viscidity" of the blood; to be followed by the chemical hypothesis of hostile alkalies and acids pervading and disturbing the economy. The theories of Boerhaave and Cullen succeeded to these; and they were met by the speculations of Brown, who resolved all diseases into the "sthenic" or the "asthenic" class, and found in the lancet or in brandy a remedy for them all. At last America produced a teacher ready to grapple with the great, many-sided question, and propound a theory of disease. Our great Rush saw unity in the midst of contrariety. Disease, according to him, is a unit. One of his illustrious pupils, Dr. John Esten Cooke, was the first Professor of Theory and Practice in this school, and he, too, had his theory. Prof. Cooke is worthy of special mention here as the last of the theorists in our country. He is worthy of special mention on another account—as furnishing, in his life of fidelity to moral and christian principle, an example worthy of the imitation of all young men. He was one of the truest men I have ever known—one of the firmest, bravest, most conscientious and upright. He was, besides, a logician and a philosopher—patient, laborious, cautious and learned. He forged a chain of argument so compact and connected that few students could resist his logical conclusions. He believed implicitly in the truth of all that he taught, and showed by his manner that it was a love of truth and not of victory that impelled him to press his

convictions upon his pupils. His was a very simple theory—that of congestion. It was easily understood. The branches of the vena cava, embracing particularly the veins of the liver, in a state of engorgement from weakened action of the heart—this it was, he held, which caused fever, cholera, dyspepsia, diseases of the liver, brain; in a word, all that might be traced to venous congestion. His practice grew naturally out of his theory, and was correspondingly simple. It consisted in the use of remedies which promoted biliary secretion. First, middle and last it was to purge—to promote consistent alvine evacuations. This theory, accounting so plausibly for many morbid phenomena, and supported by such an array of instances as its learned author adduced in its defense, was generally accepted by the pupils of the gifted professor, and for many years it exerted a wide influence over the practice of the South. The practice, indeed, modified in many respects, still holds its ground with most of those who sat under the lectures of this great and good man. But no advocate of the theory is now found, and with it theorizing may be said to have ceased in the school. It is referred to on this occasion as an interesting relic of the past, being the last effort here to frame a system of medicine.

When such was medicine, students flocked to the schools where renowned masters taught, not to witness experiments and operations, not to make dissections, or see disease in its many shapes, but to hear them expound their systems and listen to the details of their experience. Thus the great Boerhaave sat for years in his chair, at Leyden, with pupils gathered round him from all parts of the world, *reading* his lectures on "peccant humors," describing the fierce contests of acids and alkalies in the system, explaining how the blood was to be thinned by lenitives, and purified by sudorifics; and this was the best method of teaching medicine that then occurred to the medical mind of the world. True, late in life, Boerhaave returned to the processes of observation and experience inculcated by the Father of Medicine, and opened a hospital in which he lectured to his pupils on the history of the diseases before him. Clinical medicine, never wholly neglected during all the reign of theory, thenceforward occupied a more prominent place in most of the schools. But it continued to be incidental and subordinate. The leading purpose of the pupils, as before, was still to listen to the lectures of a great teacher. Rush, Hosack, Davidge and Brown resorted to Edinburgh from America to hear Cullen lecture and learn Cullen's system, as Cullen had gone before to Leyden to listen to Boerhaave. They returned home to institute a similar

mode of instruction. Sitting in their chairs in New York, Philadelphia, Baltimore or Lexington, they read to our fathers and preceptors their carefully-written prelections on disease, and unfolded at length their theories of medicine. Their pupils resorted to the schools where they taught to hear what they *professed*, to drink in draughts of wisdom from their lips, and to be guided in practice by their doctrines. In the courses of lectures upon which they waited they witnessed a few chemical experiments, made, perhaps, some cursory dissections, saw an occasional bit of surgery, and walked the wards of the hospitals in crowds to hear remarks made on patients whom they were not able to see. But their chief purpose in going to the schools was to hear great teachers, not to use their hands or eyes. Their highest ambition was to master the theories of some illustrious professor. His philosophy was to be their guiding principle—his recipes their anchor in practice. Demonstration was the accident, dissertations were the rule. Material helps were nothing; the professors were everything. One great name often made the school. The chemist read from his chair accounts of the newly-discovered oxygen, carbonic acid, chlorine, and hydrogen, carefully sealed up in glass bottles; and the professor of anatomy read minute descriptions of bones and blood vessels, muscles and nerves. Dr. Drake relates of himself that the first task assigned him on commencing the study of medicine, was to commit to memory Cheselden on the bones and Innes on the muscles, without a skeleton, or so much as a plate to lighten his laborious duty.

How completely all this has been changed in our day I need not point out to you at any great length. You are all aware how largely demonstrations now enter into every course of medical instruction. It is not merely to hear but to see, as well, that students now repair to the medical colleges. When a young man, now nearly twenty years ago, I took the ground in some remarks which I had the honor to make before the American Medical Association, at its meeting in Cincinnati, that medical schools must rest upon hospitals and other public charities, where disease in its progress and terminations might be studied; that the sites for them were not sequestered villages or quiet country towns, places the most favorable to the study of books, but in the din and bustle of crowded cities, where most casualties occur, and the greatest number of sick people are treated at the public expense. I contended that the schools which had not the means of imparting clinical instruction on an ample scale must eventually decay. These views, it is safe to say, are those which are now universally

accepted in regard to medical teaching. The maxim of the profession has come to be, *no clinical facilities, no medical school.* The schools are now made by the clinics and the other means of demonstration. The great schools of the world in our day are found where there is most to be learned by observation—where there are the most subjects for the study of anatomy, the most patients for the study of disease, the greatest number of surgical operations to be seen, the largest and best-arranged laboratories, and the best cabinets and museums illustrating all the facts in the history of disease. Mind is as indispensable as ever to direct in the schools. Mind must preside over and marshal the materials, educe from them and indicate the lessons they teach, and guide the young student in his course of study. Teachers there must be still, not less than laboratories and museums, hospitals and subjects—teachers formed by nature as well as by education to teach—teachers who have the gift of utterance as well as the necessary stores of knowledge. Without them, all material aids are unavailing. No amount of apparatus, no number of diseased people will make a physician without a master. But the master, now-a-days, is nothing without the subjects and the apparatus. You would laugh to scorn a professor of anatomy who should come before you with a written description of the eye instead of the eye itself, or a model exhibiting its structure. You would not listen long to your most eloquent teacher of chemistry if he should content himself with reading to you about the reaction of agents hermetically sealed up in glass jars. Pupils no longer accept the *ipse dixit* of their instructor. They no longer swear in the words of some great master. They demand proof of all that is asserted. The question with them is, not what says the teacher, but what are the deductions to be made from a series of clinical cases? What do the statistics of the matter teach, not what the professor believes, is the great inquiry. And he is the *successful* teacher who enriches the minds of his pupils with the greatest number of valuable facts—who, at the same time that he makes them learned about disease, makes them also handy in its treatment—who brings before them human ailments in the greatest variety of forms, and instructs them how they may be best remedied.

This, indeed, is the ideal which every conscientious teacher holds steadily in his mind, and toward which all his efforts are directed—to show how disease is to be cured—to be cured safely, speedily, and with the least discomfort to the sufferer. To this noble end all your studies have reference. It is in the expectation of being taught your

profession, under the best lights and in its most advanced state, that you have come here to follow the several courses of lectures in this institution. You expect to be taught by this faculty how to cure disease, or how to prevent it, and how to prolong human life and alleviate human suffering. These just expectations, I believe, will not be disappointed. We greatly deceive ourselves if this school is not fashioned after the ideal which I have attempted to hold up before you as a perfect school. It will be our constant endeavor to render our courses of instruction useful to you—to illustrate everything that can be made more plain or impressive by models, or apparatus, or morbid preparations, or the living subjects of disease. We are nothing if not practical. We claim none of the respect of the profession if we are not upon the true line of professional improvement, and if the style of our teaching is not according to the spirit of the age and up to the most improved method of the times. Not that we profess to present to you a perfect school of medicine. Far from it. Imperfection attaches to all human institutions. Medicine itself is progressive, and not until it has reached its utmost limits of development can medical teaching attain to perfection. But we claim to be on the alert to catch the first intelligence of any advance in the science of the art, and to have adopted whatever there is of wise innovation in the methods of teaching medicine in our day. Clinical in design from the beginning, we are striving to make the University more and more a school of Clinical Medicine. If any of its earlier pupils should return here this winter, they would find us in the path which Caldwell and Drake sought to tread when they were here—still drawing lessons of practice from the records of hospitals, infirmaries, and dispensaries, but with ampler materials than our city afforded at that early day. They would miss most of the familiar names which first gave lustre to the school, but they would freely admit, I am sure, that we have made some improvements upon the teachings of our illustrious predecessors. Not only would they find the number of chairs in the University increased, but would remark that far more attention is given to making every part of every course demonstrative and practical. And so you, when you shall return to your *Alma Mater* at some distant day will in all probability find some of us gone; but our places, I doubt not, will be filled by those who will bear our benign profession forward after us, as we claim to have carried it beyond the point where our ancestors left it, and improve upon our method of teaching, as we think we have improved upon theirs. The institution can not

perish, but will grow with the growth and strengthen with the strength of the city which endowed it with its ample grounds, its spacious edifice and its rich library and suites of apparatus. The building may fall a prey again to devouring fire, but its vigilant trustees see to it that provision is constantly made for its reconstruction in case of such an accident. Its means for imparting medical instruction will be augmented every year with the growing population and resources of our city. A third of a century, the time not yet quite elapsed since its name first appeared in the catalogue of American medical schools, is a very brief period in the history of a foundation such as it is. The institution indeed may be said with perfect propriety to be yet in its infancy. Your remote descendants, when any of them, influenced by your example, repair to it to be instructed in the healing art, as you have done this evening, will find it only the more vigorous for its accumulated years, and richer in everything pertaining to medical teaching. Its corps of teachers, progressive men still, as I can not doubt they will be, earnest, energetic, zealously laboring for the advancement of medicine, still abreast with the discoveries of their times and contributing to their number, not less elevated in moral tone than distinguished for professional learning and skill, will advance its claims still higher to the respect of the profession and the gratitude of men.

UPON THE RELATIONSHIP BETWEEN EPITHELIUM AND BLOOD, PUS, CHYLE AND LYMPH CELLS.

BY J. GARDNER, M. D., BEDFORD, IND.

There are sveral varieties of epithelium, and they have names more or less arbitrary.

That which forms the epidermis is "squamous;" that of the choroid coat of the eye, is "tessellated;" that of the intestines, is "prismatic," or "conoidal;" that of the bronchii, is "ciliated;" and that of the liver, kidneys, lymphatics, &c., is "glandular."

Each of these types has its modifications, which insensibly run into other types; so that it is often difficult to tell precisely which class an individual specimen belongs in.

There are two great divisions into which they should be separated,

according to their physiological functions. The offices performed by them should be the index of their belonging.

Nearly all flat epithelium is protective in its character, and expends all of its energy in keeping off violent or destructive influences from tissues beneath, and reducing friction to its minimum in opposing surfaces. The squamous epithelium of the dermoid structure acts as a shielding armor to the delicate nerve filaments that form such a closely interlacing plexus of sensititive fibers through every part of the vera cutis and rete mucosum.

Without this, every portion of the surface of the body would be the seat of most excruciating pain whenever touched—no matter how slightly—by any foreign body.

Tessellated epithelium is akin to the squamous, but is more regular in form, the edges of the cells fitting accurately together, without overlapping, as in the previously described kind. The skin of the frog shows this in the most beautiful manner.

The membranes of serous sacks are covered with tessellated epithelium, which is so smooth that the continuous gliding of the surfaces over each other, as in the respiratory act, or in the peristaltic motions of the intestines, is entirely unnoticed.

The epithelium of serous membranes has the power of secreting a limited quantity of fluid for lubricating purposes, which is the true synovia.

Sometimes the secretory action becomes excessive, in which case a dropsy of the part results. At other times, through the influence of morbid agency, the secretion is entirely suppressed, and a train of morbid action follows, which is of lasting damage.

The friction sound of pleurisy is so caused; as is, also, the creaking heard in the joints in articular rheumatism.

Idiopathic peritonitis commences with an unnatural dryness of its epithelial surfaces.

The involvement of serous membranes in inflammatory processes is always more painful than when mucous membranes alone are affected, because of friction (motion) existing as a normal condition. The gliding of the surfaces is unnoticed when the parts are in health, but it becomes unbearable in disease.

Glandular epithelium is found in the tubuli of the kidneys, in the ducts running through the general system of lymphatic glands, in the entire body, and in certain special localities. It has an office separate and distinct from that of protection; though that is probably em-

braced in it in a subordinate sense. Its principal mission is secretion and elaboration.

Under the head of elaboration we must include the excreted fluids of bile, urine, and perspiration. There are other minor secretions, as cerumen of the ear and meibomian glands, of Cowper's glands, the prostate and testis; all of which present the singular spectacle of widely different results of physiological action upon these apparently insignificant bodies.

The size of epithelium cells of each class is variable, but is confined to certain limits. Where there is more than one layer, the internal cells are rounder and contain more fluid than those of the surface. External causes have much to do with their degree of development, and the time of their desquamation.

Solutions of the alkalies, if concentrated, dissolve the cell walls to form a kind of ropy substance.

Ciliated epithelium is actively vital for a considerable length of time after it is removed from its natural locality; providing it is furnished with a sufficiency of the fluid in which it was bathed, and it is kept at the natural temperature of the body from which it was taken.

This variety has a triple office to perform, to-wit: protection, secretion and propulsion. The vibratile cilia crowning the free ends or bases of the conoidal cells act as so many sweeps to carry forward any excess of mucus that would accumulate in the minute bronchii and air cells, and act as an irritative foreign body. They also carry off any particles of dust or other solids that are carried into the lungs during inhalation.

There are strong reasons for believing that tuberculous deposits in the lungs would be much rarer if the ciliated epithelium lining the mucous surfaces of the lungs would preserve its integrity.

Tubercle corpuscles are probably nothing more than immature or aborted epithelium cells.

What is more rational, when we consider the functions of ciliated epithelium, than that an impairment of its activity, or the denuding of the membranes of it, should allow detached portions of it, with mucus, soot, and dust to accumulate in the air cells, solidify, soften and become purulent, to the destruction of the contiguous tissues?

The causes operating upon the epithelium of the lungs often affect, sympathetically, the epithelium of the entire body.

The hair and nails also show the intimate connection existing be-

tween mucous surfaces everywhere; in their sympathetic departure from a healthy standard.

But it is to the conoidal or prismatic epithelium of the intestinal canal, that we must look for the key to the whole system of assimilation and nutrition. It covers almost the entire surface of the canal, from the cardiac orifice of the stomach to within two or three inches of the anus. When we consider the immense amount of surface produced by the duplicature of the mucous membrane, and the increase upon that of the papillar projections of the villi; and remember that every villous prominence has an investment of conoidal epithelium, with the pointed ends attached to the membrane, and the sides coaptated together, with the bases forming an even surface of polygonal cells outwards, and that it is by their agency alone that the whole assimilation of alimentary substances is carried on, we must at once admit that they take a leading place in the phenomena of life. Each cell is a living body—a gland of the most primitive type. It is composed of a nucleus, a cell wall and a contained fluid. Some of the continental observers have thought that they discovered delicate mouths or apertures in the bases of the cells, whereby they admitted the chyme from the intestinal canal. This appearance was probably illusory, and the real mode is by transudation or endosmose. Certainly after a meal they are found to be filled with granular contents identical with the chyle granules found in the mesenteric glands and lacteals. The lacteals take the granular contents of the epithelium and pass them to the mesenteric glands, wherein they are further elaborated and sent through to the thoracic duct, and from thence to the general circulation.

After prolonged fasting the epithelium covering the villi is found to be comparatively empty.

After death all glandular epithelium and all epithelium having a contained fluid undergo a coagulation of their contents, which renders it opaque. The corneal opithelium undergoes a solidification of its albuminous endoplast, which manifests itself in the glazing of the eye after life leaves the body.

The rice-water discharge of cholera owes its color principally to the prismatic epithelium of which the intestinal villi have been denuded. When the mucous membranes are thus denuded, the lacteals have but slight opposition to the pouring out of their contents. The blood is in a like manner defrauded of a large quantity of its plasma, and loses its power of coagulation.

The fibrin transudes through the delicate membrane denuded of its epithelium, and leaves the more solid contents of the blood to carry on an imperfect circulation for a time, until the blood becomes so impoverished that it is no longer capable of supporting life; collapse ensues, and death closes the chapter.

The death and exfoliation of a large part of the epithelium of the intestines would not be of such exceedingly disastrous consequence, but that the same noxious causes producing them, at the same time destroy the vitality of the germinal matter, more or less completely, throughout the entire system.

The clear fluid or endoplasm within the cell walls has the power of transmitting material properly prepared by chymification, through the interior of the cell to its apex, where it transudes into the lacteals. At the same time it imparts to the chylous fluid a portion of its own living substance by which it becomes further prepared for organization.

As it advances through the mesenteric glands, it is matured into the true chyle cells.

A similar set of vital operations is being carried on by the lymphatic glands in all parts of the body; with this difference: the lymphatics derive their material from breaking down tissues, which it re-elaborates into the lymph cells, which are, in every respect, identical with chyle cells.

The chyle and lymph corpuscles are also identical with the white corpuscles of the blood, and it is through the agency of them that nutrition and repair are mainly affected. This may be witnessed by irritating the web of the frog's foot, at which the blood rushes to the point irritated as though it had especial volition. Upon examining the blood producing the stasis of the part, it will be found to contain a much larger proportion of the white cells than the general circulation possesses. If the irritation is carried further and prolonged, pus will form.

The difference between mucus, pus and lymph, is not in their solid or corpuscular parts, but in their plasma. *Lymph* is highly fibrinous, and consequently spontaneously coagulable; while pus is albuminous, and is only coagulable by heat or chemical agency.

Thus, when a lacerated or incised wound is inflicted, nature attempt repair of the damage by the speediest method first; this is a union by first intention. This always takes place through an agglutination of the surfaces together by coagulable lymph. When, through

the nature of the wound, or other causes, as vice of the constitution, this fails in part or in whole, nature has a last resort for repair, which is the suppurative process.

In this the same white cells are used, or others so like them that they are undistinguishable, but the plasma is different. It is albuminous and not spontaneously coagulable. The process must now be a building up by granulation; a literal generation of new tissues. It is not certain that the entire pus cell ever enters into the formation of new tissue, but it is probable. If it does not, it imparts a portion of its germinal matter to the plastic material that is to be transformed into such tissue. A small portion of this germinal matter is capable of acting upon a large quantity of unorganized fluid and of changing it into organized or formed material. It is the little leaven that leavens the whole lump.

Every true cell is at some period of its existence a secreting gland. The white blood cell, lymph cell, chyle cell, mucus cell, pus cell, and epithelial cell are all glands—glands of the most primitive type; but still glands. The five first are free migratory glands, which travel wherever they are most wanted; the last is attached and stationary.

The red blood corpuscle is not a cell, neither is it a gland; nor does it exercise any immediate agency in the repair of lesions or the waste of tissues. The red corpuscle is homogeneous in structure, of semi-fluid consistency, and is destitute of both a cell wall and nucleus. This may be proven by witnessing the breaking in two of a corpuscle, in which there is no escape of contents, nor collapse of walls. This establishes the homogeneiety of the mass composing the disc. Another evidence, and one of itself sufficient to prove the position, is the fact that the red blood corpuscles of some of the rodents—the guinea-pig especially—undergo spontaneous crystallization after being drawn from the blood vessels. Every red blood disc is wholly transformed into a separate crystal of a beautiful ruby red color. The whole red corpuscle, then, consists of hæmato-crystallin, and is a proximate principle.

This property of the red blood corpuscle may be taken advantage of in medico-legal cases where blood-stains are found upon the clothing or utensils of persons suspected of murder. If the blood be human, the dilution of it with water and the passage through it first of a stream of oxygen, and afterwards of carbonic acid, will convert the corpuscles in crystals. The fluid should be allowed to rest a day or two, for the crystals to subside.

The blood of the ox is of nearly the same appearance under the microscope as that of the human subject; but it yields no crystals by this process. By this we have an additional aid in differentiation between the two.

Red blood corpuscles are oxygen bearers to, and carbonic acid bearers from the tissues. Whether the respiratory process is one of combustion, according to Liebig's theory, or one of metamorphosis of the tissues of a more complex kind, according to the views of later physiologists, the facts are the same; they are simply carriers. They load with oxygen in the lungs, which they distribute all along the vascular highways, and then load with carbonic acid, which they carry back to the lungs, to be discharged; and pass again through the same round of changes.

This is not a perfectly complete process; as there are always some venous discs in arterial, and some arterial discs in venous blood.

The birth and growth of red blood corpuscles probably take place in every part of the vascular system. A particle of clear colorless germinal matter appropriates the surrounding plasma until the size attained is sufficient, it then takes coloring matter, and the germinal matter then changes into formed material with the balance of the disc, or it passes out to again act as a blood-maker, by inciting other plastic formation.

All free cells whose walls are not too dense, have, while living, a distinct animal motion. Those of chyle, lymph, pus, and the white blood, have a movement called amœbæform, which must be seen to be understood.

It is possible that they have the power to pass through the thin capillary walls, and change into the formed material of the tissues.

Ciliary epithelium has a rythmical motion in its vibratile filaments that has been compared to the motion of corn when the wind blows over it. The waves are continuous, and all pass one way, which is from within the sack towards its outlet. There may be an exception to this in the uterus and fallopian tubes, to facilitate the forwarding of the spermatozoa to the graafian vesicle. The direction of the ciliary vibrations may also be reversible, to carry the vesicle to the uterus from the ovary.

Spermatozoa, which are but a modification of epithelium, have a progressive movement, which is eel-like, and peculiar to themselves. The propulsive power resides in the tail-like elongation, and it is sufficient to carry them forwaad at a rapid rate. The motion is essential

to carry them through the body of the uterus to the fallopian tubes and ovaries, where they come in contact with and penetrate the graafian vesicle to make it fertile.

We thus see a community of origin and a unity of germination in all of the cells which we have described. It is through them that all vital action is maintained, and anything that attacks them undermines the foundation of life.

The Power that vitalizes all living things, has seen fit to choose the smallest and simplest forms by which to build up the most complex animal structures.

As an example of the vital power of germinal matter, let us cite the influence of the virus of any of the modifications of variola. We see there that a minute portion—less, probably, than the hundredth part of a grain—is capable of impressing its peculiar nature upon every particle of the body. And not only every atom of the body at that time, but through them to all which succeed them; and to such an extent is this done, that it gives entire immunity from all subsequent invasions of any of its congeners.

CATARACT.

BY J. THOMPSON, M. D., HARRISON, OHIO.

James Gold, aged eighty-two years, presented himself to me last May, and gave the following history:

Has been totally blind in right eye for fifteen years, and partially blind in left eye for seven years; said his case was deplorable; that he could hardly see to get about; could not count his money; could not distinguish one bank bill from another; nor could he recognize his friends by sight.

On examination without the aid of artificial means, a total, hard, lenticular cataract of right eye, and by the aid of oblique illumination and the ophthalmoscope, a partial cataract of left eye was discovered. He could count one's fingers with left, but could only distinguish light from darkness with right eye. Has very overhanging supra orbital margins and eyebrows; eyeball very much sunken; arcus semilis very distinct; anterior chamber very shallow; integument very flabby, and subject to attacks of eczema.

Pupils quickly responded to atropine; vitreous showed no sign of liquefaction. He had no cough; neither did he have any symptom of diseased kidney.

As he wanted my opinion as to the probable utility or result of an operation, I gave it as follows:

It was by no means such a case as one would select were he simply seeking eclat, as the chances against a favorable result preponderated over those in favor of success from an operation; and were he to wait until the lens of left eye became totally cataractous, he would then the more readily appreciate a good result from operative interference. But, on the other hand, as he was advanced in years, and already feeble; as he had no cough, and as one eye was already useless to him, and the other rapidly passing into the same condition, and as it was impossible for us then to foresee the condition of his health when total blindness established itself, and as the dread of total blindness rendered his life miserable, we therefore left him to determine the matter for himself.

After consulting his relatives, and duly considering the matter, he concluded to take the risk of an operation. Accordingly, a dose of sulph. magnesia was administered on the 16th of June, and on the 17th I extracted the lens, assisted by Dr. W. C. Cooper, of this place. The operation was the one known as the "Modified linear extraction of Von Gräffe."

The stop speculum was used in this case, the temporal end of which had to be pressed back by an assistant, owing to the sunken condition of the eyeball. Great care was necessary in passing knife in front of iris, owing to shallowness of anterior chamber. The sclerotic incision, as well as the iridectomy, were made in upper section of globe. The capsule was freely lacerated, after which the lens was easily extracted by pressure with spoon above and with knife handle below. He counted my fingers immediately after operation. The lens was dark brown and very hard. A compress was then placed over both eyes, half a grain of sulph. morphia administered, and patient requested to remain in a horizontal position for two or three days.

The old man was a very troublesome patient, difficult to control, being hypochondriacal. He got on his feet the day after the operation for the purpose of ascertaining "whether he had lost the use of his feet!"

On the third day subsequent to operation he was troubled with

strangulated inguinal hernia, which I feared would have to be operated upon, but fortunately opium and the taxis relieved the difficulty.

After the above date he progressed rapidly. Wound of sclerotic united by the fourth day, walked about the house on the sixth day, found him weeding his garden on the twelfth day, and by the 15th of July all redness of conjunctiva and sclerotic had disappeared. September 16th, furnished patient number three convex spectacles, which enabled him to read moderately large print, and number six for distant objects, with which he could readily read names on signs across the street.

The above case is reported simply to show that notwithstanding the age and miasmatic debility, chronic cutaneous affection, &c., of patient, a remarkably good result obtained.

A CASE OF PARTIAL PROLAPSE OF THE UMBILICAL CORD RESTORED BY THE AID OF THE KNEE AND ELBOW POSITION.

BY N. D. GADDY, M. D., VERNON, IND.

I was called to attend Mrs P., aged twenty-five years, in her third confinement, on the 29th of last January.

On examination *per vaginam*, I found the head presenting, os uteri fully dilated, and through it pouched the unruptured membranes.

By the side of the head I detected apparently several coils of the umbilical cord. Finding my efforts to elevate the cord with the patient on her side or back ineffectual, and that its complete descent was prevented only by the membranes remaining intact, I caused her to assume the "knee and elbow" position. Or, what is correct, she was placed with her knees on an elevated part of the bed, and while her hips were thus elevated, the breast lay as low as possible.

I then introduced my hand into the vagina, and with my fingers gently moved the coils of the cord, which, when started, quickly rolled down out of my reach.

The ease with which this was accomplished was as much surprising as it was to me satisfactory.

A large, healthy girl was born soon afterward, without any more trouble with the cord subsequent to its reduction.

OBSTINATE EPISTAXIS.

BY J. W. MOORMAN, M. D., HARDINSBURG, KY.

In the September number of the *Journal* for the present year appeared a very interesting article on Epistaxis, from the pen of Dr. John D. Jackson, of Danville, Ky.

Epistaxis, though of frequent occurrence, is rarely deemed of sufficient importance to demand professional aid; hence, it is only in the most obstinate cases that the physician is called to interfere. Almost every one has a list of *specifics* which must be tried in succession before the physician is consulted.

In an extensive practice of several years I can call to mind but few cases of this form of hemorrhage requiring medical aid. Of the cases coming under my care, in at least an equal number the frequency of recurrence gave more trouble than the actual loss of blood at any one time. In this class of cases gallic acid in pretty full doses, continued for some length of time, is the only remedy usually required, but occasionally a short course of iron has been given to improve the condition of the blood, taking care to allow intervals sufficient to remove all risk of incompatibility.

In an article in the *American Journal of the Medical Sciences* for October, 1865, I called the attention of the profession to the use of the oil of Canada Fleabane, (*Oleum Erigerontis Canadensis*), in the different forms of passive hemorrhage; and some cases pertinent to the subject were reported. Since that time I have had opportunity to test its virtues in a large number of cases, some of which were epistaxis of a very obstinate character, and in no case have I been disappointed in its effects.

My method of using the oil in epistaxis, as well as in hæmoptysis, is to drop twenty or thirty drops on a handkerchief or into the palm of the hand, and inhale as rapidly as possible; at the same time half a drachm may be taken internally. Should this not prove effectual in a short time, a dossil of lint may be moistened with the oil and introduced into the nostril as high as possible without injury to the mucous membrane. This should be allowed to remain several hours, and is easily removed at the end of several days.

With the precise mode of action of the oil I am not acquainted;

whether it be some specific astringent action belonging to the oil, or whether it acts in the same manner as its kindred, the terebinthinate oils, is not definitely known, but it certainly exercises a very powerful influence over the hemorrhages.

A domestic remedy very efficacious in the treatment of epistaxis, is the continued application of cold to the scrotum of the male, or the mammæ of the female. I have been much pleased with the action of this remedy in some very severe cases resisting the usual methods of treatment.

In making these suggestions, I would not seem to wish to detract from the value of Dr. Jackson's ably written paper, which is, indeed, the most exhaustive I have seen upon the subject. My desire is, simply, to bring before the profession a remedy which, I trust, will do as good service for others as it has for me.

BIBLIOGRAPHY.

A TREATISE ON THE FUNCTION OF DIGESTION; ITS DISORDERS AND THEIR TREATMENT.

BY F. W. PAVY, M. D., F. R. S.

Fellow of the Royal College of Physicians, &c., &c. Philadelphia: Henry C. Lea, 1869. Pp. 246, 8-vo.

The subject of digestion is one of unusual interest, but being so fully discussed in all the works on physiology it seems to us that it might have been omitted in this, the design of which is mainly practical. Every physician may be presumed to have read as much as he has any curiosity to read about prehension, mastication, insalivation, &c., and will consequently be apt to pass by the chapters treating of these processes without notice. Writing as we do for the busy practitioner, we shall pursue the same course.

Dysphagia is one of the troubles pertaining to the function of digestion, and it is one which has its origin so generally in mechanical causes, or in malignant disease, that practitioners are too prone to look upon it as irremediable. Dr. Pavy mentions instances in which the difficulty in swallowing depended upon causes that were easily removed. A case is cited in which Sir B. Brodie relieved a dysphagia

of several years' standing by the removal of some internal hemorrhoidal tumors. In the paralytic variety electricity has been employed with success. Where it is the result of constriction induced by swallowing corrosive agents, it may be a question to be submitted to the patient, after all other efforts at removing it have failed, whether an artificial opening into the stomach shall be made with a view to introducing food and sustaining life.

It was by such an artificial opening into the stomach, acidentally made, as all medical readers know, that the great impulse was given to modern physiological research in regard to digestion. To Alexis St. Martin all writers on this subject refer for facts which could never have been revealed except by such an exposure of the interior of the stomach as he afforded in his case. A woman in Germany has since presented to Bidder and Schmidt an opportunity of making similar observations, and by gastric fistulæ in the dog, physiologists have varied and confirmed the experiments upon the human subject. As the result of all these, our knowledge concerning digestion has been greatly enlarged. The learned Dr. William Hunter, in his lectures on anatomy, used to say: "Some will tell you, gentlemen, that the stomach is a stew-pan, some that it is a mill, and others that it is a fermenting vat; but I say that it is neither a mill, a stew-pan, nor a fermenting vat, but a stomach, gentlemen, a stomach." His more distinguished brother, John Hunter, insisted greatly upon the vital principle as the efficient agent in digestion, as in all animal functions. Great would be the surprise of these eminent physiologists if they could return to earth and see how nearly to a chemical process digestion has been reduced. Vitality is not essential to it, although one of the elements concerned in it is a product of life. There is no digestion without pepsin, but pepsin, the secretion of the stomach, is insufficient without an acid. John Hunter directed attention to the fact that the stomach is sometimes found digested after death. The gastric juice never produces any such effect during life. The explanation of Hunter was that the "living principle" protected the organ against the solvent fluid.

The explanation given to the world by our author of this curious fact is a much more satisfactory one. It is this: that the alkaline blood neutralizes the acid gastric juice. When the circulation ceases and there is no longer a stream of alkaline fluid sent through the stomach, then the gastric juice, always present in the mucous follicles of that organ, reacts upon and dissolves it as would any other digestible matter. A rabbit's ear or a frog's leg inserted into the stomach of a living dog,

is corroded by the gastric fluid, because the quantity of blood in them is not sufficient to neutralize the acid afforded by the stomach. That the stomach is not oftener found to have undergone digestion after death, is due to the fact, Dr. Pavy contends, that the temperature of the body so soon falls below the point compatible with that process. He has repeatedly caused the solution of the stomachs of rabbits by keeping their bodies at a temperature of one hundred degrees Fahr., during a single night. Parasites seem to escape gastric digestion by burying themselves in the mucous coat of the stomach. The older physiologists proved by experiments that leeches and earth-worms, when brought under the influence of the gastric juice, are digested like morsels of ordinary food.

Of vomiting our author treats at considerable length, and on account of the greatly varied circumstances under which it takes place, the subject is one of much interest to the practitioner. To allay it we must find out its cause. Ice, hydrocyanic acid, creasote, pepsin, opium or morphine, chloroform, a mustard poultice—some one of these will allay almost any vomiting which is not the result of renal or cerebral irritation. The state of the bowels also claims attention, and their regulation is necessary, not only in cases of gastric irritability, but in all the forms that indigestion assumes.

On the subjects of eructation, rumination, pain and other morbid sensations of the stomach, flatulence and acidity, the remarks are brief and generally practical. Some curious instances of rumination in man are cited from old writers, who believed that there was a double stomach in those who practiced it, and that some of the individuals at least had horns, indicating a further affinity to the bovine family. Sennert has left behind him the history of a case the origin of which he traced to the use of milk "warm from a cow." The child, according to this medical philosopher, sucked in the habit with its nurse's milk! A case is reported from Dr. Copland of a man who ruminated his food habitually. From a boy he had been troubled with acid eructations. After having reached his thirtieth year he found it impossible to resist admitting into his mouth the food that constantly gurgitated from his stomach. Being asked whether the second mastication of his food afforded him any pleasure, he replied: "Indeed, it is sweeter than honey, and accompanied with a more delightful relish!"

Intestinal digestion forms the subject of an extended chapter. In the stomach, the nitrogenous elements of food are acted upon by the gastric juice. It remains for fluids found in the small intestines to

complete the digestive process by emulsifying the fatty matters, and converting the starch into sugar. This is done chiefly by the pancreatic juice, which, however, according to the latest views, seems to be endowed with very diversified powers, taking part in the digestion of nitrogenous matters, as well as of oleaginous and farinaceous substances. What part the liver performs in the process of digestion is still undetermined. From recent experiments performed by Dr. J. H. Bennett, it appears that the bile may be dispensed with altogether in the dog for a long time without much inconvenience. In one instance the animal actually gained flesh while the hepatic secretion was for months diverted from the duodenum by a fistula.

Colic, flatulence, diarrhœa and constipation are the troubles incident to intestinal indigestion, to which the concluding chapters of this work are devoted. Of these the least is the most frequent and the most refractory. Constipation is the curse of dyspeptics. It is both the consequence and the cause of their disorder. Indigestion is induced by it, and when established, every symptom of the disease is aggravated by its continuance. To its correction the remedial efforts of the physician are to be mainly directed. And our author justly remarks, that it is the laxative group, or milder form of purgatives that is usually required in such cases, and moderate doses, repeated at short intervals, rather than larger doses at longer intervals. The kind must be determined in each individual case; but in far the larger number of instances it will be found that saline laxatives, taken before breakfast and largely diluted, move the bowels most certainly and with the least discomfort to the patient. Common salt may be taken in this way with the greatest advantage.

Dr. Pavy devotes a few pages at the close of his volume to the subject of "artificial digestion as a means of dissolving meat for producing an article of nourishment for the invalid." He is not satisfied with what Liebig has offered to the profession in the shape of beef tea, and is seeking for a process by which all the constituents of meat may be dissolved and appropriated to the support of the sick. He has hopes of being able to prepare a fluid which shall be at once palatable and eminently nutritious. He uses the same menstruum that is employed by nature for dissolving meat, and when the solution is obtained he neutralizes the hydrochloric acid by carbonate of soda, which leaves chloride of sodium or common salt as the product. This substance, on theory, leaves the stomach nothing to do. Its taste seems to be the chief obstacle to its use, but this may be overcome by

improved methods or by condiments. The agent when received gratefully by the patient, is said to afford "a sense of satisfaction to the stomach, like that which is derived from the consumption of solid animal food."

The impression left upon us, after going through this work, is the same made by the perusal of its first pages, and that is, that the anatomical and physiological details would be well replaced by matter of a more practical character. But it is a volume of decided interest, and we recommend it to our readers.

ST. AUGUSTINE, FLORIDA: SKETCHES OF ITS HISTORY, AND ITS ADVANTAGES AS A RESORT FOR HEALTH, &c.

BY AN ENGLISH VISITOR.

G. P. Putnam & Son: New York. 1869.

FLORIDA AND THE SOUTH: A GUIDE-BOOK FOR TOURISTS, INVALIDS AND EMIGRANTS.

BY DANIEL G. BRINTON, A. M., M. D.

George Maclean: Philadelphia. 1869.

These little works will attract attention at this season, when the thoughts of invalids are turned towards resorts for the approaching winter. If all be true that the English author writes of St. Augustine, it does not fall very far short of that earthly paradise of which Ponce de Leon was in search when he discovered Florida. What with its balmy atmosphere, its soft moonlight nights, its forests, flowers and fruits, it presents to the traveler who is in search of pleasure or health, a combination of attractions hardly to be found any where else on our continent. After reading the glowing descriptions of the country by this visitor, we confess we felt the keenest desire to start at once for this land of flowers. Nothing, it seems to us, could be more delightful than a winter where green peas may be had in January, and tomatoes in March—where orange blossoms, scarlet pomegranate, yellow capporelle and crape myrtle perfume the air all the year round. Of the influence of the climate upon patients with pulmonary affections, this author says:

"It is no uncommon case for consumptives to live for ten or fifteen years with but one lung, in a climate such as St. Augustine, where no bitter wind ever irritates the remaining lung, where no biting frost ever congests the respiratory organs, where the summer knows no enervating heat, or the winter any intense cold, but glide imperceptibly into each other, wafted in and out by a clear sea breeze—not keen enough to chill the most sensitive, but cool enough to be a grateful fan."

Dr. Brinton writes more like a medical man than the author of the preceding work, and his guide-book contains all the details that a tourist would seek to learn. He cautions travelers against going to Florida too early in the season. The heat is relaxing from May until October. Miasms are to be feared after midsummer, and until frosts occur. The winters are delightful, though no part of the State is entirely free from frosts. The concluding chapters of Brinton's manual are devoted to questions especially interesting to invalids—the climate adapted to their cases, and where it is to be found. For the aged all agree that mild latitudes are to be sought. Ten years may be added to the life of men at the age of sixty, says Dr. Brinton, by relaxation from business and two or three winters in a warm climate. His estimate of the climate of Florida, as one suited to invalids, is high. He quotes army surgeons in proof of its great salubrity.

"The sea coast of south-east Florida," he says, "fulfills the four conditions which make up the best climate for a consumptive. I have other testimony about it well worth presenting. It, too, comes from the same unimpeachable source—the medical statistics of the United States Army. I preface it by a fact of general interest about the whole of Florida. All know how terribly arduous must be campaigning through the swamps and everglades of that State. Yet the yearly mortality from disease of the regular army there, was only twenty-six per thousand men. The average of the army elsewhere was thirty-five per thousand."

As to the character of disease, he says:

"In Arkansas, one man in every sixteen came under the surgeon's hands, each year, with consumption, bronchitis, pleurisy and pneumonia; on the southern frontier of Texas one in sixteen, with one or other of these diseases; at Baton Rouge, one in seventeen; on the western frontier of Texas, one in nineteen; on the west coast of Florida, one in twenty-one; on the east coast of Florida, *one in thirty-nine.*"

The hints to health-seekers which close this little work are excellent, and enhance decidedly the value of this guide-book, which is one that may be recommended in strong terms to all who have thoughts of visiting Florida.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA, AT ITS TWENTIETH ANNUAL SESSION, HELD AT ERIE, JUNE, 1869.

Philadelphia: Collins, Printer. Pp. 557. 8-vo.

This is a volume which reflects honor upon the Society from which it emanates. It contains much matter of great interest. The reports of committees are drawn up with singular ability, and show the members of the Society to be working men, with learning and training in their profession, and zeal to promote its highest interests.

The address of the President, Dr. John Curwen, has for its subject Mental Insanity, and is a far more readable production than most inaugural addresses, for the reason that it is thus devoted to a specific subject. It is a sensible and instructive paper, on a subject concerning which it would be difficult to bring out anything new.

The first report is on Intemperance as a disease. Dr. Joseph Parrish is chairman of the committee, and whether the report is from his pen or not, it is a very able one. Intemperance, in the judgment of the committee, is not a disease, and in that opinion we fully concur. Still the habit is one which calls for treatment in institutions for inebriates. The committee reports that from thirty to fifty per cent. of cases of alcoholic intoxication are curable, and that ninety per cent. of opium cases may be cured.

The second report is on the admission of patients into insane asylums, and suggests some wise modifications of the plan which has been in operation in all the asylums of Pennsylvania ever since Dr. Franklin was one of the managers of the Pennsylvania Hospital.

The report on the inspection of drugs is a valuable one. Physicians and patients are alike interested in securing genuine medicines, and we shall be glad if our Pennsylvania brethren can bring about a system by which spurious drugs may be driven out of the market.

The "Training of Nurses" is the subject of a report from the practised pen of Prof. Gross. We confess that it interests us less than any other in the volume. Is it true, as the doctor, we think, somewhat dogmatically asserts, that "mothers, in ninety-nine cases out of a hundred, are totally ignorant of the first principles of nursing, and therefore wholly unfit for the discharge of so sacred a duty?" If it is, and if it is also true, as he affirms, that "good nursing is often in-

comparably more valuable to a sick man than the most skillful medication"—that "it is the right hand of the medical practitioner," we are at a loss to account for the recovery of so many sick people. If "good nursing is half the battle," and bad nursing prevails in ninety-nine cases out of every hundred, it is a wonder to us that the sick are not nearly all killed.

A case of Rupture of the Uterus, reported by Dr. J. McConaughy, follows the report of Prof. Gross.

We like the next report. We accept its conclusions. It is a report on the "Use of Stimulants by the Profession," and the authors condemn, in strong terms, that practice which in late years has become well nigh universal, of prescribing alcoholic stimulants in every variety of diseases. We think the advocates of this wholesale use of stimulants will find it difficult to answer the argument of this admirable report.

Dr. Benj. Lee describes, in the next paper, a new instrument for the treatment of lateral curvature of the spine; and to this succeed the reports of County Societies. These reports are full of interest, having been laboriously prepared. Their authors have studied carefully the medical matters of their several counties, and present to the State Society a body of statistics which will prove of great value to the medical historian. This plan of bringing out the medical topography and medical statistics of the various counties of a State strikes us as worthy of general adoption. A mass of most instructive matter might in this way be accumulated by the Medical Societies of the several States.

A COURSE OF PRACTICAL CHEMISTRY, ARRANGED FOR MEDICAL STUDENTS.

BY WILLIAM ODLING, M. B., F. R. S.

Fellow of the Royal College of Physicians, Lecturer on Chemistry at St. Bartholomew's Hospital. Henry C. Lea: Philadelphia. 1869. Pp. 261. 12-mo.

The object of this work is fully set forth in its title page. But the medical students for whom it was written are not those who are in attendance upon the lectures at the medical colleges. It is not a text book, but a manual for the laboratory, or for the practitioner who wishes to apply chemical science to the solution of problems arising in

his practice; and for these purposes it has been prepared with admirable judgment. It is at once concise and intelligible. With this volume in his hand the physician is prepared to determine what is present in abnormal urine, and to make such an investigation as may satisfy him of the presence or absence of any suspected poison. Every student of medicine should place it in his library, to recall what he may remember but faintly of the chemical course, and more especially to guide him in those investigations which he will have occasion to make after he enters upon practice.

THE MEMBRANA TYMPANI IN HEALTH AND DISEASE—ILLUSTRATED BY TWENTY-FOUR CHROMO-LITHOGRAPHS.

DR. ADAM POLITZER,

Of the University of Vienna. Translated by A. Matthewson, M. D., and H. G. Newton, M. D., Assistant Surgeons of the Brooklyn Eye and Ear Hospital, Members of the American Ophthalmological and Otological Societies. New York: Wm. Wood & Co.

This volume certainly contains all that can possibly be said in reference to the minute organ in question. The author considers all the appearances and conditions, in reference to their diagnostic value especially, and his careful elaborations will be found extremely useful as a guide to the objective diagnosis of aural disease.

The nature of the book is such that a synopsis would afford little profit to the reader; but as a whole, we recommend it to those who desire to be *au fait* on aural science and art. A few practical points may be noticed, however. As a substitute for the more costly artificial ear-drum, a disc of thin vulcanised rubber, with a small wire from the centre an inch or more in length is suggested. Open perforations more than a line in diameter rarely heal. Calcareous deposits in the membrane may exist without impairing the hearing. They are found sometimes in ears supposed to be normal. In chronic inflammations of the middle ear, as an astringent, a solution of sulphate of zinc is preferred, to be used by allowing the external meatus to be filled with it for ten minutes twice a day. When no perforation exists, the blowing of weaker saline solutions, such as chloride of sodium, muriate of ammonia, &c., through the eustachian catheter is recommended. In

acute inflammation of the middle ear, when the pain is excessive and persistent from retention of secretions, the author punctures the membrane with a cataract needle. The relief is speedy, and the perforation soon heal.

The translators are worthy of praise for the able manner in which they have done their work. W. H. R.

A TEXT BOOK OF PRACTICAL MEDICINE, WITH PARTICULAR REFERENCE TO PHYSIOLOGY AND PATHOLOGICAL ANATOMY.

BY DR. FELIX VON NIEMEYER,

Professor of Pathology and Therapeutics, Director of the Medical Clinic of Tubingen. Translated from the seventh German edition by Geo. H. Humphreys, M. D., and Chas. E. Hackley, M. D. New York: D. Appleton & Co. 1869. Two volumes. Pp. 731, 761.

Another work on practice! We doubt not many of our readers will join us in the exclamation, and think of the complete works of Wood and Aitken, the "system" of Reynolds, and the admirable and unequaled compendium of Flint, as sufficient in this line. Yet we have no regrets at the appearance of another candidate for professional favor, but rather find good reasons for giving this new comer a cheerful and hearty welcome. In no part of the world is clinical medicine studied with more ardor, more patience and pains-taking perseverance than in Germany; no where are the effects of remedies being submitted to a more minute scrutiny; nowhere else is elementary pathology undergoing a more thorough re-investigation, and, we may add, passing through a greater revolution. It is well, then, to have a representative of this modern German school in our language, and thus accessible to all. The author is a worthy representative of that school; his reputation as a clinical teacher is among the best of his country, and the fact that this translation is from the seventh edition is sufficient evidence of the estimation of the book and the man at home.

The work is a complete and methodical treatise upon practice. For the information of those who may not have an opportunity to examine it, we will say that it begins with diseases of the throat, passes on to those of the respiratory and digestive organs, and ends with the constitutional diseases. There is to be noted, then, an absence of any introductory treatise upon general pathology, such as prefaces the

works of Wood, Aitken and Bennett. On the other hand, we find several subjects not generally included in works on practice with us, among them we may mention diseases of the uterus, ovaries and vagina, virulent and non-virulent inflammations of the male urethra, with some others.

On taking up this work we turned with especial interest to the chapters upon tubercle and consumption, and we presume most of our readers have read something of the new doctrines of Niemeyer in regard to phthisis, and are interested in his division of the disease into several distinct ones, which are distinguishable always pathologically, and in many instances clinically also. The whole subject of the pathology of tubercle is undergoing a re-examination, a renewed study of it being stimulated by Villemin's discovery, in 1865, of its inoculability, and although much yet remains unknown, although there is far from being harmony among pathologists, this much has certainly been done: the reign of the doctrines of Lænnec has been overthrown—much has been added to our knowledge—and, to speak after the manner of politicians of the day, a "new departure" has been taken for the final attainment of the whole truth.

It is singular how long the doctrines now current have maintained sway—singular, when it is known that in many points they do not harmonize with the observation of the ancients, nor with the accepted doctrines of any other period of medical history before the present century, nor with the results of modern research. Lænnec was the founder of nearly all the received views as to tubercule, and his renown as the founder of physical diagnosis, aided by the influence of Louis, fixed them upon the profession. Yet there were always dissenters, and during the lifetime of the originator of this school, Broussais opposed them, and so did Andral, and we are surprised to find in this work (vol. i, p. 225) Andral termed an "unqualified adherent of Lænnec's," because Andral recognized the origin of phthisis in inflammation, both bronchial and pulmonary, and also in hæmoptisis, all of which were denied by Lænnec, as now—the diathesis being the sole, at least the chief factor in the origin of the disease.*

The more recent school began with Virchow, and the author is one of its chief teachers. The term tubercle is now strictly limited to miliary tubercle; the diffuse, cheesy, yellow matter called "tubercu-

* The student who would master the history of the doctrine of tubercle from Hippocrates down to the present time, should read, "Die Tuberculose, die Lungenschwindsuch und Scrofulose. Nach historischen und experimentellen studien bearbeitet von Dr. L. Waldenburg." Berlin: 1869.

lous," is a product of inflammation, and not tubercle at all. The miliary tubercle may, and frequently does, undergo "caseous degeneration," and is then, also, yellow and cheesy, but it is circumscribed, either miliary, or in larger nodules formed by the aggregation of miliary. This "caseous degeneration" is not peculiar to tubercle, any pathalogical product may pass through it—Virchow has found it in the middle of malignant growths—but the exudations of pneumonia are especially prone to it, and of these are the diffuse, yellow, cheesy deposits in the lungs, called with us "tubercular deposits," and by the softening and breaking down of which cavities are formed, and thus arise by far the greater proportion of cases of consumption.

These, briefly stated, are the doctrines of the modern German school of pathologists and clinical teachers. Their important bearing upon the doctrines current with us, as to the origin, course, treatment and prophylaxis of consumption is seen at a glance; they effect, if substantiated, nothing more nor less than a complete revolution in medical doctrines.

As we desire to give our readers an opportunity of judging as to the merits of the author and the work, we will quote a few paragraphs in relation to some of these points. Speaking of the fact that "modern physicians and clinical teachers only recognize one form of consumption," the tuberculous, he says:

"I have long contested this doctrine, and, upon various occasions, have declared, in direct contradiction to it, that destruction of the pulmonary tissues, the establishment of cavities and consumption of the lung, are much more frequently a result of chronic inflammation than of tubercular deposit." (Vol. i., p. 206.)

Very different is the consumption dependent upon tubercle. This may be, of course, acute or chronic; the former is so similar in its clinical features to typhus that, we are told, the most experienced often err in diagnosis:

"The development and progress of a *tuberculous* consumption differ essentially in type from anything hitherto described, and its symptoms are so characteristic that the diagnosis of this form of consumption (which is not common), is, as a rule, easy. In the first place, it has no precursory catarrh. The fever and wasting are not deferred until the sputa become profuse and purulent, the tubercular eruption being accompanied by a marked elevation of the temperature and rapid emaciation of the body from excessive calorification. If we are informed that the patient did not begin to cough and expectorate until several weeks after he had begun to decline in strength, and to grow pale and thin, there is always reason to fear that he has tuberculous consumption." (P. 237.)

What is the connection between these two pathalogical products, the caseous matter of pneumonia and tubercle? The view is held in Germany that the latter is always *dependent* upon the former, that tubercle is therefore never a primary but always a secondary disease. Niemeyer does not go so far as this, but expresses himself cautiously:

"Although the consolidation and destruction of the pulmonary tissue in consumption is mainly a result of inflammation, yet the frequent co-existence in phthisical lungs of the products of chronic pneumonia and tubercle renders it improbable that the presence of the latter should be purely accidental, and suggests a causative connection between tubercle and the inflammatory lesions. According to the common opinion, this connection is, that tuberculosis is the primary affection to which the pneumonic process is secondary and dependent. It can not be denied that this view is right in certain cases; in a great majority of instances, however, the converse is true; the tuberculosis supervening as a secondary process upon a pre-existing pneumonia. It is, indeed, rare for tubercles to form in a lung which does not contain products of chronic inflammation." (P. 27.)

Now, in regard to the etiology of phthisis there are three points of this creed to be especially noted:

I. The denial of the indispensible necessity of a peculiar diathesis, and the recognition of its indirect inheritance, *i. e.*, of its being caused in the offspring by the existence even of pure debility alone of the parent:

"I regard the wide-spread doctrine that consumption is solely dependent upon a diathesis, from which it proceeds independently of all so-called "exciting causes," as equally gratuitous and dangerous." (P. 214.)

"The tendency to consumption is, in many cases, congenital. When the congenital tendency is due to the fact that the parents were consumptive at the time of begetting the offspring, it may properly be spoken of as inherited. But it is not (as is often asserted) the malady which causes the inheritance, but the weakness and vulnerability of constitution which had already laid the foundation of the consumption in the parents, or which had arisen in them in consequence of that disease. The hereditary constitutional feebleness of the offspring may proceed from other diseases of the parent instead of consumption. Parents afflicted with other exhausting maladies, or who are ruined by debauchery, or who are far advanced in years, are quite as liable as consumptive parents to beget children who come into the world with a predisposition to consumption." (P. 213.)

II. A distinct recognition of the occurrence of hæmoptisis in persons with healthy lungs, and the dependence of consumption upon the hemorrhage:

"Many physicians do not hesitate to accept a brisk hæmoptisis as a sure sign of incipient, or even established tuberculosis, although the patient may present

no symptoms, either subjective or objective, of disease of the lungs, and when, soon after the occurrence of hæmoptisis, signs of consumption have arisen, they confidently assume that the bleeding has been caused by the presence of tubercles, or by the process of its deposit in the lungs.

"I must earnestly protest against this opinion, as altogether unwarranted, and fraught with danger to the patient. * * * * * * *

"In the very great majority of cases in which the first attack of hæmoptisis has not been preceded by either cough, dyspnœa, or other signs of pulmonary disorder, the lungs are free, and by no means the seat of tubercular deposit, at the commencement of the bleeding." (P. 143.)

Upon this point the author is in harmony with all authorities in medical history down to the beginning of the present century; the doctrine was only departed from under the influence of Lænnec, and is now, by the help of others besides Niemeyer, being re-installed in its ancient sovereignty.

III. The direct origin of phthisis in repeated catarrhs is taught:

"Even a simple, genuine catarrh may extend into the air vesicles in a person of apparently perfect health and vigor. Healthy men should never feel sure that they will not die of an acute or chronic catarrhal pneumonia, proceeding from a cold, and resulting in caseous infiltration and destruction of the pulmonary substance," P. 210.)

"Whenever there is the slightest suspicion of a predisposition to consumption, every catarrh, no matter how slight, is to be treated with the utmost care, which is not to be relaxed until the catarrh is entirely well. * * * Many patients fall a victim to the deeply rooted prejudice that a neglected catarrh never leads to consumption." (P. 241.)

These extracts will suffice to show how our accepted doctrines in regard to tubercle and consumption are assailed, and how sweeping is the revolution proposed.

We must pass on to some other points.

In therapeutics the author will be found more reliable than fertile as to variety of means; more sceptical than over-reliant as to the power of medicines to control morbid processes. The reader will not unfrequently find some of his therapeutic idols overthrown by a rude shock and disposed of with brief ceremony. On the other hand, several remedies not usual with us are frequently prescribed, and we can afford to balance against his scepticism the confidence which we can not fail to feel when such an observer and teacher states a medicine to be efficacious. But whatever doubts he may entertain and express as to the powers of medicines, we speedily become convinced, as we read his pages, that they are neither idle whims nor prejudices, but the direct offspring of clinical experience. In the preface he takes occa-

sion to lay down the principles which should guide us in judging of the action of medicines, and they are the only correct ones, too often overlooked, too often forgotten. Years ago he says he "declared it idle to hope for the time when a medical prescription should be the simple resultant of a computation of known quantities;" he laments the tendency to seek aid from physiology, pathology and chemistry, all of which yield now and then "an ingenious suggestion;" believes the study of the effect of medicines upon animals useless, or at least as far inferior to the one and only mode of studying therapeutics, observation at the bedside. "The empirical method of investigation is the only rational and proper one for the study either of therapeutics, or of any other department of natural science." These, as we said before, are correct principles, this is laying a sure basis, and in urging these views he is in harmony with such renowned and unsurpassed clinical teachers a Trousseau and Graves.

We will begin by illustrating his scepticism, and quote from the treatment of the effusion of pleurisy where, we think, generally, with us, the treatment would be pretty active to promote absorption and free the chest of the water-logged patient:

"Remedies for the promoting of re-absorption of the effusion deserve little reliance. It is, indeed, questionable whether it be possible, by any therapeutic means, to bring about the conditions upon which the absorption of pleuritic effusion depends. If, after the inflammatory symptoms have subsided, the effusion remain undiminished, all medication both external and internal, is to be rejected, and the application of blisters is of very doubtful use. * * * The action of the diuretics, of which bi-tartrate of potash, boracic cream of tartar, and the juniper-berry are the best, is very uncertain, so that we can not promise ourselves much from their use, and the pernicious effects of the drastics upon digestion and assimilation forms a serious objection to their employment. * * * * An attempt may also be made to excite re-absorption by the outward and inward administration of iodine, which has a well-known reputation as an absorbent. I have seen such remarkably rapid absorption take place under the internal use of syr. ferri iodidi in conjunction with the external application of a weak compound solution of iodine upon the affected side of the chest, that I can not help regarding the beneficial action of this prescription as probable, although I do not regard it as proved." (Pp. 272, 273.)

The "antiphlogistics" are not in much favor with him; he is far from being a "bleeder" in the old sense of the term. Neither in pneumonia nor pleurisy does he believe venesection has power to cut short the progress of the disease. The former, indeed, we are told, is markedly "cyclical" in character, a fact not recognized, "owing to

the active manner in which we used formerly to attack the disease, whereby its typical course became deranged:

"Whichever one of the current theories upon inflammation we may adopt, none of them even partially upholds the efficacy of venesection in pneumonia. The fact is, unfortunately, forgotten, that the most intense hyperæmia, by itself, can not occasion croupous inflammation."

"I had rather that any one, dear to me, and sick of pneumonia, were in the hands of a homœopath than in the hands of a physician who thinks that he carries the issue of the malady upon the point of the lancet." (P. 184.)

Yet he does not banish blood-letting from our list of remedies, but advises resort to it sometimes, and especially local bleeding. In this he resembles Bennett, who, while denying its power to control inflammation, yet finds in it a speedy relief for some of the distressing symptoms. Thus in pleurisy:

"At the commencement of an attack of pleurisy, however, I can not sufficiently recommend the use of cold and of blood-letting. * * * When the patient dreads the application of cold compresses, or if the latter do not relieve the pain and dyspnœa in an hour or two, a tolerably large number of leeches, or cut cups should be applied; and if the pain, which is almost always relieved by the depletion, recurs in the course of a day or two, we should not hesitate to repeat the local blood-letting until the relief becomes permanent." (P. 271.)

In pneumonia he would bleed under the following circumstances:

"Whenever the pneumonia has attacked a vigorous and hitherto healthy subject, is of recent occurrence, the temperature being higher than one hundred and five degrees Fahr., and the frequence of the pulse rating at more than one hundred and twenty beats a minute.

"Whenever the great frequence of respiration in the commencement of a pneumonia can not be traced to fever, pain, and [or?] to the extent of the pneumonic processes alone, *as soon as a serous foamy expectoration appears, together with a respiration of forty or fifty breaths a minute*, and when the rattle in the chest does not cease for a while after the patient has coughed.

"The third indication for bleeding arises upon the appearance of symptoms of pressure upon the brain, not headache and delirium, but a state of stupor or transient paralysis." (P. 186.)

We find the author to be no more of a "mercurializer" than bleeder. He does not hesitate to express his doubts as to any "antiphlogistic" power of calomel. He nevertheless uses it, in membraneous croup for instance, and supports his practice with very similar reasoning to Flint. There is high authority in favor of it doing good—the disease is rapid and very generally fatal—we are justified in using remedies which promise even but little where we are wanting in those more reliable.

He is far, however, from denying beneficial effects from the use of calomel; thus in bronchial and intestinal catarrhs of teething children, he says:

"Incomprehensible as the beneficial effect of this drug upon either of these disorders may be, yet experience has affirmed it so fully that we can not have any hesitation in making use of the remedy. We give small doses of from the sixth to the quarter of a grain, three or four times a day." (P. 79.)

He is an advocate of its use in typhoid fever:

"After the accurate observations of Wunderlich, we can scarcely doubt that by this remedy we may, in some few cases, cut short the disease (according to Wunderlich one or two gr. v. doses are enough), and that in the great majority of cases where this remedy is given during the first week, and before the occurrence of much diarrhœa, the course of the disease is rendered milder and shorter. The experience of Pfeiffer's clinic, as well as my own, perfectly agrees with Wunderlich's." (Vol. ii., p. 595.)*

This is undoubtedly a just estimation of mercurials; their power to control inflammation, to promote the secretion of bile more than doubtful—certainly, in the language of the Scotch verdict, made to escape acquittal where conviction is impossible—"not proven"—yet their value in many deranged conditions and diseases established upon the firm basis of clinical observation. We are glad to find, then, in Niemeyer another author whose influence will tend to check the too frequent resort to these valuable but not harmless remedies, and we trust his influence may be potent with those gentlemen who always have their patients upon "small doses of calomel and ipicac," who always talk of "rousing the secretions!" There are some of them left in this section. If any of them are troubled with an "eclectic" rival, let us remind them that the chief corner stone upon which has been built up that school of dissenters, is the *abuse* of mercurials by regular practitioners. The truth may be unwelcome, but it must out!

In the treatment of pleurisy we have seen that he recommends cold applications to the chest. This is one of the remedies which will be new to the profession generally here, and a remedy to which we think the laity will have to be "educated" before we can resort to it much! In pneumonia they are one of his chief measures, and are believed to render more essential service than the palliation which generally speedily follows their application:

* The abortive mode of healing typhoid fever by calomel has had many adherents in Germany, and the general treatment by small doses, repeated, for their laxative effect, has the high authority of Lebert in its favor. See Hondbuch der practischen medecin, B. I., s. 163, Tubingen, 1863; and *Amer. Jour. of Med. Sciences*, July, 1864. P. 183.

"I have made extensive employment of cold in the treatment of pneumonia, and, relying upon a large number of very favorable results, can recommend this procedure. In all cases I cover the chest of the patient, and the affected side in particular, with cloths which have been dipped in cold water and well wrung out. The compresses must be repeated every five minutes. Unpleasant as this procedure is in almost all cases, yet even after a few hours the patients assure me that they feel a material relief. The pain, the dyspnœa, and often the frequency of the pulse, are reduced. Sometimes the temperature goes down an entire degree. * * * *

"In the hospital at Prague every pneumonia is treated with cold compresses, and, according to the statements of Smoler, it is exceptional for a patient not to feel material relief from this treatment." (Vol. i., p. 185.)

We are, then, "advancing backwards" to use a Hibernianism, towards the teachings of Currie. But we do not speak in jest; the use of water as a remedy has been neglected by us almost to the extent of founding a school based on its exclusive use, and we hope to see a revival of its reputation. There is high authority, and abundant clinical evidence in favor of the value of cold water and ice in the treatment of visceral inflammations.*

We will add one more quotation, favorable to the use of a remedy that we may not convey the impression that our author is altogether a sceptic. Digitalis is a medicine in great favor with him; in fevers and inflammations it reduces the temperature and the pulse without lowering the strength of the patient. In the following, from the article on Dilatation of the Heart, it will be seen that he fully commits himself upon the disputed question as to the medicine being a cardiac tonic:

"Prepossessed by the doctrine of Traube regarding the effect of digitalis upon the contractile force of the heart, and the tension of the aortic system, I formerly regarded the use of this remedy in dilatation of the heart as unnecessary, and even dangerous. Of late years I have convinced myself, from a great number of observations, that digitalis is a very efficient means of temporarily strengthening the heart's contractile powers, and of thus allaying cyanosis and dropsy. In dilatation of the heart, digitalis, when combined with an exclusively milk diet, is an invaluable remedy. I have repeatedly succeeded in obtaining complete removal of dropsical effusions of great magnitude, and produced considerable temporary relief by this mode of treatment." (P. 325.)

We can not continue our quotations, or extend our remarks; yet there are so many interesting and important points marked for no-

*See, for instance, Lectures on the Diagnosis and Treatment of Functional Nervous Affections, by Brown-Sequard, p. 50, where the "marked benefit" obtained by Michaelis, Helm and Kiwisch, in "inflammation of the viscera or serous membranes of the chest and abdomen," is alluded to.

tice, that we find it as difficult to break off as we do to express an opinion of the merits of the work without laying ourselves open to the charge of exaggeration. Without drawing any invidious comparisons with other works of our own or foreign countries, we may say that it is a most excellent and valuable treatise, bearing upon its pages the marks of close observation, great clinical study, sound reasoning and good judgment. If the author now and then destroys our confidence in a favorite medicine, he strengthens it in many others—if he demolishes favorite theories, it is by showing that they are inconsistent with the facts gained by recent progress—and if he often confesses the powerlessness of our art, we can not help feeling that in whatever there is to do, he is a safe guide and sound counselor.

We must add that the translation is exceedingly well done; there is an entire absence of awkward sentences, and of that obscurity of the author's meaning so often seen in translations, and which arise from too close a verbal rendering of the text. The publishers' work has been done, too, in excellent style. J. C. R.

CORRESPONDENCE.

NEW YORK CITY, OCTOBER 16, 1869.

DEAR JOURNAL: In the course of time, the medical lecturing season has again come round, and at the various schools the bustle and excitement plainly indicate the commencement of a new campaign. The old war-horses are buckling on their armor, and those who, this season, make their *début* upon the lecturing stage, await with high hope and eager desire, although with palpitating hearts, the signal for the strife. The city is full of students. Each year, our great metropolis is deservedly increasing in popularity with those who contemplate the study of the healing art, and our colleges were never in a more flourishing condition.

Our advantages for clinical instruction, and for practical study at the bedside of the sick—the only true way of making a thorough physician—are unsurpassed by any city in the world; and these advantages are constantly on the increase, by the erection of new hospitals, asylum and dispensaries. And thus a double good is effected, new

homes for the relief of the suffering and the afflicted are secured, and the medical student has opened to him new ways and broader opportunities for increasing his amount of practical information and useful knowledge.

A new Eye and Ear Infirmary is about to be opened at No. 233 East Thirty-fourth street, between Second and Third avenues, and is to be called "The Manhattan Eye and Ear Hospital." A hospital building is to be erected at some future day. The directors of the institution comprise some of our most distinguished business and medical men. There have been elected as surgeons to the hospital, Drs. Agnew, ——— and Roosa. This is an institution that has long been needed in the upper part of the city, and will, without doubt, enjoy a great popularity, and prove to many an inestimable blessing.

Of the new hospitals, the *Medical Gazette* says:

"On the 18th of September, 1866, the corner-stone of the new German Hospital, which is located on the plat of ground bounded by Seventy-sixth and Seventy-seventh streets, and Fourth and Lexington avenues, was laid by Mayor Gunther. The erection of the building has proceeded slowly, owing to the want of funds, and even at present but one of the two pavillions of which the hospital is to consist, has been completed. Although the establishment is known as the German Hospital, the subscription list bears the names of many of our native-born citizens, and it is intended that persons of all countries, colors, creeds and conditions shall be received there, so far as the capacities of the building will permit

"*The Roosevelt Hospital.* Ground was broken a few days ago for the erection of the Roosevelt Hospital. The location chosen is the block bounded by Fifty-eighth and Fifty-ninth streets, and Ninth and Tenth avenues. It will be remembered that the late Mr. Roosevelt left the sum of one million dollars to found and maintain a hospital in this city. The work of designing a suitable building has been entrusted to Mr. Carl Pfeiffer, the well-known architect. It is probable that the corner-stone will be laid at the end of next month.

"*The New York Hospital.* The managers and the trustees of the New York Hospital have purchased a plat of ground at the corner of Twenty-ninth street and Ninth avenue, on which a building will be erected covering a space one hundred feet square. It will be used as an adjunct to the principal building at Bloomingdale. Excavations have been commenced, and the architect, Mr. Carl Pfeiffer, is engaged in preparing the plans."

The corner-stone of a new hospital, St. Michael's Hospital, has recently been laid in the neighboring city of Newark, New Jersey, and the erection of the building is now in active operation. It is to cost forty thousand dollars: will be of red brick, with trimmings of brown stone, and three stories in height. There will be accommoda-

tions for one hundred and fifty patients, the wards being twenty-two in number. The dimensions of the building will be ninety-six by forty-eight feet, and a rear extension twenty-four by forty-two feet, for the chapel.

On Monday, October 4th, the regular course of lectures commenced at the College of Physicians and Surgeons. The introductory address was delivered by Professor McLean, and was listened to with marked interest by a large audience.

The University Medical College is now comfortably settled in their new quarters on Twenty-sixth street, opposite Bellevue Hospital, and all things are now moving onwards prosperously. Students are flowing in: new blood and youthful zeal have been admitted to lecturing corps: and everything indicates renewed life and activity. The University will gain immensely by its change of base. The introductory lecture to the ensuing winter course will be delivered next Monday night, by Professor Draper.

Bellevue Hospital Medical College, and the Female Medical School, are also once more in active operation.

The New York College of Pharmacy, that most important institution, convened its fortieth annual course of lectures in the University building, on the 4th. The lectures on chemistry are delivered on Wednesday and Friday evenings, by Professor C. F. Chandler: on materia medica and botany, on Monday and Friday evenings, by Professor ———, and the lectures on Pharmacy on Monday evenings, at eight o'clock, by Dr. Edward R. Squibb.

During the term, the second-course students have abundant opportunities afforded them of witnessing many of the operations spoken of by the lecturers, conducted at the various manufacturing establishments, on an extensive scale.

Yours very respectfully,

JAMES B. BURNETT, M. D.

MISCELLANY.

ON THE PATHOGENESIS AND TREATMENT OF STERILITY IN THE HUMAN FEMALE.

BY WM. C. ROGERS, M. D., OF NEW YORK.

Concluded from the October Number.

Sometimes, on the same day, one bougie, after remaining in a little while, may be withdrawn, and a larger one passed, but not often. Strictures of the os internum uteri, like strictures of the urethra in the male, are irritable and capricious, and must either be coaxed or taken when in good humor.

If it is going in, the bougie must pass in quickly, almost precipitately. I think I understood Dr. Kammerer to say that he also made use of steel bougies of graduated sizes. All I have to say about this is, that safe as these may be in skillful hands, and successful—they have not been so in mine—they cause pain, and, I think, excite irritation and spasmodic contraction in the upper os, which makes it difficult to pass them through it; and if pushed in forcibly, might, I should think, do mischief. I can conceive of cases in which it might be necessary to incise the outer os, or to dilate the cavity of the neck with sponge or laminaria, in order to introduce the bougie; but when a hysterotome of any kind, a sponge-tent or slip of laminaria can pass, a slender-pointed, flexible, gum-elastic bougie, I should think, could be passed also, and with time and patience effect the object. Try to learn the course of the stricture, pass in the bougie in it, firmly and quickly, through the os, *au fond*. If it means to go, it will then, and may be retained for a longer or shorter time. I believe it would be well to leave it in for some hours. If you do not succeed after a short trial suspend the operation till a later day. If the stricture is, or becomes irritable, the more you try, the less likely you are to succeed. Success is either null or immediate. When complete dilatation has been obtained with a bougie of large size, the passage of it becomes easy, but it must be repeated at intervals; after menstruation; perhaps best in the true inter-menstrual period (ten or fourteen days after), for if the women should happen to have conceived, abortion would almost inevitable follow the introduction of the bougie into the uterine cavity. The bougie should be new, firm, and not too flexible, or it will double up and not pass. Bougies that have been used a few times are liable to this objection. If, after withdrawing the bougie, a laminaria tent could be introduced, and left *à démeure* some days, it

would be well; but it is not easy or always possible, and the bougie alone must be depended upon.

All these operations have for their object the facilitation of the menses and removal of dysmenorrhœa, and the allowing of an easier and freer entrance to the spermatozoa. But beyond this is the aid afforded to methods intended to effect the change in the uterine secretions necessary to insure the vitality of the spermatozoa. If this can not be done, our researches and conclusions upon this point in the pathology of sterility will be of no avail. It is to be effected, as far as I know, by cauterization, chiefly with nitrate of silver, introduced in the solid form, or by injection, into the cavity of the neck and uterus; although other substances are employed. Dr. Sims' pamphlet is unfortunately silent on this point. Courty ranks among curable causes of sterility, simple or complicated imperforation, congenital or accidental narrowness of the uterine orifices, the frequent cause of mechanical dysmenorrhœa; and says, by dilatation and double incision of the neck, he has obtained unquestionable cures of more than fifteen sterile women, whose fecundation followed the treatment in from three to five months. Flexions, when very decided, are causes of sterility, and uncurable when held down by adhesions; and he does not partake of the opinion of Mr. Joulin, on the small importance of deviations of the uterus as causes of sterility. He thinks that the glans penis should, at the moment of ejaculation, be opposite to the meatus uterinus; and that even a temporary restoration to the natural position (p. 1008) suffices sometimes for fecundation; and that after this, and after dilatation even, no time should be lost in attempting fecundation, and that certain positions of the *female in coitus* are preferable in some cases to others. Hypertrophy even of one lip, and conicity of the neck, congestion, inflammation, granulations and fungosities, are all obstacles to fecundation. This appears to be also the opinion of Kammerer, of C. Mayer of Berlin (1856), whom he cites in his paper.

In Dr. K.'s patients, retroversion (twenty), anteversion (eighteen), anteflexion (eighty-three), retroflexion (seventy-one), hypertrophy (sixty-five), small os (twenty-four), stricture of internal os (thirty-five) were the commonest lesions, and seven-eighths of the whole number were affected with some form or other of uterine catarrh. If the views which I have herein presented, relative to the occasional and frequent destructiveness of the accompanying secretions to the spermatozoa be correct, some of the sterility in them may be fairly, I think, attributed to it, and some of the successes to the means employed for its removal. Courty thinks that very abundant leucorrhœal secretion may expel the semen from the uterine cavity, when it has once entered, and the very viscid, tenacious mucus which plugs the os oppose its entrance.* Vaginal, he thinks less injurious than uterine mucus, the latter of which may have a very injurious influence upon the relatively very small quantity of sperm which enters the uterine cavity (1012). He adds: In a great number of cases the great abun-

* Sometimes the semen is all instantly thrown off by the vagina, by too soon rising after coitus. (Sims 12).

dance of the leucorrhœa, and even its purulence, does not prevent fecundation.

Courty differs from Joulin as to the effect of a want of orgasm on the part of the female. He thinks it may occur without being felt or expressed, that it is capable of development and education, and hence fecundation seldom occurs until after some months (twelve, eighteen, twenty-four and thirty-six) of married life; again, in some cases of sterility, coinciding with perfect general health of the genitals, and only attributable to absolute defect of orgasm, even in women very desirous of becoming mothers; or awaking, together with fecundity, after a lapse of years, and thence pursuing the natural course of its evolution; a new lover, or husband perhaps, determining the result. But it is equally certain that many entirely cold and passive women are extremely fecund. Sterility on the other hand, may depend upon a totally opposite condition. Menorrhagia (a precocious abortus), or inter-menstrual menstruation, by its tendency to reproduce itself when the ovum is recently fecundated, becomes an obstacle to gestation. The number of causes, single or allied, upon which sterility may depend, should certainly render us sober of promise to women in whom it is only relative, and affords hope of recovery; while the very frequent realization of that hope, under well-directed treatment, should warrant a patient and continued effort on the part of both patient and physician.

Among the chief means of correcting the morbid conditions of the uterine mucus membrane upon which noxious secretions may depend, may be said to be cauterizations of the mucous membrane of the neck and cavity, and certain intra-uterine injections. The caustic most commonly in use is nitrate of silver, used externally to ulcerations and abrasions of the neck, and internally applied to the mucous membrane of the neck and cavity, to repress granulations and fungosities, to diminish hypersecretion, and by modifying the morbid condition of the glands which produce leucorrhœa, change the character of the secretion itself into one less injurious to the vitality of the spermatozoa. Upon this subject M. Courty says: "The cauterization may be performed, after dilatation, with a camel's hair brush, but as this is an unenergetic method, the idea has arisen to introduce the solid nitrate and apply it directly over the surface."

Various porte-caustics have been devised for this purpose, intended to secure the caustic from being broken off within the cavity. "But," says M. C., "having myself met with the accident and satisfied myself not only of its harmlessness, but of its happy results, I fix a piece of solid nitrate of silver, of suitable length, in an ordinary platinum porte-nitrate with a long handle; place the patient in supination; introduce a wooden speculum; examine very gently with a sound the direction of the utero-cervical canal, and immediately after carry the crayon of nitrate of silver even into the uterine cavity." This is easily said, but is it quite as easy to do? M. C. continues: "Instead of endeavoring to withdraw it intact, I use, on the contrary, all my endeavors to precipitate it, to break it off, which is not very easy to do, and I abandon

it in this cavity (p. 265). The vagina is then tamponed with a cloth, wetted in a solution of salt in water, sustained by a second one, and the speculum withdrawn." "I can say," he adds, "that I do not know any more heroic means than this *little* operation, which it is not often necessary to repeat, in the treatment of obstinate leucorrhœa. I have not observed serious accidents to follow it. Once only I saw atrocious pains, not yielding to baths, antispasmodics nor narcotics." The neck having swelled, and the os being occluded, he incised it some hours afterwards, to facilitate the expulsion of the mucus and caustic itself. In all the other cases, the pains, "even very strong in a small number of women," have always yielded, however violent, to general and local antispasmodics, and to cool hip-baths, with continuous vaginal irrigations, prolonged if necessary for some hours.

Those of my readers who may feel disposed to adopt this heroic and comparatively innocious and "incomparable" little remedy, 619, will do well to consult M. Courty's Traité Prat., &c., Paris, 1866, p. 264 and 7, 618. It is to be employed only, be it remembered, when the passages are freely pervious, and there exists neither metritis, perimetritis, ovaritis, flexion, deviation, stricture, nor constriction of orifices.

M. Courty is not in favor of intra-uterine injections. He says that they are the most dangerous that can be employed, and has seen them instantly followed by very formidable accidents, to say nothing of the possibility of their passing through the tubes into the peritoneal cavity and giving rise to fatal peritonitis. M. C. uses no other fluid than pure water, and even then only where there exists a perfect facility for the escape of the injected fluids.

Dr. James Kammerer, of this city, whose paper on Uterine Catarrh, reprinted from the *American Journal of Obstetrics*, vol. ii., No. 2, August, 1869, I have just been favored with, is a warm advocate, on the other hand, in their behalf, and uses them constantly with safety and success. When catarrh is accompanied with true angular anteflexion, the posterior lip of the uterus must be incised by Emmet's operation, to straighten the canal and provide for a free exit for the catarrhal secretion; and extreme smallness of the external os requires a bilateral incision. The patient being placed in a recumbent position, a sound is introduced into the uterus, and the depth, capacity of the cavity and the mobility of the organ accurately measured and ascertained. A cylindrical speculum is then introduced into the vagina. In order that an entire permeability of the cervico-uterine canal shall exist before the injection is attempted, Dr. K. is careful to dilate it by means of a series of sounds, four in number, of varying sizes, made of copper or German silver, of which exact figures are given on pp. 14 and 15 of the pamphlet alluded to. These are successively introduced through the speculum, until full dilatation of the canal is obtained; after which injection and escape of the injected liquids are easy and safe. After washing out the cavity of the uterus with a long-nozzled india-rubber bag syringe, the appropriate remedy, in liquid form, is injected. These are chromic acid, Lugol's solution of iodine,

dilute or concentrated, and carbolic acid diluted, and also sulph. zinci, ten grains to the ounce. Of carbolic acid as an intra-uterine injection, I find no notice in the three French works I have consulted, Joulin, Courty and Becquerel, and do not know with whom it originated.

Dr. Squibb, in a recent pamphlet, speaks of it as a mild local anæsthetic, useful in cystitis and leucorrhœa, and says that its use has often been favorably noticed in the foreign journals. Weak solutions of these dilute substances may be freely injected, raised to a certain temperature, not cold; but of the concentrated, ten to twenty drops is the most that can be safely injected, the dilute being in ordinary cases the most prudent. Caution and skill are necessary; for Dr. K. himself allows (p 23) that accidents may occur occasionally, notwithstanding the most careful observance of the rules he has laid down (p. 12). Dr. K. observes that he has often cured patients of their catarrh, as well as their sterile condition; but the peculiar morbid action of the secretions upon the spermatozoa, to which in this paper, I have endeavored to direct attention, is not, so far as I have observed, alluded to. Dr. K. remarks that a new cause of sterility, hitherto little attended to, may be a destruction of ciliary uterine epithelium from the too powerful application of escharotics. The direction of the cilia, however, is from, and not toward the uterine cavity. There can be no doubt of the safety and efficacy of intra-uterine injections in Dr. K.'s experienced hands, and many cases are cured by it no doubt, which would resist any other mode of treatment. Dr. K. looks upon uterine catarrh as the most frequent cause of sterility in the female, having met with it in three hundred and forty-two cases out of four hundred and eight, but without assigning any reason.

The womb, in the present state of therapeutics, must be looked upon as a meek and long-suffering organ, which endures with wonderful patience the rough handling, the burnings, slashings, pokings and scrapings it receives at the hands of the gynæ-atrics. Still gentleness and caution are necessary; for it does not *always* submit to them without resistance, remonstrance, or recalcitration.

If these remarks shall conduce to a better study and understanding of the causes of sterility, and a more successful treatment for its removal, my object in writing them will be happily attained. The action of the vagino-uterine secretions upon the spermatozoa, will soon, I have no doubt, become an interesting and important specialty, and I trust, will receive speedy and due attention.—*Medical Record, Sept. 15, 1869.*

EDITORIAL AND MEDICAL NEWS.

THE LIFE of a true physician is that of a student. To keep pace with the wonderful progress of Medicine, both as science and art, in these modern days, requires both a disciplined and industrious mind. Nor is it sufficient merely to be a receptacle of the treasures of other minds—to possess information, however large; these treasures must be digested and assimilated, in order that such knowledge may become a power for the great end of the physician's life—*the cure of disease.* Some fail in the acquisition of knowledge; they neglect study of books and journals, and their libraries remain meagre as they were ten, twenty or thirty years ago when they first received or assumed the title of doctors, while in practice they are dull routinists, and the activity of their minds is expended in cunning devices to get patients, in courting popular favor, all things to all men, shaking hands with Tom, Dick and Harry, like some petty aspirant for a constableship, in sharp trades or in the debasing pursuits of local politics. Let such men reconcile this conduct with the high responsibilities of their vocation and with their best usefulness and happiness as they can.

There are still others who, while diligent in the acquisition of that knowledge with which the press teems, do not properly weigh, compare, discriminate and judge—have simply information, which they use in a hap-hazard, hit-or-miss sort of a way. The physician ought to be a *ruminating* animal. Many an hour of lonely riding, many an hour of weary watching in the home of a tedious but healthy parturient, could bring rich profit to a mind stored with knowledge from various authors—that observes where views harmonize, where they differ—discriminates between the true and false, and, finally, by a process of *mental composition*, builds up as complete a structure as possible of some particular disease and its therapeutics; and the hours thus occupied would be rescued, many a time, from absolute loss, and sometimes even from worse than loss, for there are thoughts, dreamy and unsubstantial, floating through the idle mind that are like the "drowsy syrups of the East," and "medicine" it to passionless and powerless slumber,

while other thoughts may debase and degrade, corrupt and kill the moral nature.

The complete man, the physician of symmetrical mental development, will not only acquire but appropriate—will not only read and observe, but also reflect. Reflection will fructify acquisition.

There is one department of professional knowledge which almost all physicians too much neglect. In the richness of the present we are all prone to neglect the treasures of the past. We remember a sentence from Cicero, found in one of Dr. Tilt's volumes, which is pregnant with force: *Nescire quod antequam natus esses factum sit, id semper esse puer.* Without enlarging upon this topic, we wish, in concluding, to enforce it by a quotation from Charles Bell's History of Surgery, a quotation which we find appositely introduced in an Introductory Address recently delivered by Mr. Sampson Gamgee, at the Queen's Hospital School, Birmingham: "We learn that art improves slowly, and by degrees scarcely perceptible in an age, and that what one man is able to do or accomplish is as nothing when compared with that accumulated knowledge which has descended from our predecessors. It is not merely in diminishing the resources of professional skill that this disregard of study is to be deplored. The neglect of the literature of the profession deprives the student of all enthusiasm and love for it; he is brought up deficient in liberal views, and is taught to overrate the importance of the person under whom he has been educated, and to content himself to walk in the trammels of his particular practice. Those who are ignorant of the history of the art, and not aware of the observations and discoveries of the great men who have preceded them, are in continuous danger, in striving after new inventions, of only restoring what has been discovered, tried and rejected before their time."

THE DOCTORS OF HERAT, IN AFGHANISTAN.—General Ferrier says as in their eyes every European is a doctor, their conversation never ceased running on the healing art, of which they considered themselves distinguished professors. They often brought with them their drugs, in order that I might tell them how to use some chemicals which they had received from India. They gave these chemicals in progressive doses, in all obstinate cases, until they found out the right dose, and in what disease to use them. Finally, one of them, Mirza Aska, pulled a bottle of cyanuret of mercury from his pocket, and requested to know what devil of a salt that could be. "It has been of little or no use to me," he added, "for of over one hundred patients that I have given it to, all died but one."—*Caravan Journeys.*

DR. N. PINKNEY, one of the delegates to the British Medical Association from the American, and also a representative of the Medical Department of the Navy, was, like our friend, Dr. Hibberd, a few days too late in his arrival at Leeds for the meeting. He addressed a letter to Dr. Chadwick, the President of the British Association, expressing his regret at the mistake as to time, full of fraternal feeling, eulogistic of some famous names in our own country and in Great Britain, and not lacking in rhetorical flights eminently characteristic of the author: the letter is too long for us to republish. Dr. Chadwick writes the following handsome letter in reply:

LEEDS, AUGUST 8, 1869.

"MY DEAR SIR: I hasten to acknowledge the receipt of your very interesting letter, and, on behalf of the Association, over which I have the honor to preside, express to you our regret that, by an accident, you should have arrived too late, exactly to fulfill your important mission.

"That such a mission was about to honor us was, in some way or other, known to our recent meeting, and its arrival was anticipated with lively satisfaction.

"Had you been present, you would have found that the signal and unexpected honor conferred on our Association by the graceful recognition of the United States Government, of which you were the bearer, would have been duly estimated; and, in the cordiality of your own personal reception, you would have discovered how thoroughly we in England reciprocate those sentiments of patriotism and good will, to which you so eloqently give utterance. You would likewise have found that your numerous pioneers, in the improvement of medical science and art, are well known here, and their labors duly estimated. I abstain from naming them individually—even that of our illustrious visitor to the Oxford meeting, whose presence there gave additional brilliancy to that altogether remarkable gathering—lest I should, by unintentional omission, do injustice to many others equally deserving mention, hundreds of whom adorn the American profession. Had you arrived in Leeds in time for the meeting you would have discovered that, whether on this or on that side of the Atlantic, or in any other country, the ardent cultivator of medical science is, without envy and without jealousy, duly honored by us, and that the only warfare we recognize as justifiable between our kindred races is that bloodless encounter, the result of which secures the advancement of our common profession, and the more perfect alleviation of the ills of suffering humanity.

"I shall not fail to inform, through the medium of our *Journal*, not only the five hundred members who were present at the Leeds meeting, but our four thousand Associates, and through them the entire profession of Great Britain, of the honor done them by the Government of the United States, and by the President of the American Association.

"It is fully intended that delegates shall attend, on our behalf, the next meeting of your Association in America. They will be charged to acknowledge,

as opportunity may serve, the condescension of the United States Government, and the cordial good will of the American profession, as evidenced in your mission here; and they will likewise express our entire sympathy in those sentiments of which you have proved yourself so able an exponent; and thus, by the interchange of these kindly courtesies, we shall draw closer those bonds of amity and good feeling which should ever animate the members of a common calling.

"I have the honor to remain, your very faithful and obedient servant,

"CHARLES CHADWICK.

"To Ninian Pinkney, Esq., Surgeon United States Navy, etc."

REDUCTION OF DISLOCATIONS BY MANIPULATION.—The following extract from the *Address in Surgery*, British Medical Association, by Mr. Nunneley, will be read with interest, especially by those members of the Indiana State Medical Society who heard at its last meeting the discussion upon reduction of dislocation of the head of the femur, and they will remember a most absurd implied statement made by one of the speakers, which here meets with its contradiction:

"In the whole round of surgery, I know of nothing more perfect than the reduction of a dislocated limb by manipulation, as it has been not inaptly called. To those who have only seen a dislocated hip, for instance, replaced by the common method of extension and counter-extension with pulleys, and for the first time witness a few painless and comparatively gentle movements made with the dislocated thigh by the unassisted surgeon, the process very likely not occupying a minute, and find the limb restored to its normal condition, the proceeding must appear almost like magic. To Dr. Reed, of Rochester, U. S., we are, I believe, indebted for first directing attention to this plan, which he pointed out as applicable to two of the four varieties of hip-joint dislocation. The method is, however, capable of a far more extended application than Dr. Reed appears to have been aware of. In our Infirmary, we have reduced not only every form of dislocation the hip is liable to, but those of the shoulder also. I have practiced it in a man seventy-three years old, and I have assisted my colleague, Mr. T. P. Teale, to do so in a child of only two years. My own cases of success number upwards of twenty, and each of my colleagues has had several. Many cases have been reported by Mr. Birkett in Guy's; Mr. Hutchinson in the London Hospital; and by other surgeons in hospital and private practice, so that the general value of the method may be regarded as fairly established. I may mention that its successful performance mainly depends upon attention to two things—1, our anatomical knowledge, enabling us to place the bones and muscles in the most advantageous position; and, 2, on bringing the muscles into a proper condition, in which they shall have neither too much nor too little power of action, for either state will prevent success. If their action be too great, their resistance can not be overcome; on the other hand, if it be entirely suspended, the head of the bone will not be drawn into or maintained in its natural cavity. Hence the anæsthetic should only be carried far enough to suspend volition and

spasmodic action, leaving some little power of perception and contraction. When in this semi-passive condition, the limb should be firmly seized, put into gentle rotary motion in such a direction as our knowledge of the attachment of its muscles tells us, when they act, will cause them to draw the head of the bone towards its socket, and then, by a sudden and more forcible action, they are roused into quick contraction, by which the bone is partly pulled into its socket. To every dislocation of the ball and socket-joints, this simple method is applicable; to the hinge-joints, it is not equally so."

SPINA BIFIDA; INJECTION OF IODINE; RECOVERY.—The rule is that these cases die. M. ROUX, of Meximieux (France), has recently published in the *Bulletin de Thérapeutique* the case of a girl six weeks old, presenting this deformity. The tumor hung from the extremity of the sacrum to the lower third of both thighs. The author first made an exploratory puncture, and removed about an ounce of limpid fluid. He tried, then, the following plan: An assistant was desired to hold the tumor in such a manner as to occlude the opening into the spinal canal; the operator then injected an ounce of the following solution: Distilled water, eleven drachms; tincture of iodine, three drachms and iodide of potassium, one hundred and eighty grains. The liquid was left five minutes in the sac, the latter being kneaded with the hand of the operator. The solution was then withdrawn to the last drop by the exhausting agency of the syringe. This proceeding succeeded so well that, in a fortnight, there was only a hard nucleus left, no larger than a walnut. M. Roux attributes his success to the occlusion of the canal, and to the withdrawal of the very last drop of the injected fluid.—*Medical Press and Circular.*

DR. KRAUS, the Editor of the *Allgemein Wiener Medizinische Zeitung*, against whom an action was brought a short time ago by Dr. Billroth, for having erroneously attributed to him (Dr. Billroth) the leaving of a piece of sponge in the abdomen of a patient after ovariotomy, has been sentenced to pay a fine of one hundred fiorins, or to undergo twenty days' imprisonment, with costs.—*British Medical Journal.*

TREATMENT OF MALIGNANT PUSTULE.—Dr. Caspar of Stassfurth asserts, in the *Deutsche Klinik*, that he has treated several hundred cases of malignant pustule successfully by strong solution of ammonia; and that all the patients recovered except one—a pregnant woman, whose stomach rejected everything. The dose for children was one, two, or three drops; and for adults four drops, given every hour, day and night, in sweetened barley-water. The treatment, he says, must be continued until the inflammation ceases to spread round the pustule. The local application of solution of chlorine is of little or no value.—*British Medical Journal.*

THE ANÆSTHETIC ACTION OF CHLORAL.—At the first meeting of the Physiological Section of the British Association in Exeter, Dr.

Richardson was requested by the President, Mr. Busk, to undertake the investigation of chloral, proposed as an anæsthetic by Dr. Oscar Liebreich, of Berlin, during the present year. An important series of experiments upon animals and birds was accordingly carried out in the laboratory of the Devon and Exeter Hospital, by Dr. Richardson, with the able assistance of Dr. Shapter, Dr. Kelburn King of Hull, and the house-surgeon and pupils of the hospital. Chloral was discovered by Liebig, in 1832, and afterwards was investigated by Dumas. It is made by acting on alcohol with dry chlorine gas. It is a colorless volatile liquid, of specific gravity 1.502; and boils at two hundred and two deg. Fahrenheit. Its vapor has a pungent odor. When choral comes into contact with water it turns into a white crystalline solid substance—hydrate of chloral—which is the substance Dr. Richardson subjected to experiment. When this substance is treated with an alkali, it is decomposed into chloroform and into formiate of the base. Liebreich speculated that, if the hydrate of chloral were introduced into a living body, chloroform would be gradually liberated under the influenec of the alkali of the blood, and that sleep would follow as from chloroform, but for a longer time. Liebreich made many experiments in regard to this, putting animals and even human beings to sleep for long periods: in one case a dose of forty-five grains produced sleep in a man for sixteen hours. Dr. Richardson, in his researches, first tested whether chloroform is given off when the hydrate of chloral is mixed with blood, and proved it was so by distilling over the liberated chloroform from the blood. He next made a standard solution, which consisted of one part of chloral to two of water. Afterwards he put Leibreich's experiments to the test, and then made his own series of special investigations. The results of his researches were, that chloral was decomposed in the living body, as Liebreich affirms. It gives off chloroform, and it forms a formiate of soda with the blood. The chloroform thus liberated produces sleep, which is in every sense the same as the sleep from chloroform itself. The substance can be given either by the mouth or by subcutaneous injection. Two parts of hydrate of chloral are equivalent in physiological value to seven of chloroform; the sleep it produces may be made to extend over four and even five hours; but vomiting is frequently produced previously to sleep, and there is only a brief period of actual insensibility, the body being, if anything, hypersensitive to touch and pain, even during the stupor. With great care in regulating the dose, recovery may be pretty certainly insured, but death is very liable to be induced by slight excess of the quantity administered. Death takes place by the continuation of sleep with rapidly falling temperature of body. Having discovered the physiological value of hydrate of chloral in comparison with the like application of pure chloroform, Dr. Richardson next investigated the relative dangers and advantages of these two anæsthetic agents. He further compared the hydrate of chloral with bychloride of methylene, tetrachloride of carbon, and chloride of amyl, and came to the conclusion that all the effects of the hydrate of chloral could be obtained by those other

agents simply, and with greater safety. While, therefore, he recognised that Liebreich has brought out a very valuable physiological truth—that the animal body is capable of decomposing some chemical compounds, and that the symptoms in the animal may be due to the formation of secondary products—he did not think that the hydrate of chloral would practically supersede opium, chloroform, and similar narcotizing agents now in medical use. On the contrary, he believed that the decomposition of blood which it induces by the formation of formiate of soda is detrimental.—*British Medical Journal.*

HYDRATE OF CHLORAL.—Dr. J. W. Ogle has been giving a trial to this new remedy in several cases. It has proved most useful and satisfactory in its action as a hypnotic in small doses—viz., doses varying from five to ten grains. In a slight attack of delirium tremens, twenty grains acted very sufficiently and well in procuring sleep. In one case only did any unpleasantness attend its administration, and that was when peculiar sensations about the head were complaineed of by a woman suffering from chronic peritonitis, who took five grains. On the following night four grains were given along with a few drops of chloric ether, and no such unpleasant results followed.—*Lancet, October 16th.*

EXPERIMENTS ON THE PANCREATIC JUICE.—In the Academy of Sciences of Paris M. Chauvin and M. Morat have recently read a paper "On the Pancreatic Juice," and the conclusions at which they have arrived are—first, that the general results of their experiments on artificial digestion with this fluid agree with those made by older experimenters, from Eberle to Claude Bernard. Secondly, that in such experiments with artificial digestion the action of the pancreatic juice is not checked by the presence of gastric juice, nor by hydrochloric acid considerably diluted with water. Thirdly, that at ordinary temperatures, and in inert vessels, the juice does not act so energetically as when maintained at the temperature of the body, and under the influence of the movements of the digestive fluid. Fourthly, in the digestion that ordinarily takes place in the stomach—and this is a capital point—the pancreatic juice preserves its energies intact, notwithstanding the presence of the gastric juice, and may initiate in the interior of the stomach a complete digestion of the three species of alimentary substances. And, lastly, they state that in a clinical point of view they have obtained remarkable results with the aid of pancreatic juice and extract.—*Lancet, October 16th.*

MARRIED—Wednesday evening, October 13th, 1869, at the residence of W. P. Hill, Knightstown, Indiana, by the Rev. S. B. W. Shryock, J. H. Stuart, M. D., of Spiceland, Indiana, to Annie M. Lynch, of the former place.

SALTS OF MORPHIA.

We have the pleasure of informing our medical and druggist friends that we can now supply our own brand of *pure Salts of Morphia*, in any quantity that may be desired. Our arrangements are such as will enable us to furnish the *sulphate, acetate, muriate, valerianate, etc.*, in lots of *one hundred* or *one thousand ounces*, and also, *all the acid alkaloidal principles of opium* used in medicine.

The *Sulphate of Morphia*—the salt most used by American practitioners—we present in the form of beautiful, white, downy crystals, of the *highest purity and excellence;* and these are placed in vials holding ¼ ounce each, avoirdupois. We venture to state that modern chemistry is incapable of producing the active principles of opium in greater perfection than is found in the salts we offer.

No agent is more generally used or relied upon by physicians than Morphia; and hence the importance of securing it in the highest state of integrity, free from all attenuation or sophistication.

CINCHO-QUININE.

Cincho-Quinine results from a series of experiments upon the Cinchona Barks, undertaken in our Laboratory, with the view of presenting the medicinal alkaloidal principles in an equally efficient, but pleasanter and cheaper form than Sulphate of Quinine. *This desirable end has been accomplished.*

It is manufactured from a mixture of the finest varieties of the *Loxa* and *Calisaya*, or the Pale and Yellow Peruvian Barks, and *no substance or ingredient, but what exists naturally in these barks, enters into its composition.* The crystallizable, alkaloidal principles of these barks, upon which their therapeutic influence depends, disassociated from mineral acids, constitutes Cincho-Quinine.

It presents the tonic and febrifuge properties of bark, in their most pleasant, direct and natural form, and is adapted to *replace* sulphate of quinine, and is preferable to that salt, from the following considerations:

1. It exerts the full therapeutic influence of sulphate of quinine, in the same doses, without oppressing the stomach or creating nausea. It does not produce cerebral distress as sulphate of quinine is apt to do, and in the large number of cases in which it has been tried, it has been found to produce much less constitutional disturbances.

2. *It has the great advantage of being nearly tasteless.* The bitter is very slight, and not unpleasant to the most sensitive, delicate woman or child.

3. It is less costly than sulphate *of* quinine. Like the sulphate of quinine the price will fluctuate with the rise and fall of barks, but we shall supply it at all times at less than the lowest market price of that salt.

Cincho-Quinine we present in the form of snow-white crystalline flakes, easily reduced to powder by rubbing, and perfectly soluble in weak acidulated water. It is placed in vials holding each one ounce, of the same size and form of those holding sulphate of quinine.

No directions for its employment are needed, as it may be used in the same quantities and forms, and for the same affections as sulphate of quinine, so fully understood by every physician.

Any physician in the United States, by inclosing *four three-cent stamps* to our address, will receive by return post, a specimen of Cincho-Quinine sufficient *for* satisfactory trial.

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Elixir Phosphate Iron, Quinine, and Strychnia.

There is, perhaps, no prescription so generally used, and with such gratifying results, as the above combination. Owing to the intensely bitter taste of the solution or the syrup, patients very generally object to them, and many sensitive stomachs reject their administration. Physicians hesitate to prescribe in pill form from the want of prompt action—the frequent passing away from the system undissolved, and the occasional cumulative action of the Strychnia when the pills are long retained. This Elixir has been extensively used with very gratifying results, and does not seem open to any of the above objections. Using pure alkaloids of Quinia and Strychnia, the excess of acid is not required, the bitter taste is not developed, and the Elixer is readily taken by children as well as adults.

Each teaspoonful contains two grains of Phosphate of Iron, one of Quinia, and one-sixtieth of a grain of Strychnia.

Adult dose, one teaspoonful three times a day.

Ferro Phosphoreted Elixir of Gentian.

This preparation is identical in strength to the Comp. Infusion of Gentian of the Pharmacopœia, with the addition of one grain of Phosphoreted Iron to each teaspoonful.

This Ferro Phosphoreted Tonic Bitter excites the appetite, invigorates digestion, and operates as a general corroborant. Blended with Aromatics, and slightly acidulated with Phosphoric Acid, it proves grateful to the most delicate stomach.

Give to children one-half to a teaspoonful before eating. Adults a dessertspoonful as often.

Elixir of Hops.

This preparation represents, in the most agreeable form, the Tonic and Anodyne properties of Hops. There are few medicines of more real value, and less open to objection from continued use, in cases of wakefulness, nervous tremors, and the general irritability so often associated with Dyspepsia. This equals in strength the officinal Tincture of Hops.

Adult dose, one or two teaspoonfuls.

Elixir Valerianate of Ammonia.

(GODDARD'S FORMULA.)

This preparation, combining the stimulant and anti-spasmodic properties of both Valerian and Ammonia, in a form agreeable and convenient, has proven a valuable agent in all cases of Nervous Derangement, Neuralgia, Hysteria, Nervous Headache, and in all those complicated disorders consequent upon nervous debility and depression.

Adult dose, one or two teaspoonfuls.

Elixir Valerianate Ammonia and Quinine.

This is simply our Elixir Valerianate of Ammonia, with the addition of one grain of Quinia to each fluid drachm. It is an agreeable and effective Anodyne, and a powerful Nerve Tonic.

Physicians and Apothecaries will find it a much more elegant preparation than can be prepared extemporaneously, or than can be made from any of the Salts of Quinine.

Elixir of the Pyrophosphate of Iron.

IRON, WITH PHOSPHORUS AND CALISAYA.

Promptly tonic, without being irritating or stimulant, combining the effects of Phosphorus and Iron with the cordial and tonic influences of the Cinchona Elixir. The freedom from all unpleasant taste, and the ease with which this preparation is borne by even the most sensitive stomachs, together with its ready assimilation with the food, and consequent rapid absorption, render this preparation specially valuable. It is used with benefit in all instances where a nerve tonic is indicated.

Each teaspoonful represents the activity of five grains of Calisaya Bark, together with two grains of the Soda-Pyrophosphate of Iron. This Salt of Iron is not precipitated in the stomach by the agency of food or gastric juice, and will be found an efficient chalybeate when ordinary iron preparations produce constipation, headache, &c.

The dose for an adult is a teaspoonful three times a day, immediately before or after meals. For children, to be graduated according to age.

Ferrated Elixir of Cinchona.

IRON, PERUVIAN BARK, AND CHOICE AROMATICS.

This preparation embodies the cordial, tonic, and anti-periodic properties of its constituents, so modified by the combination as to avoid the objectionable effects of their distinct action. Its constant and continued use by our leading practitioners, and its often attested good results, warrant our decided indorsement of its merits.

Each dessertspoonful represents two grains soluble Citrate of Iron, and ten grains Red Peruvian Bark.

The dose for an adult is a dessertspoonful, three times a day, immediately before or after meals. For children, to be graduated according to age.

Comp. Fluid Ext. Buchu and Pareira Brava.

This fluid extract is composed of equal quantities of Buchu, Pareira Brava, and Collinsonia Canadensis. As a tonic and diuretic it will be found of great value; exerting prompt remedial action in Calculous Affections, Chronic Inflammation, and Ulceration of the Kidneys and Bladder, Leucorrhea, Dropsy, &c.

In Chronic inflammation of the Bladder, for allaying irritability of that organ, and correcting the disposition to profuse mucous secretion, we specially recommend it.

Adult dose, one teaspoonful three times a day.

Elixir of Calisaya Bark.

AN AGREEABLE STOMACHIC AND EFFICIENT TONIC.

This is a most delightful and energetic tonic and restorative. Prepared with Sherry Wine, Peruvian Bark, and Aromatics, it is peculiarly grateful to patients suffering from debility, loss of appetite, and general lack of nervous force.

Each fluid drachm represents five grains Calisaya Bark.

DIRECTIONS.—A teaspoonful for children, a dessertspoonful to adults, three times a day, or as required.

Compound Syrup of Hypophosphites.

This preparation, suggested by the experience and researches of Dr. Churchill, is composed of the Hypophosphites of Lime, Soda, Potassa, and Iron. The theory of the advantage of the Hypophosphites is based upon the elimination of free Phosphorus into the system. The therapeutic effect would seem to sustain the value of this preparation, from the benefits derived from their use, both here and abroad.

Each fluid drachm contains two grains Lime, two grains Soda, one grain Potassa, one-half grain Iron.

Adult dose, one teaspoonful three or four times a day.

Bitter Wine of Iron.

CITRATE OF IRON AND PERUVIAN BARK.

Prepared with Sherry Wine, Calisaya Bark, and Citrate of Iron; each fluid drachm represents two grains of the ferruginous salt, and the activity of five grains of Calisaya Bark.

Among the many chalybeate and vegetable tonic combinations that are justly entitled to a high degree of favor, we know of none more worthy of esteem than this. The happy effect, in many cases of debility, loss of appetite, and general prostration, of an efficient Salt of Iron, combined with our most valuable Nerve Tonic, has been so frequently demonstrated, that we feel every confidence in recommending it. For an adult, a teaspoonful immediately before or after each meal.

Ferrated Cordial Elixir.

This Elixir rivals in delicate and delicious flavor the most prized of the foreign cordials. Specially grateful to a sensitive and delicate stomach, it stimulates digestion and invigorates the whole system. For the general debility, nervous prostration, and loss of vigor of females and children, it is particularly indicated. The healthy color, renewed muscular force, buoyant spirits, and regained appetite, give the best evidence of the rapid assimilation of the Chalybeate Salt. Each fluid drachm contains one grain of Pyrophosphate of Iron.

DIRECTIONS.—Children, one-half to a teaspoonful, before eating. Adults should take a tablespoonful as often.

Elixir Bromide Potassium.

This Elixir contains five grains Bromide of Potassium in each teaspoonful, and is an agreeable and elegant form of administering this highly-prized alterative, and nerve sedative. The objectionable saline taste is completely masked in this Elixir, and the Bromide will be found less apt to prodnce nausea and derangement of the digestive organs.

Elixir Calisaya Bark, Iron, and Bismuth.

This Elixir contains one grain of Soluble Citrate of Bismuth, in each teaspoonful of the Ferrated Elixir of Cinchona. The addition of the Soluble Salt of Bismuth gives increased value, in cases of debility, dependent upon enfeebled digestion, or associated with gastritis.

Elixir Calisaya Bark, Iron, and Strychnia.

Each teaspoonful contains one-fiftieth of a grain of Strychnia; this enhances the tonic power, and will be found a valuable adjunct to the other constituents, when a powerful nerve tonic is desired.

Each fluid drachm contains Calisaya Bark, two grains Iron, one-fiftieth grain Strychnia.

Wine of Wild Cherry Bark.

This is a pleasant and concentrated preparation of Wild Cherry Bark, and will prove an elegant form of administering this valued tonic and sedative. Each fluid drachm represents twenty grains of the Bark, collected at the proper season.

Adult dose, one teaspoonful.

Ferrated Wine of Wild Cherry Bark.

Few medicines combine so pleasantly as valuable effects, as the carefully selected bark of the Wild Cherry. Uniting a tonic, expectorant, and sedative influence, it is indicated in most cases of debility, particularly when accompanied with local irritation. By careful and elegant pharmacy, we combine in this preparation a protosalt of Iron, giving the advantage of a combination so frequently desired.

Each fluid drachm contains twenty grains of the Bark, two grains Iron.

In addition to the above, we prepare all the other popular Pharmaceutical combinations, which we will supply at reasonable prices.

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THE WESTERN JOURNAL OF MEDICINE,

(*Formerly*, "CINCINNATI JOURNAL OF MEDICINE.")

Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

VOL. IV. INDIANAPOLIS, DECEMBER, 1869. No. XII.

SOME OBSERVATIONS IN RELATION TO CASES OF FEVER IN RICHMOND, INDIANA, DURING THE MONTHS OF SEPTEMBER AND OCTOBER, 1869.

BY J. R. WEIST, M. D., RICHMOND, INDIANA.

(Read before the Union District Medical Association, at Rushville, Indiana, October 28, 1869.)

During the past two months quite a number of cases of febrile disease have fallen under my notice, that have presented some features not usually met with in the fevers prevailing in this locality in the autumnal season, at least not so far as my personal observation extends; and it seems to me to be worth while to make some record of them, both for the purpose of present comment and future comparison.

The peculiarities adverted to have been noticed in the manner of invasion, the symptoms presented during the progress, and in the duration of the disease.

Except that the first well marked evidence of disease was the occurrence of a chill of variable duration, these cases presented no uniformity in the method of invasion; the occurrence of the chill in some cases being preceded for days and even weeks by a feeling of indisposition, with a loss of appetite and strength, while in others the chill was the first evidence of impending disease. The occurrence of this paroxysm was not limited to any particular portion of the

twenty-four hours—sometimes coming on in the night. This occurrence of the paroxysm in the night was one of the first features that directed attention to the disease as differing from the ordinary cases of intermittent and remittent fevers, as in these paroysms very seldom occur in the night. Another marked feature in many of these cases, in this stage of the disease, was the intense pain complained of by the patient. This was most frequently in the back of the head, neck and shoulders—not unfrequently, however, it existed elsewhere, and especially in the limbs. Very often in connection with the pain in the head, neck and shoulders, tenderness and stiffness of these parts was complained of.

In some of the cases sore throat was complained of, either in the beginning or soon afterward. In these cases traces of inflammation and enlargement of the tonsils were seen on examination, and in a small number the tonsils were seen to be dotted with small patches of what appeared to be diphtheritic deposit.

In addition to the special features mentioned as belonging to the period of invasion, the chill presented the ordinary characteristics of the intermittent type of fever. Febrile reaction of variable intensity and duration followed the chill, which in some of the cases, in time, gave place to a sweating stage and a more or less complete intermission. In some cases these distinct paroxysms, so closely resembling those of intermittent fever, as early in my experience to be mistaken for those of that disease, occurred for several days, before giving place to a series of phenomena more nearly resembling those seen in cases of remittent fever, while in others the remittent type was assumed in the outset of the disease.

In addition to the throat trouble that I have mentioned as belonging to some of the cases in the earlier stage, other irregular manifestations were observed. Slight hemorrhage from the nose was common. In some patients an eruption on the skin, having some resemblance to roseola or scarlet-rash, was seen. Marked evidence of disturbance of the nervous system existed in most cases; this consisted in disorder of the mental faculties, and a disturbance of sensation and motion: hyperæsthesia of the skin sometimes being present, while at other times it was in a state of partial anæsthesia; temporary partial paralysis of the extremities existed in a few cases.

The skin was in a number of cases slightly jaundiced. The tongue in the beginning was usually but slightly furred; the coating, however, gradually increased in thickness, assuming successively a yellowish

brownish, and in the worst cases, almost a black color. A tendency to dryness of the tongue showed itself early in the disease—the dryness nearly always being much more marked during the night, and this almost irrespective of the period of greatest febrile reaction. very often during the second week of the disease the tongue became less dry and cleared itself of its coating, assuming thus in the more marked cases, the glossy, varnished appearance not uncommonly met with in different kinds of fever, to soon become as dry and rough as before.

The pulse was increased in frequency even in the intermissions, in those cases in which the apyrexia was most marked, it seldom, during this period, falling below ninety, going up from this number to one hundred and twenty or one hundred and thirty, during the access of fever. After having had some experience with the disease, this frequency of the pulse in the absence of fever, enabled me to make out a correct diagnosis early in the disease, even in those cases in which the intermittent type was most developed. Nausea and vomiting were occasionally present, but did not constitute marked features of the disease. In the commencement the bowels, if disturbed, generally inclined to constipation, while in the majority of cases a tendency to diarrhœa manifested itself at some period of the disease. This, according to my observation, was easily controlled. The tendency to diarrhœa and the susceptibility to the action of cathartic medicines were much less than I have usually met with in typhoid fever. In none of my cases did hemorrhage of the bowels occur. Slight tympanites and iliac tenderness were almost invariably present.

When the cases were intermittent in the beginning, they soon lost this feature, becoming more nearly of a remittent character. A marked peculiarity was shown in the irregularity as to time of the remissions and exacerbations, these varying from day to day, most commonly, however, the greatest access of fever occurred at night. In this respect these cases offer a strong contrast to cases of ordinary remittent fever, as in the latter the remission usually occurs at night.

In most of the cases the remissions continued to take place at irregular intervals throughout the disease; yet in a certain number the fever gradually assumed very nearly the continued form.

In the temperature of the body considerable variation was noticed. In none of the cases, however, did it become very high. In a few of the later cases the degree of heat was positively determined by means of the thermometer in the axilla; in these the temperature ranged

from ninety-six deg., in the cold stage, to one hundred and three deg. during the greatest febrile excitement. In the majority of cases the range of temperature was, I believe, limited to about four deg., while, as a general rule, the highest degree of temperature was attained in the evening, and the lowest in the morning—frequent exceptions were noticed. In three of the best marked cases, during the first week the lowest temperature was reached between midnight and three A. M., and the highest between six and nine A. M., and during the second week, the lowest between six and ten A. M., and the highest between six and twelve P. M. Yet it is not to be understood that these extremes of heat and cold occurred with regularity between these periods, during the times mentioned; for they did not. Indeed, during both weeks there was extreme irregularity in this respect—the times given representing only those at which the extremes of temperature were noticed. Another feature somewhat out of the usual course, was the occurrence, often, of two and sometimes of three well-marked exacerbations in the twenty-four hours.

During the latter part of the first week, and the whole of the second, profuse swetting often took place—it coming on during the decline of the febrile stage, and sometimes continuing for five or six hours, being thus extended not only through the time belonging to the sweating stage of ordinary intermittents, but through the intermission or remission, and even into the cold stage; and being sometimes more profuse than I have ever witnessed in any disease.

In some cases, differing apparently but little if any from ordinary remittent fever, after the disease seemed to have almost yielded to the usual remedies, profuse sweating occurred in connection with extreme coldness of the surface—the cases afterward assuming the form and running the course of typhoid fever.

The pain in the neck, head and shoulders was often extreme. It was not rare for the patient to complain of severe neuralgic pain in the extremities. In connection with the same nephalgia, intolerance of light sometimes existed.

The "intolerable headache," and the "bone-breaking pain in the extremities," for so they were described by the patient—seldom lasted beyond the eighth day.

The mental disturbance usually was not extreme, and made its appearance during the second week in the form of quiet delirium, being in most cases decidedly more marked during the night than during the day. Hallucinations were not uncommon—other cases of irregular nervous action were presented. The modifications of cutaneous

sensation have already been noticed, as well as the incomplete motor paralysis. In a portion of the cases insomnia existed during the first and second weeks, while in others the patient slept almost continuously for three or four days and nights. I say slept, for the insensibilty to external impressions seemed to be owing more to sleep than a semi-comatose state. These two opposite conditions were often present in the same patient at different periods.

As I have already intimated, the fever toward the end of the second week assumed a character more nearly akin to the typhoid than the remittent type. In addition to the symptoms presented by the tongue, pulse and nervous system, already described, that are common to several forms of fever, others that belong more especially to typhoid fever presented themselves. These were a tympanitic condition of the abdomen, tenderness in the iliac regions, and diarrhœa, or at least an increased susceptibility to the action of cathartic medicine. At this stage a slight evidence of pulmonic inflammation was usually present. The characteristic eruption of typhoid fever was observed in but one case.

All of the cases recovered—convalescence becoming almost imperperceptibly established, and proceeding in a manner similar to that observed after cases of typhoid fever.

The duration of the disease varied from three to five weeks.

Another item of some interest that I omitted to mention in the proper place was, that although the worst patients were evidently seriously sick, they retained their strength to a surprising degree. Whether this was the result of a peculiar feature of the disease, or in consequence of the absence of perturbating treatment, I am not prepared to say.

While the disease here briefly described presents some resemblance to remittent typho-malarial, relapsing, break-bone and typhoid fever, I think it can not be clearly identified as either.

SULPHITE OF SODA.

BY GEORGE KELMER, M. D., SULLIVAN, ILL.

(Read before the Æsculapian Society of Wabash Valley, October 28th, 1869.)

(The first part of Dr. Kelmer's paper is occupied chiefly with Prof. Polli's and Dr. De Ricci's investigations, and the recorded experiences of several American Physicians: these observations are familiar to

reading physicians, and therefore in publishing, we omit all but the Doctor's own experience with the agent.)

In dyspepsia its efficiency has been most marked, especially when accompanied by flatulence and eructation — these symptoms being the result, doubtless, of decomposition and fermentation of foreign material in the stomach itself, from one or more causes. It may be owing to deficiency of the gastric juice, the privation of some of its essential ingredients, or to a defective capacity of the circulatory or nervous functions (upon the integrity of which the function itself is greatly dependent); the contents of the stomach must undergo the decomposition and fermentation which invariably occur with all dead animal and all vegetable matter, when confined in vessels and subject to the continued influences of heat and moisture. To this natural operation are due the generation of gases which produce flatulence, nausea and eructation of food so frequent in dyspepsia, and also epigastric pains, diarrhœa, disentery, colic, hepatic congestion and torpor, so frequent from the presence of foreign masses thus retained and imparting, to a greater or less extent, fatal and injurious ingredients to the blood by absorption. To arrest the process of decomposition and fermentation, I have found in my practice no means so efficient as the sulphite of soda. In such cases it acts as a direct and powerful arrestor and preventive of decomposition of the food, and as an illustration of its value, the following cases (among others) treated by the sulphite of soda, will speak for themselves:

Thomas F., æt. forty.—Has been affected five years, sometimes quite ill, and at other times apparently much better. Bowels inclined to constipation, but irregular in consequence of the too free use of cathartics. Bowels seem quite sensitive, and are very susceptible to cathartic medicines. Appetite indifferent; tongue a little coated, grayish upon the surface, a little reddened on the sides and tip; skin rather dry; does not sleep well at night; has unpleasant dreams of suffocation, and starts in his sleep.

TREATMENT—Cinchona comp. and cardamons with the sulphite of soda in separate solutions, combining the two at the time of administering. Bathe the body once per day in a cold solution of the sulphite, and use friction freely. Reports ten days after that he feels much improved. Bowels regular; skin improved in being more moist; sleep is better and more refreshing. Continue the treatment for one month. His general appearance much improved—seems entirely well.

In several instances in which flatulence was a very prominent

symptom, one or two doses of the salt appear to have immediately arrested and removed it. In all those cases of "*Cardialgia*," where there seems to be an uneasy sensation at the pit of the stomach, with great heat and burning, sometimes amounting to actual pain, and which frequently extends up into the throat, with difficult breathing, vomiting, coldness of the extremities, and great restlessness and anxiety accompanying it. And in pyrois it acts like a charm, taken after each meal. The sulphite of soda owes its virtues to the fact that it is decomposed by almost any vegetable acid, or by the hydrochloric acid of the stomach, and that this decomposition liberates sulphurous acid, which has great power to prevent alcoholic or acetous fermentation.

Its value in erysipelas I have had the gratification of testing in several cases. In one case in particular, I was most agreeably suprised at its effects.

The patient, a man aged thirty—the disease had attacked his right hand and arm, extending almost to the shoulder. The hand and arm were enormously swollen, tense and hard, with one or two patches which assumed a decided gangrenous character; pulse one hundred and twenty per minute; respiration hurried; skin hot and dry; tongue thickly coated; throat dark red, and tonsils swollen; urine scanty and highly colored. The patient was ordered three grains of quinine every three hours, with a teaspoonful of the following, intermediated:

℞ Sodæ sulphitis, ℥i,
Ex. glycyrhiz, ʒi,
Aquæ font., ℥iii.
M.

And, as a local application, one ounce of the sulphite dissolved in a quart of water, and applied to the parts affected by means of cotton batting, over which a piece of rubber cloth was put to prevent evaporation. Beef tea allowed *ad libitum* and free ventilation was strictly enjoined. At the expiration of twenty-four hours there was a marked improvement in all the symptoms. The quinine and soda were continued at longer intervals, and in twelve days the patient was convalescent.

It is not necessary to refer to all the cases of erysipelas in which I have given the soda a trial, as the case mentioned is analogous to other cases which have been successfully managed with this salt. If any of those who have not used the sulphite of soda will give it a trial, both internally and externally, they will doubtless come to the

conclusion, as I have, that it is one of the best among all known remedies for the control and management of erysipelas.

In tinea favosa there is no local remedy whose use, in my experience, has been attended with better and more speedy results—as the following old and inveterate cases will show:

Juli McD., age ten.—Tinea Capitis (Favosa). Has been afflicted three years. The back of her head only is affected, and in this location it resembles (granulata) sores, small, and of about two lines in diameter; secretions fetid; hair matted, forming large scabs over the sores. General health much affected; skin pale; appetite indifferent; habit scrofulous; slight enlargement of cervical lymphatic glands, probably from sympathy with the *Tinea*.

Cornelius Cage, age seven.—Tinea Capitis (Favosa). Disease commenced about six months ago, by inoculation from a comb. At first there was only a small pustule, secreting an ichorous and fetid matter. From this the disease extended to the border of the neck and forehead, with a number of very large sores upon the scalp, and the interspaces were covered with thick heavy scales and small scabs; the hair had been trimmed off closely with scissors. Fetor of the part, resembling the urine of the cat. Lice and their ova had collected in quantities upon the head and burrowed among the scabs.

Joseph L., aged twelve years.—Tinea Capitis. Had an eruption upon the top of the head, covering the whole surface between the parietal protuberances, and extended from near the forehead to the summit of the back of the head. The eruptions were yellowish, with deadened base, and contained a mucoid secretion resembling honey.

The mode of treatment in all the cases was as follows:

℞ Sodæ sulphitis, ℥ss;
Acid carbolici (crys), ℥ss;
Glycerine, ℥iss:
Cerati simplicis, ℥ii.
M.

Ointment to be used three times a day. Shave the hair from the sores, and cleanse them with castile soap and water; apply the ointment on the parts; cover with oil-silk; give, internally, sulphite soda in twenty-five grain doses, in cinchona and cardamon comp, combining the two at the time of taking, three times a day; and in from three to four weeks a permanent cure will be effected.

SCABIES.

I have used it in this class of diseases with decided success, and it

can be relied upon as a speedy and effectual remedy in almost all parasitic affections of the skin. I have also used it in various other cutaneous diseases with uniform and unvarying success. And in that condition of the blood which is manifested by the production of numerous furuncles, commonly known as boils, the administration of sulpite of soda, with carminative tonics, has proved, under my observation, a perfect and rapid remedy. In carbuncles, I know, after using the following, that it may be relied upon. After a forced or spontaneous opening of the carbuncle, apply a solution on lint, of, say,

℞ Soda sulphitis, ℥ss;
Acidi Carbolici (crys), ʒss;
Glycerine, ℥iii.
M.

It is remarkable how rapidly, under these applications, the ordinarily slow separation of the necrosed cellular tissue takes place—the destructive process ceases, and healthy granulations spring up.

In urticaria, it has proven very successful in subduing the worst forms of this disease in twenty-four hours. There are a great many other skin diseases in which I have found it equally efficient.

Another application of this salt which I consider valuable, is in the case of infants, by whom their food (the mother's breast-milk) is often ejected. A dose of two to five grains of sulphite, in combination with comp. cardamon, sweetened, has proved successful in causing a retention and assimilation of the contents of the stomach when administered soon after imbibition, thus greatly promoting the health of the child. Also in cases of children where there is a fermented, swollen condition of the bowels, especially if constipated, the sulphite of soda will remove the difficulty in a short time.

I am of the opinion that the sulphite of soda, one ounce to the quart of water, makes one of the best solutions that has ever been discovered to sponge the body with in all kinds of fevers.

There are three forms of this remedy, viz: The sulphite, the hyposulphite, and the bisulphite. The first of these has been my principal dependence; though the others, when employed in proportionate quantities, for the supply of the acid constituent, are equally useful

FORTY YEARS' PRACTICE, OR REPORTS OF EXTRAORDINARY CASES.

BY N. FIELD, M. D., JEFFERSONVILLE, INDIANA.

About the year 1831, I was called to see a little son of Mr. John Myers of Jeffersonville, three or four years of age, who, to all appearance, had a regular attack of billious remittent fever, which was at that time endemic in and around Jeffersonville. As the case occurred in midsummer, and seemed to be a plain case of ordinary fever. I commenced the treatment with a cathartic, followed by a diaphoretic, with the view to bring on an intermission. In the course of thirty-six hours after he was taken sick, there supervened a most extraordinary and intolerable thirst. His cries for water were incessant. He would drink until his stomach was distended to its utmost capacity, and still plead for more. The repletion of the stomach would occasionally provoke emesis; and just as soon as it was emptied, he would drink as long as he could force a drop down his throat. At last, after two days spent in trying to relieve the distressing thirst, I directed his mother to withhold all but a reasonable quantity of water, despite his cries and importunities. He became at times almost frantic, and when not confined, he would leap from his bed and struggle desperately for the water-bucket. Foiled in his attempt to seize that vessel, he would run into the kitchen, and try to drink soap-suds, dish-water, or any thing in the liquid form, however filthy and loathsome.

There being no evidence of gastritis or enteritis, but on the contrary a pulse but little variant from the natural standard; skin preternaturally warm; no pain in the epigastrium, or soreness on pressure, and loose bowels, I was utterly unable to account for the insatiable thirst with which he was afflicted. Supposing that an emetic might allay his thirst and produce some favorable change in the case, I gave him a strong dose of ipecacuanha, which resulted in the ejection of a conglomerate mass of mackerel, eaten about a week before he was taken sick. The fish had no doubt been swallowed without mastication, in too large a bulk for transmission to the duodenum.

A few hours after it was discharged the fever, thirst and every other morbid symptom subsided.

The question involved in this case is, how did the mackerel produce such intense thirst? Was it by its mechanical action on the coat of the stomach, causing sub-cutaneous inflammation; or was it the salt in the fish; or what was it?

URINARY INFILTRATION: A REPORT MADE TO THE CINCINNATI ACADEMY OF MEDICINE.

BY PROFESSOR P. S. CONNER, M. D.,

(Chairman of Section on Urine and Urinary Organs.)

Rupture of the urethral wall with consequent escape of urine into the tissues adjacent, though fortunately, not a very common accident, is sufficiently often met with to entitle it to careful consideration in view of the resulting danger to part and life. In the great majority of cases it is consequent upon stricture of the urethra that has existed for years, or is the result of external injury, the perineum having been violently contused—stricture being by far the most common cause. Leaving out of consideration ante-scrotal lacerations, the urethra may be opened between the peno-scrotal angle and the anterior layer of the triangular ligament, or betwwen this layer and the neck of the bladder; in the former situation, the cases being most common, in the latter most fatal, especially when the urine has made its way through the pelvic fascia.

Stricture being, as already stated, the most frequent cause of the lesion in question, and the greater number of strictures being situated in the bulbous portion of the urethra, the laceration is generally found but a short distance anterior to the triangular ligament. A long continued progressive dilatation of the canal behind the stricture having taken place, the urethral wall at length becomes so thin as to be unable to resist the powerful efforts made to expel the urine, and a laceration is the result. In many cases, indeed, in the majority, not only is there this thinning of the wall from dilatation, but also an ulcerated condition of it consequent upon chronic inflammation, due both to the stricture itself and the constant, or almost constant presence of urine in the pouch formed, and this ulcerated condition causes an

earlier rupture than would take place were there simply a thinning of healthy wall. The symptoms of rupture and infiltration, when the laceration is extensive and the urine freely poured out, are unmistakable. The sudden relief of vesical distension experienced by the patient, the early swelling (at first generally in the perineum, soon involving the scrotum), the rapid development of violent inflammation followed by gangrene of the parts affected, the shock and speedy manifestation of severe constitutional disturbance, all combined with the history of the case, make diagnosis an easy matter. The locality of the early swelling serves as a guide to the determination of the position of the urethral rupture. When the laceration is in front of the triangular ligament, the close union between the superficial perineal and the deep fascia compels the urine to travel forward, so as to successively invade the anterior part of the perineum, the scrotum, the penis and abdominal walls in front, traveling upward in some cases as high as the axilla. It may, in two ways, reach the anterior face of the thighs. 1st, by traveling along under the superficial abdominal fascia to the lumbar region, and then over the crest of the ilium and down upon the outer aspect of the thigh; and, 2d, by involving the superficial abdominal fascia, and passing along in the subcutaneous areolar tissue. over Poupart's ligament. When the laceration is in that portion of the urethra behind the anterior layer of the triangular ligament, the urine may break through the anterior layer and follow the same course as when the laceration is in front of the ligament, or, as is more common, it may force its way through the posterior layer, into the space intervening between the pelvic and levator fasciæ. From this space it may pass downwards through the levator fascia, when the swelling will be first noticed in the ischio-rectal fossæ, or upwards through the pelvic fascia, opening the cavity of the pelvis. The fatal result of lithotomy is sometimes due to urinary infiltration, following the last mentioned course, the fascial reflection covering the prostate having been cut through at time of the operation. When the laceration of the urethral wall is the result of external violence that has not made a wound in the integument, the hemorrhage from the meatus, and the extensive and early appearing swelling in perineo will indicate the probable character of the accident, and after a few hours, or at most days, the development of the characteristic symptoms of urinary infiltration will leave no room for doubt.

A patient with urinary infiltration being let alone, death may result at an early period in consequence of shock, or later, from the exhaustion

due to extensive suppuration, acting upon a constitution already impaired, in a majority of cases, by excesses and organic disease of the bladder, kidneys and liver. Under the most proper and carefully directed treatment, death is not an infrequent result; and at best, the individual recovers only after more less loss of substance; for, as Bichat has said, "there is no other fluid in the animal economy the effusion of which is so baleful as is that of the urine."

The primary and most important remedial measure to be adopted is free incision, in the middle line of the perineum, further out towards the rami of the ischium and pubis, through the integuments of the scrotum, on the penis, one or other, as necessity may require, in order that the extension of the infiltration may be arrested. Upon two points in the treatment opinions are divided, viz: as respects the advisability of the early introduction of the catheter, and as to the necessity and propriety of perineal section. Of the various authors whose works I have been able to examine, who refer to this particular point in reference to the treatment of the accident under consideration, Berard, Desault, Lassus, Amussat, Brodie, Colles, Guthrie, Druitt, Erichsen and Gross advise the introduction of the catheter immediately after the incisions have been made, such catheter to be either left in or introduced several times a day. Richerand advised catheterization only after cicatrization of the wounds made had proceeded to a considerable extent. Delpech recommended in cases of infiltration from injury, the use of the elastic catheter after the first violence of the inflammation had subsided.

Bumstead says: "Nothing can be done for the relief of the stricture during the continuance of the shock consequent upon rupture, but usually as this passes off, catheterism may be successfully performed."

Sir Henry Thompson says: "You will be safer in letting the catheter alone and permitting the water to drain off. When the water flows off by another passage, the urethra begins to improve, and in three or four days you will probably have no difficulty in passing a number 3 or 4 catheter."

In a case under my care, not long since, where the rupture occurred in or very near that portion of the urethra covered by the scrotum, and in which the extravasation had taken place at least forty-eight hours before I saw the patient, in a very few hours after free incisions had been made urine was readily passed in a larger stream than had been possible for months previous. The special advantage claimed to be derived from the early use of the catheter is the prevention

of the passage of the urine through the abnormal channel, thus favoring cicatrization, while at the same time the stricture is being dilated. But when free incisions have been made, a ready outlet for the urine is afforded, it rapidly loses its unhealthy character, and its passage through the wound hinders cicatrization but little if at all. The very early introduction of the catheter is sometimes impossible, at best not easily effected; the presence of the catheter, if left in, is irritating, and adds to the unhealthy condition of the urethra and bladder. Its use is not necessary, for the tightness of the stricture is in a measure relieved by the free exit allowed the urine through the rupture, and the treatment of the stricture either by dilatation or otherwise, though very important, is for the time being of little moment in comparison with the relief of the peculiar and dangerous symptoms consequent upon infiltration. Even in cases of urethral laceration from external injury, where perineal section has been performed not only with a view to the relief of the immediate symptoms, but still more the prevention of a traumatic stricture, and where it is desired to preserve as perfectly as may be the normal calibre of the urethra, the use of the catheter is not demanded until after the separation of the sloughs. As respects the necessity and propriety of perineal section, there exists a decided difference of opinion. Where the infiltration has taken place in consequence of external injury which has not produced a wound of the integument, a free perineal incision not involving the urethra, with a judicious after-use of the catheter, will in many cases be all that is required. But when the urethral wall has to a considerable extent been lacerated and contused, the free laying open of the urethra will go far towards preventing a subsequent closure either complete or nearly so of that part of the canal included within the contused area, and it is this closure that is the special danger to be apprehended in this sort of injury. But when the infiltration is a consequence of stricture, is it advisable to so make the perineal incision as that the strictured portion of the urethra shall be laid open, or shall the incisions be made with reference only to the giving exit to the extravasated fluid, deferring until a later day direct treatment of the stricture? With reference to this subject Amussat says:

"It is usually advised not to injure the urethra. However, when there exists a large depot from infiltration, is it not better to freely open the canal at that point which is the seat of stricture? If we adopt the measures insisted upon by writers, when the urinary depot has been opened, as the urine can not pass out by any direct channel, and as the stricture still remains, a second infiltration is to

be feared, and the difficulty of carrying a catheter into the bladder remains always the same. On the contrary, if, after opening up the depot, the original obstruction be cut through (which may done by carrying a catheter down to the stricture and letting its point serve to indicate the point from which the incision shall be made), we may at once introduce the catheter into the bladder, and thus hasten very much the cicatrization of the wound, and prevent any new infiltration."

If the stricture is permeable and a catheter or staff can be carried through it to serve as a guide in the incising of the strictured and ruptured portion of the urethra, perineal urethrotomy is not an operation of any very great difficulty; but if the case is one in which a catheter can be carried into the bladder at the time when the perineal incisions are made, it is one in which the evil consequences of the infiltration can be as fully prevented by proper incisions not involving the urethra, as by urethrotomy, and one in which a fair trial should be made of dilatation in the treatment of the stricture. If the stricture is not permeable, the laying open of the urethra without the aid of a guide other than the point of a catheter, that resting upon the external face of the stricture shall serve, as Amussat says, as the "point of departure" for the incision, such operation, as Bichat said of it, "is one always difficult and often impracticable." In the words of Colles:

"When you can not introduce the catheter, you are directed to cut down through the perineum and urethra on the point of the catheter, to find out the impervious part of the urethra, to cut through it, and pass on the instrument to the bladder by the inferior opening. Now the great difficulty is to find this opening, or to find the urethra at all. I assure you one of the most expert surgeons in the kingdom was an hour and half cutting here and there, looking for the urethra, and was at last obliged to put the patient to bed without finding it. The great difficulty is to find the urethra."

But whether the opening of the urethra is difficult or easy, if the operation is necessary and the neglect of its performance will materially lessen the chances of recovery in cases of urinary infiltration, it should be performed, or at least attempted. But if as has been repeatedly shown, free incisions through the swollen and infiltrated subcutaneous areolar tissue are sufficient to arrest the infiltration and give exit to the urine, and if, after such incisions, the strictured portion of the urethra dilates in a few hours or days to such an extent as to pass a number 2, 3 or 4 catheter, it is not, as a rule, advisable to perform external perineal urethrotomy because there has been a rupture of the urethra and extravasation of urine. The operation diminishes

to a certain extent the patient's chances of recovery, and under the most favorable circumstances death is to be feared.

I had hoped to have been able to present to the Academy some statistics of the mortality of the accident under consideration; but the figures obtained as yet are too small to warrant any satisfactory statement as to the comparative per centage of deaths and recoveries.

VENTILATION AND VENTILATORS.

BY WILSON HOBBS, M. D., CARTHAGE, INDIANA.

Read before the Union Medical Society, at Knightstown, Indiana, at their November session; referred to the Committee on Publication, and by them presented to the *Western Journal of Medicine.*

MR. PRESIDENT—My paper for to-day may be considered as doubtfully coming within the constitutional provision which requires each member, at each meeting, to report a case or read an essay of his own writing upon a medical subject. What I shall say upon the topic selected relates more especially to the sciences of natural philosophy and chemistry—but I shall attempt to apply this knowledge, not to the cure of disease, but to its prevention, by the removal of some fruitful causes of disease and death.

It is as much the duty of the intelligent physician to inform himself upon sanitary and hygienic questions, by which he may be able to give advice for public as well as private use in relation to the preservation of health, as to arm and equip himself for battles at the bed-side, and he is a lame workman in the beneficent mission of the science of medicine who is not well informed upon such subjects.

Our thinking men are just now saying and writing much upon the varying and changing types of disease and the corresponding changes in plans of medication; and I have often thought if we would carefully study the changes in the habits of our people, which advancing civilization is producing, we should find more satisfactory solution and remedy for these differences of type than elsewhere.

The necessity of pure air for respiration need not be considered here; nor need we stop to discuss the question whether poisons sufficient to produce disease may be introduced into the blood by the respiratory organs: these are established theorems.

In the primitive states of society, when the people spend most or all their time in the open air, or in wide and airy tents or huts, there is little need of disquisitions upon ventilation and pure air—their supply comes direct and uncontaminated from the broad ocean above and around, with nothing to confine its circulation or obstruct the supply; but when, according to the custom of modern, civilized and enlightened nations, we shut ourselves up in close rooms, we have great need to study the conditions of health as they relate to this subject.

Age after age we are becoming more effeminate. Our fathers and mothers lived in log cabins with puncheon floors, loose board ceiling and wide-jam fire-places, with walls through which light and air were never forbidden to enter; in the cities and "better-to-do" localities they had large rooms and open chimneys, which furnished an ample supply of air and kept it constantly in motion, thus preventing the accumulation and concentration of atmospheric poisons.

Small rooms in residences, and close and ill-ventilated ones for assemblies, are modern inventions, as are also stoves and hot-air furnaces. Year after year we are becoming more timorous of the cold, and closer and closer we are shutting ourselves in. The open fire-place, that good old life preserver, which seeks every nook and corner and crevice for a fresh breath, and failing there gives the alarm by a cloud of smoke, which compels the inmates to open a door or raise a window, is now fast passing away, and we are warming ourselves by hot stoves, steam pipes, furnaces and other devices, which allow the air in our rooms to become corrupted, and which provide no sufficient remedy. In rooms heated by stoves, no systematic method of ventilation is usually arranged, the doors and the windows sliding each way being generally considered ample means to change the air—but their proper use for such purpose is so often neglected, that danger and injury to the inmates are not always escaped. For the ventilation of rooms heated by hot-air furnaces and steam pipes, flues are usually provided, but they are not always so arranged as best to accomplish the purpose intended. I have sometimes seen the ventilating register placed near the ceiling—sometimes near the floor—sometimes at intermediate points—sometimes two in each flue, one near the floor and the other at the ceiling. Each of these methods has its advocates. There is at least one right way to arrange this apparatus, and there may be many wrong ones. It is the purpose of this paper to discuss the scientific principles involved in the question, and determine, if possible, which is the correct method.

Where furnaces are used for heating purposes, a current of cold air is made to pass into a chamber where it surrounds the heater, and its temperature is raised to such point as is desired. It is thence conducted by pipes or flues to the apartment which is to be warmed, and there admitted by a register, which is so arranged as to regulate the size of the current. This register should always be placed at the floor of the room, and, by reason of a well known law, the hot air will immediately rise from it to the ceiling. The apartment being before full of air, this current can not long continue unless a way of exit is opened. This is done by means of flues in the wall, leading to the roof, which are also furnished with registers to regulate the outward current. The hot air thus admitted will warm the room in either of two ways—by mixing with and imparting its caloric to the cold air by radiation and convection, or by rising above, displacing and replacing the cold air, if the flues are so arranged as to allow it to do so. The specific gravity of the warm air being less than that of the cold, it will rise to the ceiling, while the heavier cold air will always be found below it. The two will not mix nor come together except as they are forced by currents or by agitation.

Now if the ventilating register be placed near the ceiling, the warm air will pass out of the room, leaving the heavier cold air below but slowly affected in its temperature. The current would be from the lower register to the ceiling, thence to the ventilating register: and were it not for counter-currents and the agitation which these currents would produce in the body of the air in the room, with the slight amount of caloric radiated, the furnace might be kept hot the whole of a cold day without making the room comfortable.

The draft in the ventilating flue, with the registers thus arranged, would be a very strong one, as there would a continuous column of heated air from the cellar to the roof.

If, however, we place the ventilating register at the floor, the heated air will make its way to the ceiling as before; but finding no means of escape, it becomes imprisoned there, pressing upon the cold air below, which immediately seeks exit through the ventilating register. As the currents continue, the heated air gradually fills the room from above downward, and the cold air near the floor is all carried out through the flues to make place for it. Thus the room is quickly heated, the warm air driving out and replacing the cold.

Until the room is thoroughly heated, the draft in the flues, with the ventilating register thus arranged, will be much weaker than in

the former case, because the ventilator is not now filled with hot air as before, but with cold, and which is pressed out by the elasticity of the heated air at the ceiling, not rising by its own specific gravity.

Now, as we pass with the ventilating register to intermediate points on the wall between these extremes, we shall find the effects correspondingly modified, the ventilator always receiving its supply from above the register, and leaving the cold air below.

It will thus appear that with both registers at the floor, the room will be most quickly and most thoroughly heated; and as we pass the ventilating register upward, we increase the body of undisturbed cold air. From this we infer, that if the only purpose of the air flues were to heat the room and maintain its temperature, the registers should both be placed at or near the floor, and if the ventilator is not so arranged, however well the room is heated, there will always be a stratum of cold air near the floor of the room, which will produce cold feet for those occupying it.

When steam pipes are used for heaters, there is no supply-pipe to furnish a current of hot air. The heater should be placed near the floor, where it will be constantly immersed in the cold air. A current of heated air arises from it toward the ceiling, while it is the center of a circle of surrounding currents of cold air passing up to be warmed. The air, as it rises, gradually expands out at the top of the room. As it gradually gives out its caloric, it sinks downward to make room for the lighter and warmer. Thus it continues to sink until again at the floor, when it again comes up to be warmed, and again rises to the ceiling. Thus the air continues to rise and fall, as it receives caloric, and distributes it, mixing and mingling with that about it, until the whole is of equal temperature.

With such a heater there is no need of a ventilating pipe in order to warm the room; there is no fresh air admitted, and hence no demand for exit, except to the extent of the expansion of the atmosphere in the room by the heat, which will easily be accommodated in any building not air tight.

To change the air of a room thus heated, the supply of cold air should be admitted near the heater, where it will be immediately warmed, and the ventilating register placed as in the case of rooms heated by furnaces.

The human body in a limited space of confined air, becomes self-destructive, and an additional use of the ventilator is to carry away the poisons which the air receives from the occupants of our houses, and maintain its purity.

We will now consider what are these poisons, their mode of dissemination, and the means requisite for their elimination.

At the head of this list we will enumerate carbonic acid gas, which is, when respired, a deadly poison. The average amount of carbon daily consumed by an adult, in pulmonary and cutaneous exhalation, in the form of carbonic acid, is about 10.8 ounces, the skin eliminating about one-thirtieth of the amount. The specific gravity of this gas is 1.52, atmospheric air being 1. Hence, by its great weight, it will settle toward the floor of the room and mix with the cold air there.

The average amount of aqueous vapor daily exhaled from the lungs is from sixteen to twenty ounces, the quantity depending upon conditions not necessary now to consider. This is not pure water, but contains in solution carbonic acid, hydrogen, nitrogen, phosphorus and a considerable amount of albuminous substances in a state of decomposition. When exhaled, this vapor has a temperature of ninety-eight to one hundred degrees, and being lighter than the air in the room, will rise toward the ceiling, and diffuse itself with the atmosphere there.

The average amount of fluid daily lost by *insensible* perspiration may be stated at from two to three pounds, and almost any man occupying a comfortably heated room will add a pound or two to this by *sensible* perspiration. Nor is this pure water; besides the mineral salts which it holds in solution, it has a large amount of organic substances in a state of incipient decomposition. This, too, comes to the surface at the temperature of the body, and when liberated, will rise to the ceiling, and mix chiefly with the warm air there.

Besides these principal, there are other impurities in less amount, which emanate from the body, or necessarily occur from our habits of living. Among these may be mentioned small quantities of nitrogen, sulphuretted hydrogen, ammonia, the vapor of saliva and the fumes of various perishing substances which may be present. Most of these substances, from their low gravity, will seek the ceiling and mix with the warm air there.

It is not to be understood that the impurities indicated will not separate themselves in chambers as stated. The atmospheric currents kept up by the access and egress of the air, and other causes producing agitation, will more or less mix them through the whole body of the air in the room; but the greater quantity of each will find the places above assigned them.

Hence it will be apparent that of the substances which should be

carried out of the chamber by the ventilating flues, one class will be found at the floor and the other at the ceiling.

Now if the ventilating register be placed at the floor, it will carry off the cold air and carbonic acid, but leave the atmosphere of the room freighted with the lighter exhalations above enumerated, which have no way of escape. If, on the other hand, the register be placed at the ceiling the hot air and lighter impurities will pass out of the room, leaving the shivering sufferers below with cold feet and breathing carbonic acid. If it be placed at any point between these extremes, it will remove neither class completely, but leave the room poisoned with all by its taking out the best air in it.

No single register can act at the two points where it appears from what has been stated, means of egress are most necessary; hence it is apparent there should be two—one at or near the floor to remove the cold air and carbonic acid, and one at or near the ceiling to afford exit for the lighter exhalations enumerated. The latter will, of course, allow the escape of a quantity of warm air, but as this can not be separated from the impurities to be eliminated, the waste can not be avoided. It may be closed until the room is warmed, and the size of the current afterward graduated according to the number of persons in the room, for reasons which are apparent.

The lower register has a double use—the elimination of the carbonic acid, and the removal of the colder air. It is through this channel that the chief current from the furnace to the roof is to be maintained, and upon its capacity should chiefly depend the supply-draft from the furnace, and the frequency of the change of the whole body of the atmosphere in the chamber. The upper register need not be so large as the lower, for two reasons, viz: 1st, the current through it is a very strong one, for the reason already stated; 2d, this current affords no aid toward heating the room, but rather retards it by carrying off the caloric; its only purpose is to separate the air, and should only be large enough to prevent the concentration of the lighter exhalations.

In assembly rooms the air needs more frequent change, as more persons are breathing it, and these points of exit should have corresponding dimensions.

I may also state here what was omitted at its proper place—that the supply-pipe from the furnace and the ventilating registers should always be placed at opposite points of the room, so as to compel the currents of air to traverse the whole chamber.

SPERMATOZOA.

BY W. H. LEMON, M. D., BRAZIL, INDIANA.

In prosecuting, recently, some microscopic researches in entomology, in behalf of the New Albany Society of Natural History, those tiny creatures led me away by their charming proportions as they descended into the infinitesimal world, until I found myself in a strange new field, in search of the entosthoblast of being—the nucleus of the nucleolus of life,

With a magnificent glass, having a power of near seven hundred diameters, which it is my good fortune to possess, I have been able to elicit many interesting facts; some of these pertaining to human spermatozoa, may not be wholly uninteresting to many of the profession, the more especially so, since the questions of excessive fecundity and sterility are so often forced upon us.

The ultimate forms of animate and inanimate organisms seem to merge so nearly into one as to need but the presence or absence of the same subtle agent to convert both into neither (original inorganic atoms) or vitalize the whole, to bestow at some future moment the distinctive elements that chain the germule to the animal or vegetable kingdom.

Certainly, the world of forms begin the monad. From the huge creations of the midæval age, the mammoth palm, and mastodons, to the veriest midge of the present day, all began being alike: at once a *cytoblast* and *cell-birth*, a *spermatozoa*.

The *pollen* of the plant, and the *semen* of the animal, may fecundate in the same mysterious manner; and at some future day we may be able to *see* a twin brother to our own spermatozoa in the fairy dust of flowers.

A very recent specimen of semen, when first placed under the glass, seemed a living but ill-defined mass of maggots, but which was soon resolved into a structure of something like cellular tela and columnar epithelium, floating in colorless *liquor seminis*, amid which sported multiplied thousands of very young *tad-poles*, or more exactly, *wiggle-tails*, like those of stale rainwater—*spermatozoa*. Embryo beings, eh? What becomes of them when they pierce the ovule, eh, again?

That they are individual vitalities, nothing is clearer. They possess all the requisites to constitute them such. They have distinct

forms; rest or move as they choose, and live or die independently. They travel in different directions—meet and pass each other. One will wriggle and lash his tail for hours on the same spot, while another drives past him with ease, making a journey at once, in about thirty seconds, across the entire field of the microscope—full the one thousandth part of an inch—a truly wonderful feat! They will show signs of consternation and alarm, and dodge from cell to cell like lizards hunting a place of safety. I have seen three and four packed in a single celule the one-four thousandth part of an inch in diameter. Thrown into the vagina, they are said to travel universally in the direction of their destination, the uterus and ova; but on the glass-slide there is the utmost confusion, save among those on the outer edge of the film under examination, whose heads are turned nearly always toward the center of the mass, caught, as it dries up, running for deep water. Is that instinct, volition, or what? As the school-boy has it, for the present, we will call it "what."

They possess a body or head, neck and tail. The body or head is an elipsoid in shape, at one end of the longer axis of which is inserted the caudal filament through a ring or button that forms the neck. Their entire length will average about one-twelve hundredth part of an inch. The body is about one-tenth of this in length, and one-twelfth of it through the shorter axis; hence it is about one-twelve thousandth of an inch long, and less than one-fourteen thousandth of an inch thick. The neck is about one-twentieth of the body, and the tail with a thickness equal to about the one-one hundred and sixty-eight thousandth of an inch, has the wondrous length of one-twelve hundredth of an inch. These measurements vary much with the different physical conditions of the animalcule. While in the normal state, they have the life-like translucent fullness of very young fish; in dying, they shrink and blacken, presenting well-defined outlines. They show a clear spot in the center of the body, which, however, may not be owing to anything peculiar in their structure, but to a law of light.

Not all specimens of semen possess spermatozoa—some many, some few; and in some again they are dead: hence not all are capable of fecundating; for that power, beyond question, lies in and depends upon the vital spermatozoa. Healthy semen teems with them. In an average specimen, recently examined, I counted three hundred in the clear focal field of my glass, the one-ten thousandth part of a square inch.

This would yield the enormous number of three hundred millions in a cubic inch of the vital fluid.

It is not our province to settle the question of how many are required to vivify the ovule; suffice it to say, whether one or many, that by this great number a beneficent Creator has put the chances for procreation beyond a peradventure.

CONSERVATIVE SURGERY.

WAYNE GRISWOLD, M. D., CIRCLEVILLE, OHIO.

December 8th, 1868—Was called to see Miss W. While holding a chicken for her brother to kill, a misdirected blow of his hatchet cut off the end of her thumb, taking the entire nail, about one-third of the first phalanx and the entire ball of the thumb. On asking for the piece of thumb, they informed me that it was rolled up in a cloth out in a cold room, and that it had been one hour and three minutes (by the clock) since the accident. The mother was in great tribulation at the prospect of a deformed thumb for her young daughter, and the child was still more worried for fear she would not be able to play octaves on the piano. After washing the thumb in warm water till it bled freely, and warming the piece in the same manner, it was placed as near in position as possible and secured by adhesive straps. Left orders to wet the thumb (in a warm weak solution of carbolic acid in water) every few hours.

On the third day, removed the dressing. The parts adhered, but the nail looked blue and the skin white and dead. Dressing continued.

On sixth day, removed the dead skin and with it the phalangel bone. The ball of the thumb looked like a piece of fresh beef covered with purulent matter. Found by examining with a glass, a new nail starting. Continued the carbolic acid dressing.

The old nail came off in fifteen days; a new one took its place, leaving the thumb perfectly natural except a little flatness of ball from loss of blood. There is not a scar to mark the place where the thumb was injured. New skin formed from the stump up over the ball, smooth as it ever was. The mother was left to rejoice that her daughter had no thumb deformity and was again able to play the piano as well as she did before the injury.

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MYXOMA, OR HYPERPLASIA OF THE VILLI OF THE CHORION.

BY ALEXANDER D. SINCLAIR, M. D.

Member Massachusetts Medical Society, American Medical Association, Obstetrical Society of Boston, &c. Re-printed from Vol. 1, No. 1, of the publications of the Massachusetts Medical Association.

A little *brochure* of three pages, on a very old subject, with a very new name. The first page relates to the rarity of the affection; the second, the history of the case; and the third and last describes the remarkable phenomena.

"Mrs. ———, æt. forty, mother of seven living children, youngest about four years old, aborted after her first and fifth conceptions, about the third month. * * * Catamenia regular with some pain, were last present on January 27th, 1868." Pregnancy, "May 10th, she noticed for the first time her linen slightly stained with a somewhat bloody matter, which appeared at intervals for the next four days, with a slight pain occasionally felt in the uterine region.

Near midnight, on May 14th, "she was suddenly seized with an alarming hæmorrhage, causing her to faint and become pale as if dead. She had recovered her senses before I arrived, but the pallor which remained, together with the appearance of the bed on which she lay, bore evidence of a frightful loss of blood.

"On examination, the uterus felt like that of a woman in the fifth month of pregnancy. The os rigid, though sufficiently dilated to admit the index finger; hæmorrhage had ceased. Careful examination of the clots discovered only a small fœtus, having the appearance of full three months growth."

A tanpon was introduced and ergot administered, restoratives, &c.

"This dilated the cervix and excited uterine contractions, expelling large quantities of bloody fluid, *and opaque, flattened, flesh-colored bodies, irregular in size and form, many of which looked like pieces of decidua, generally longer than they were wide, and measuring about three to ten or twelve inches in length; others consisted of tuberosities strung together by more or less elongated and constricted portions. Many of these measured from two to five inches in length. All of these bodies were covered with a thin membrane (exocborion), from which sprung numerous bud-like processes, varying from one to three lines in length.* No where did these growths present the vesicular

appearance which characterizes hydatidiform degeneration of the chorion villi, and when placed in a basin of water, they sunk to the bottom like pieces of flesh. . * * * * The quantity of these bodies discharged would more than fill a quart measure."

We venture the presumption as a safe one, that these lines will scarcely attract the eye of any practitioner of any experience who has not encountered his similar case, and will not at once recognize it under its new title as a simple case of mole, and of the variety spoken of in the older obstetrical works as the mola carnosa. The history of the case, the symptoms, the character of the discharge, and above all, the microscopical results decide it as definitely as any collection of facts can.

"On microscopic examination of these bodies (which had been in alcohol for nearly twelve months), they were found to consist, essentially, of mucous tissue, or more literally, cells with here and there an indistinct fibrous appearance. Fatty metamorphosis had commenced in the tissue. The largest tuberosities contained masses of blood corpuscles and granular debris. No blood vessels were found, although searched for diligently."

What is a mole? So long ago as the time of Dubois and Velpeau, who wrote during the formation of the modern school of pathology, a mole was regarded as an "hypertrophy of the villosities of the chorion." (*Chaily Obst., p. 82.*) And although opinions have varied as to the primitive point of departure, *i. e.* whether in the decidua or the chorion, almost all agree that this hypertrophy constitutes the mole. (*Vide* resumé on the vesicular or cystic mole in its scientific and practical considerations, by Dr. Marcus Bloch, Freiburg, 1869. Schmidts Jahrbücher, August, 1869). Moles, organized fleshy masses. (*Montgomery on the Signs, &c., of Pregnancy, p. 213*). Moles, massa carnea (*Vogel*). Voigtel in describing the different species of mole, "in others," he observes, "the fœtus itself is destroyed, and only its membranes and the placenta continue to grow for a time and *get thickened and fleshy.*" For a good description of the mola carnosa, see *Lange's Geburtshülfe, p. 411.*

"When a placenta has been formed, many alterations may occur in its tissue in consequence of hypertrophy, inflammation or other morbid changes, &c. When thrown off, these diseased placenta present usually the appearance of a fleshy mass, being much thicker and more solid than the natural tissue, &c., and in some, there is a fatty degeneration." (*Hodge, p. 460.*)

Indeed, we scarcely entertain a doubt but that the gentleman himself entertains the opinion that the "remarkable condition" was a

mole attended with all the symptoms occurring, in the rule, as in this case. But we can not understand why the matter was regarded of such importance with all the literature we possess on the subject as to merit a re-print from the transactions.

Myxoma is a beautiful name and in accord with Virchow's anatomical classification of morbid growths. It means simply a tumor of mucous tissue, and was used before Virchow in describing this very condition, by Hildebrandt. In the resumé quoted above, occurs the following sentence: "Of particular interest is the occurrence of partial degeneration of the coty ledons, which have been observed both in the chorion and very often in the placentas of ripe fruits. (*Hildebrandt, Myxoma fibros, plac.,*) when the fœtus is generally found dead, badly or defectively developed."

"Myxoma occurs oftener as hyperplastic, more seldom as heteroplastic formations. To the first belongs especially the myxoma of the placenta (the so-called grape or vesicular mole), which consists in an hypertrophy of the mucous basis of the chorin villi *generally in the entire circumference of the membranes.*" (*Allgemein: Pathologie, Uhle & Wagner, p. 400*).

"Strapman found the decidua of a three months ovum thickened in places to three to four lines," and besides this general thickening, several perfectly smooth, somewhat flattened polypous excrescences, with broad bases. Besides these *mucous masses* were observed, likewise, other small polypi with pedicles, in commencement.

Virchow describes a similar case from a supposed syphilitic disease of the membranes, wherein the large *mucous masses* possess a smooth surface of a reddish color. He considers it a hyperplasia of the decidua (*Klob. p. 557–8.*) He, Virchow, believes also that the enlargement of the villi occurs outside of the cells, which may either persist or perish by fatty degeneration. The tissue is, besides, identical with that of the umbilical cord.

"It is among the tumors due to a proliferation of the mucous tissue that is among the myxomata that hydatidiform degenerations also are now ranged, and they are called myxoma of the villi of the chorion." (*Charpentier sur des Malad. du Placenta et des Membranes, p. 137*).

"The mucous tissue exists also in a high degreee in the tissue of the umbilical cord, which is called the gelatine of Wharton." (*Charpentier, loc. cit.*)

The most interesting case of mole, we may mention in passing, which we have ever encountered, is recorded in *Klob's Path. Anat. of the Female Sexual Organs, p. 529,* wherein an extra uterine pregnancy degenerated to a mole, while a mole also existed in utero, which proved fatal by hæmorrhage in the second month.

The case reported then, is simply a case of molar pregnancy with the usual termination, and occurring at the time (three months) when it is most likely to occur, because of the increased vascularity at the period of the placental formation, and from the fact that nearly twelve months elapsed between the accident and the report, the whole case bears the impress to us of a resurrection from its spiritual preservation and a re-imbodiment under the newer and more fashionable name.

The "most remarkable condition" is that of the accompanying plate, which consists of a number of irregular lines enclosing an open cavity, and which does not convey nearly as good an idea of the condition described as if the book had been suddenly closed on three or four unfortunate insects between. J. T. W.

REPORTS ON THE DISEASES OF CATTLE IN THE UNITED STATES, MADE TO THE COMMISSIONER OF AGRICULTURE, WITH ACCOMPANYING DOCUMENTS.

Washington: 1869. Pp. 190—8 vo.

The remarkable increase of disease among the domestic animals of the United States, in the last fifteen years, has attracted general attention, and the fact is of deeper interest because this prevalence of destructive plagues among these creatures has been attended by a signal exemption of the human family from all epidemic disorders. Except cholera, which spread over the continent in 1866, we have had no generally diffused disease since the fatal malady, called by the people cholera for want of a name more descriptive of its character, appeared about fifteen years ago among our hogs and the various families of poultry. What connection there is, if any, between these facts it would be unprofitable, in the present state of our knowledge, to inquire. But it can not be regarded as uninteresting that, at the time when man is enjoying the highest health, the animals associated with him are suffering from destructive diseases. It establishes at least this fact, that the causes of disease are not common to him and the lower animals. The "vengeful arrows" which destroy his "dogs and mules," are not those which fasten upon him, and the infection by which he is poisoned passes harmlessly over them.

This volume is devoted to the consideration of the diseases of cattle, which have only begun to excite interest in our country within the last few years. In the summer of 1868 an affection became general among the cattle brought to Cairo, Illinois, from Texas, and has been called, from its resemblance to a disease of the old Spanish cattle on the Gulf coast, "Spanish fever." It is more generally known by the name "Texas Cattle Disease." Professor Gamgee, of London, was requested by the Commissioner of Agriculture, Horace Capron, Esq., to make a full investigation of the complaint, and this work consists chiefly of his reports on the subject. The disease, according to Prof. Gamgee, is pleuro-pneumonia, and is propagated alone by contagion. The popular term murrain was applied, in times past, to all the fatal affections of cattle. This has been sometimes called "pulmonary murrain." It has been long known to veterinary surgeons, and much within the last century has been written concerning it in France, and especially in Germany. It has been eminently fatal in England and Ireland in the last twenty-seven years—two millions pounds sterling having been lost in cattle in those countries from the disorder during that period. From England and Holland the malady has been propagated far and wide. In 1843 it is said to have been imported into Brooklyn by a cow from Germany, and the disease is believed to have existed in the neighborhood ever since. From Holland the infection was imported into Massachusetts in 1859. Four cows arrived in a diseased state, of which three died in a short time, and the disease spread rapidly among the cattle on the farm of the importer. That the pleuro-pneumonia of cattle is propagated by contagion Prof. G. entertains no doubt; and to ignore the fact, he contends, will be to diffuse the fatal malady all over the whole country. Sick cows are sold to the butchers; often put into droves of other cattle, to which they impart the contagion, and in this way it is carried to all the marts where beef is sold, to become again centers of contagion.

Of the signs or symptoms of this disease, the first that elicits attention is a cough, and this Prof. Gamgee has found always attended by fever. In a herd of cattle he has frequently detected individuals apparently in perfect health, with a temperature of one hundred and four or one hundred and five degrees Fahr., and never in such a case did he fail to discover friction sounds and loud respiratory murmurs, the disease having been already set up in the lungs. The animal affected first attracts attention by the appearance of its coat, which is

dull and staring; its appetite soon fails, its breathing becomes quick, and it stands motionless with protruding head and arched back, which sufficiently indicate grave disease. Auscultation and percussion reveal a harsh rhoncus, with solidification of one or both lungs. Death, when it occurs, takes place from prostration, suffocation, purulent fever or hectic. The incubation stage of the disease may last eighty days, and usually averages from twenty-five to forty; the acute stage varies from seven to twenty-one days. The mortality varies from one to ninety per cent. of the animals affected. Even in mild outbreaks the mortality is seldom below twenty-five per cent. In England the usual cattle mortality has been more than double by the lung plague, and for many years, of the cattle that have died, fifty per cent. have fallen victims to this fever.

In regard to the contagiousness of the cattle plague, Professor G. remarks:

"The history of pleuro-pneumonia, coupled with the observations made on the supposed casual agencies capable of inducing the disease, are almost sufficient to establish the purely contagious nature of the disease; but there are several important proofs that deserve mention.

"It is seen in all countries where the lung plague appears, that it spreads in proportion to the opportunities of contagion. It is worst in large cities where cow-feeders have to make frequent purchases. It is apt to diminish in severity so long as the cows are confined to stables in the winter, and different herds have no chance of approach.

"The high-prized herds of England, which have been carefully isolated by their proprietors, have always remained free from the disease."

All the facts adduced on this head certainly make out a strong case in favor of the nature of the plague asserted in the following paragraphs:

"The lung plague is a malignant fever, never generated *de novo*, so far as reliable information has yet reached, dependent on the introduction of a virus or a contagion into the system of a healthy animal. This principle produces a local change if inserted into any part provided with a connective or fatty tissue, in which it most readily penetrates. The same local change is produced by its contact with the delicate mucous surface of the bronchial tubes.

"Viewed in this light, we have to classify bovine pleuro-pneumonia with the contagious fevers, and we must recognize that it is peculiar and different from the other known diseases of man or animals. The ordinary phenomena of inflammations are but superadded conditions, and an animal may have the disease without indicating their presence."

The medical treatment of this disease has not been satisfactory, and as to the treatment in general use, Prof. G. remarks that it is worse—useless. Bleeding was at one time extensively practiced, especially in England, but it is now almost entirely abandoned. The remedy to which Prof. G. attaches most importance, is iron in the form of the sisquichloride or sulphate, which he gives with the view of smothering the exudation into the lungs. A drachm mixed with coriander seed in bran, is freely eaten, and has, he thinks, often arrested the distemper. But it is evident from all that has been written on the subject, that a great deal is not to be expected from medical treatment in this complaint when once firmly established, and hence the greater importance of prophylatic measures by which it may be prevented from spreading. These consist in separating the healthy part of the herd at once from the diseased animals, and in inoculating those which have been exposed to the infection. Our author is fully persuaded of the efficacy of inoculation in securing at least a temporary immunity from the disease. He is not sure that a permanent security is given by the operation. At the same time that this exemption is secured, there is no danger of developing the plague by inoculation. The tip of the tail is the point most favorably chosen for inserting the virus, which is the fluid obtained from the lungs of an animal in the first stages of the disorder.

If the conclusions at which veterinarians have arrived in regard to the contagiousness of this disorder, and the practicability of avoiding it by inoculating healthy animals, should be sustained by future observation, the terrors of this plague will be substantially annihilated.

From this interesting report of Prof. Gamgee, it would appear that diseased cattle in great numbers had been slaughtered and sold by butchers in all countries where the lung-plague has prevailed, and it is a note-worthy fact that in no instance does disease in man seem to have originated from the use of such flesh.

Splenic fever is the subject of an elaborate report by Prof. Gamgee. The disease is not contagious. It is hardly amenable to treatment. Quarantine is the measure for preventing its dissemination.

These reports are highly interesting to agriculturalists engaged in raising cattle, and they are also instructive to the physician. We hope the investigations will be continued, and that important results will follow the efforts of government in this direction.

THE SCIENCE AND ART OF SURGERY: BEING A TREATISE ON SURGICAL INJURIES, DISEASES AND OPERATIONS.

BY JOHN ERIC ERICKSEN,

Senior Surgeon to University College Hospital, and Holmes Professor of Clinical Surgery in University College, London. From the fifth enlarged and carefully revised London edition. Illustrated with six hundred and thirty engravings on wood. With additions by JOHN ASHHURST, JR., A. M., M. D., Vice-President of the Philadelphia Pathological Society, Surgeon to the Episcopal Hospital, etc., etc. Philadelphia: Henry C. Lea. 1869. Pp. 1238, imperial octavo. Cloth, $7.50; leather, $8.50. From Robert Clarke & Co., 65 West Fourth street, Cincinnati, Ohio.

Among the various works issued frem the medical press of this country, during the present year, this edition of the "Science and Art of Surgery" stands pre-eminent both for its intrinsic value and its handsome appearance.

Through four editions the work is so well known to the profession that any extended notice of it here would be entirely superfluous; for we believe it to be generally admitted that no single work, either American or foreign, pertaining to the principles and practice of surgery, has been so universally received with favor as this of Professor Ericksen. For ourselves, we may be permitted to say, that for the last ten years we have been in the constant habit of referring to "Ericksen," when beset by doubts and difficulties in the managment of our surgical cases; and owing to the completeness of the work in details relating to the pathology, diagnosis and treatment of the affections falling within the domain of surgery, we have seldom failed of obtaining the information sought.

The fifth London edition, from which this is prepared, is in two volumes; but by greatly enlarging the page, the American publisher has presented the English edition complete in a single large though not unwieldly volume. The improvements in this edition, as clearly stated in the preface, are, "The whole work has been remodeled; many of the wood-cuts have been re-drawn, and nearly one hundred new ones added. Some chapters have been, in a great measure, re-written, and much new matter has been added beyond the mere general enlargement of the work. The additions thus made have not been confined to any one particular part, but have been widely and generally distributed through the various subjects of which the work treats;" and

in them are presented a notice of the more important recent advances in the science of surgery, and the results of the more extended experience of the author in the practice of its art.

The chapter devoted to ophthmalic surgery is written by Mr. Sheatfield, one of the ophthalmic surgeons to University College Hospital, and adds much to the value of the work. The chapter on syphilis has been re-arranged by Mr. Berkley Hill, surgeon to the Lock Hospital, London. And the subjects of general surgical diseases, including pyæmia, scrofula, and tumors, have been revised by Dr. Alexander Bruce; while others have assisted in other branches.

The additions made to the work by Dr. Ashhurt are of especial interest, and consist mainly of such practical matters as have been omitted by the author in relation to American surgery; and we believe the general verdict will be that the American editor has performed his work, both as a text-book for the student and as a work of reference for the practitioner, at the same time we observe several instances in which we think a brief notice of the statistics collected by American surgeons, in relation to certain operations and accidents might have been inserted with advantage.

A well arranged table of contents and a copious index render the work convenient as one of reference. In the way of paper, printing and binding, the work is superb. J. R. W.

A MANUAL OF ELEMENTARY CHEMISTRY—THEORETICAL AND PRACTICAL.

BY GEO. FOWNS, F. R. S.,

Late Professor of Practical Chemistry in University College, London. Edited by Robt. Bridges, M. D., Professor in the Philadelphia College of Pharmacy. Published by Henry C. Lea, Philadelphia, 1869. For sale by Robt. Clarke & Co., Cincinnati.

The publishers have given us this re-print from the tenth revised and corrected English edition; the notes, together with a number of illustrations having been added by the American editor. Fownes' chemistry has long enjoyed the favor of students, more especially of those directing their attention to the science of medicine, and this edition, fairly representing, as it does, the present condition of the science, will, we are sure, continue to hold the favor it has so long enjoyed.

It is the text-book recommended by many, if not most of our medical lecturers, and a more complete expose of the subject can not be found in any work of its size. About one-half of the work is devoted to organic chemistry, the greater part of which has been re-written and those additions made which have been rendered necessary by recent investigations and discoveries. The latter part, about forty pages, is devoted to animal chemistry; this has been entirely revised. The work is substantially bound, printed on good paper, in small but clear type, embracing much information in a compact and convenient form for use. We know of no work on the subject more deserving of a place in the library of either practitioner or student of medicine. A. W. P.

BIOGRAPHY.

A BIOGRAPHICAL SKETCH OF DR. B. F. SHUMARD.

BY LUNSFORD P. YANDELL, M. D.

The subject of the following memoir was known as a man of science wherever Geology is cultivated; and it is in this character that his name commands the highest respect of men. But he was also a physician of note, and at the time of his death was pursuing his profession successfully as a teacher and a practitioner in one of the leading cities of our country. His professional life presents some points of unusual interest. It affords an instance of the attainment of distinction in two pursuits foreign from each other—both demanding much time and severe mental application; and the rarer example of success in the practice of physic, after having deserted it through a number of years for another profession. The many friends attached to him by his social virtues and scientific attainments, have a right to expect some enduring record of his useful and honorable life; and it is with the view of meeting to some extent this just expectation, as well as to satisfy the claims of friendship that this memorial is written.

Dr. Benjamin Franklin Shumard was born in Lancaster, Pennsylvania, on the 24th of November, 1820, of pious and respectable parents.

His father, Mr. John Shumard, was a descendant of the Huguenots, and received in his youth careful mental and moral training. Evincing decided piety when young, he was educated for the ministry in the Methodist Episcopal church. The day had been appointed for his ordination, when he suddenly declared his intention to quit divinity and engage in some business by which money might be made. His friends remonstrated against his change of purpose in vain. He was of a somewhat stubborn temper, and it is possible that they were not entirely judicious in the manner of opposing his determination. An old, gray haired minister, to whom he was greatly attached, expostulated with him feelingly against his course, and finding him immovable, closed his argument with the prediction, that "though he might make money, he would never be rich"—a prediction which was literally fulfilled. About a year after this event he married Miss Ann Catherine Gets, of Lancaster. He had become a merchant, and was in prosperous business. His prospects at the time of his marriage were encouraging, but he grew restless, and in changing from place to place in a few years wasted not only his own means, but the little patrimony of his wife. He was industrious, punctual, energetic, but the desire of change operated as a bar to success notwithstanding his good moral and business habits. But amid all his failures as a merchant, he never lost sight of the interests of his family; and, although generally straightened in his circumstances, he found means to keep his children at school. Two of his sons received a professional education. He was careful about the moral training of his children, and, always truthful himself, impressed upon them early the sacred duty of adhering at all times strictly to the truth. At one period of his life his misfortunes rendered him almost desperate, and it was feared that he would become a slave to the vice by which so many men, under the pressure of pecuniary disasters, are ruined. But his strong will, his early religious principles, and the salutary influence of a judicious wife and devoted sons prevailed, and he died in the communion of the church in which he was reared, cheered in his declining years by seeing his children prosperous in life, and two of his sons rising to distinction.

The father of Mrs. Shumard, Mr. Peter Gets, was a man of decided talents. He was an inventor, of a mechanical genius, and had great fondness for general science. He entered the navy as midshipman, in 1812, at the opening of our last war with England, and was with Lawrence at the battle of the Hornet and the Peacock. After a short

service he left the navy, and was appointed a lieutenant in the army, in which capacity he served to the close of the war. He was successively, at different periods, a publisher, an editor, a bookseller, and an author, and when he died was mayor of the city of Reading. He claimed to have invented the first fire-engine used in America. At one time he was connected with the general Government as inspector of arms, and in some official capacity made two or three voyages to Europe in the service of the war department. His daughter inherited his taste for letters, which he took pains to cultivate, and this, conjoined with a sound judgment, deep piety and a natural sweetness of disposition, rendered her one of the most valuable of mothers. Mr. Getz merits the consideration of American physicians as the early patron and friend of Dr. John Eberle, so long esteemed one of the ornaments of our profession. Mr. Eberle, who lived in the same town with him, had not the means to improve his son's mind as he wished. Mr. Getz was impressed with the taste for study and aptitude to learn displayed by young Eberle, and not only encouraged his father to send him to school, but assisted him with the means of giving him a thorough education. He was not spared to see his young townsman reach the eminence which he ultimately attained as a teacher and author, but he lived long enough to see him rising into the highest rank as a practitioner in Philadelphia.

In 1835 the father of Dr. Shumard removed to Cincinnati, and he was placed soon afterwards at Miami University, in Oxford, Ohio, where he remained three years. Here, as always before when at school, he made good use of his time. He was a diligent student, and acquired accurate knowledge of the branches of study to which he applied himself. His father removed to Philadelphia before he was ready to take the degree of A. B., and he was sent two years afterwards to attend a course of lectures in the Jefferson Medical College. After one winter in that institution, his father removing to Louisville, he became the private pupil of Prof. Gross, and entered the Medical Institute of Louisville in 1841. At the end of his second course in the Institute he received his doctor's degree, to which he had fully entitled himself by years of diligent study. In a large graduating class, it is safe to say, that not a student excelled him in the extent or accuracy of his attainments.

That stage of his career was now reached the most anxious in the life of a young professional man, when he had to select a home and set up in his profession for himself. The world was all before him

where to choose, and he knew that it was entirely upon his own efforts that he had henceforth to rely for the means to make himself comfortable and independent in the world. Something led him to fix upon Hodgenville, a small town in Kentucky, south of Louisville, as his place of abode; and here, a few months after he received his degree, he opened an office and modestly tendered his professional services to the great public.

The novitiate, proverbially trying to the patience of young professional men, was, in the case of Dr. Shumard, more than usually tedious and discouraging. With his manners and tastes it is doubtful whether he would have commanded early success any where. His habits were those of a scholar brought up in a city, and all his tastes inclined him to the cultivation of science rather than the acquaintance of men. The people among whom he settled, though intelligent and capable of appreciating professional merit, had been accustomed to look for sociability in those who sought their favor. Besides a native modesty which made Dr. Shumard retiring, the love of natural history had become with him a passion, and this tended constantly to draw him away from society and from his office. Instead of seeking practice, he spent a good share of his time in the woods and fields exploring the geological formations of his neighborhood, and making collections of objects of natural science. The people had no just conception of the dignity of such employment. They could not understand him. He was looked upon generally as eccentric, and by many, perhaps, as not in his right mind. It was evident to all that, at the least, his heart was not in his profession, and very naturally but few were disposed to seek his services as a physician. He made many friends in Hodgenville, of all in fact who were brought in contact with him, and was greatly esteemed, especially by his professional brethren, for his high cultivation of mind, his refinement of taste and manners, and his amiable character; but his progress as a practitioner was so slow that in less than a year he determined to quit the country and return to Louisville. This step was extremely disheartening to his father, who had experienced in his own case the evils of instability, and was by no means pleased at the display of so decided a taste for natural science in his son. On the return of the young doctor to his house he remarked to a friend, that he "was afraid Benjamin had so many rocks in his head that there was no room left in it for medicine." Mrs. Shumard, it is interesting to remark, was more hopeful in regard to her son. She was not displeased by his devotion to geological studies

but encouraged him to attempt to win a name as a cultivator of the science.

In the late Prof. Cobb, Dr. Shumard met a congenial spirit, a friend who appreciated his fine powers of mind and sympathised in his love of the study of nature, and who, as a professional anatomist, was qualified to assist him in analyzing the structure of the by-gone races of animals that once tenanted our globe. Together they explored all the localities so rich in organic remains in the neighborhood of Louisville, and made collections of their fossils. In this way Dr. Shumard was diverted more and more from his profession, and yet there were indications of growth in his business, which showed that he might succeed as a practitioner if he would devote himself to practice.

In the summer of 1846, M. Edward de Verneuil, President of the Geological Society of France, in the course of a tour to determine the parallelism of the palæozoic formations of North America with those of Europe, visted Louisville, and in those researches was materially aided by the knowledge of Dr. Shumard, who had made the geology of Kentucky a special study. That eminent geologist expressed the greatest delight at finding in the Louisville collections fossils so analogous to many in his own cabinet at home as to fix beyond doubt the equivalency of the corresponding deposits; and as a token of his regard for the young geologist of Kentucky, and of his appreciation of the services which he had rendered to science, presented him with a copy of his splendid work on the Palæontology of Russia. Dr. David Dale Owen was in Louisville at the same time, and like M. de Verneuil, was struck with Dr. Shumard's attainments, and the energy and zeal with which he was prosecuting geological science. Having on hand the geological survey of the north-western Territories, under the direction of Congress, he appointed Dr. Shumard a few months afterwards one of his assistants in that great work.

The large volumes, issued successively by Congress, containing reports on the geology of Iowa, Wisconsin and Minnesota, rank among the great scientfic productions of our country; and the contributions by Dr. Shumard impart to them a large share of their value. During the winter of 1846–7, he worked with Dr. Owen in his laboratory, at New Harmony, analysing minerals and soils, and preparing his report for the press. In the spring of 1847, before taking the field again, he prepared, in conjunction with the writer, a paper which appeared in the October number of the *Western Journal of Medicine and Surgery*, under the title of "Contributions to the Geology of Kentucky."

This memoir, which, it is but just to say, owes its chief scientific interest to his pen, attracted unusual attention at home and abroad, and was complimented by many European geologists. It was pronounced by the best critics a real contribution to geological science, and is still referred to by all writers who have occasion to notice the organic remains of Kentucky. Its claims to the consideration of medical men rest upon the connection which is shown in it to exist between certain geological formations and particular diseases.

He continued to labor in the survey of the Territories, under the government of the United States, until 1850, when he made a voyage to Oregon with Dr. John Evans, for the purpose of making a geological reconnoissance of that Territory. The work occupied him eighteen months, and the palæontological report of the survey was written by him. He returned to Louisville in 1852; and on the 18th of November, in that year, married Miss E. M. Allen, a lady whose love of science, domestic virtues and fine literary accomplishments heightened the usefulness as well as the charm of his subsequent life. For nearly a year after his return from Oregon, he was employed on the palæontology of the Red River Exploration, which had just been completed by his brother, the late Dr. George G. Shumard, in connection with Capt. R. B. Marcy. He was equally at home in the field making surveys and determining the relative ages of formations, and in his study writing reports and authenticating the genera and species of fossils; and his powers of observation, his patience and accuracy rendered his researches eminently trustworthy. His communications bore unmistakable evidence of learning and fidelity, and were always accepted as from the hand of a master.

In 1853 he was invited by Prof Swallow to take the position of Assistant Geologist and Palæontologist in the Missouri Geological Survey, and that year removed to St. Louis. It was in a subordinate station still that he was destined to exert his great faculties and employ the large stores of his knowledge. From the time of his first employment on a geological survey, he was qualified for the foremost position; but though his qualifications were recognized by men of science everywhere, they had been hitherto overlooked by those who held the power of appointing to office. As assistant he labored five years in the geological survey of Missouri, when, at last, he received an appointment worthy of his reputation. In 1858 he was invited by Governor Runnels, of Texas, to make a geological survey of that State. The compliment was hardly more gratifying to Dr. Shumard than to his

friends, who had become impatient at seeing him so long kept in the back ground. They felt that now, for the first time, he was in a situation to receive full credit for his labors.

He entered upon the great work with enthusiasm and in the expectation of being able to prosecute it to its completion. For two years he pursued it industriously, and had progressed so far in it as to make a reconnoissance of almost the entire eastern and middle portions of the State; and the specimens collected during the survey were arranged preparatory to writing his report, when Gen. Houston, who had just been elected Governor, removed him from office to make room for one of his political supporters. In the course of his exploration, Dr. Shumard had made interesting discoveries. The geological deposits of Texas were ascertained to be the most complete of any series elsewhere known on the continent of North America, ranging from the most ancient strata up to the latest tertiary formations. If the survey had been completed, there can not be a doubt that it would have presented results of immense value to the State, and of great interest to the scientific world. As it is, Dr. Shumard indicated the wealth of the field which remains to be developed by future explorers. His friends had great hopes that he might be recalled to the work, and there is reason to believe that he would have been reinstated in office if the survey had gone on. But a short time after its interruption the war unfortunately broke out and put an end to geological surveys in our country for the time. He returned with his family to St. Louis, but still indulging hopes that he should soon be able to resume his geological labors. He could not persuade himself that war would be waged between the States; but as it went on, month after month, he at last turned reluctantly away from his darling schemes. Geology no longer promised him employment, and he was compelled to return to medicine for the means of supporting his young family. It was in March, 1861, that he removed to St. Louis from Austin, and after waiting for a few months in vain for the return of peace, he opened an office.

"For two or three years," says a friend in a letter written to me since his death, "it was a pretty hard struggle with him, but success at last crowned his efforts. He was always the industrious, hard-working student you knew him years ago, with the same determination to succeed. Few persons seemed to suspect that under his suavity of manner and gentleness of character he bore so strong a will. If he determined to do a thing, it was done in spite of all opposition.

Having once decided in his own mind that a principle was correct, he adhered to it at all hazards."

In a letter to me, written some time after the close of the war, referring to the same matter, he said: "You have learned that I have, in a measure, abandoned geology; and, much to your surprise, no doubt, resumed the practice of physic, after being out of the profession well nigh fifteen years. I was driven to it at the commencement of the war, as geology was then pretty well 'played out.' I had to practice medicine or starve, and of course did not hesitate long which alternative to choose. I have been eminently successful in the end, and my practice is becoming quite lucrative. The strangest part of the matter is that I have become almost as much in love with medicine as I once was with geology."

He was elected Professor of Obstetrics in the University of Missouri in the autumn of 1866, and lectured acceptably in that school two winters. "My professorship," he remarked in the letter referred to, "yields me something, and I am rather fond of lecturing." Before the beginning of another term he had a hemorrhage of the lungs, which proved to be the precursor of phthisis. He was in too enfeebled a condition to attempt to lecture, as he had hoped to do, and was obliged to have the course delivered by a medical friend. His health had been evidently declining for several months, but he attributed his failing strength to bronchitis. From the middle of January last until he died he declined rapidly, and in March, by the advice of his medical attendant, left home to try the effects of a milder climate. He took passage on the ill-fated steamer Ruth, for New Orleans. The boat was burned on the Mississippi above Vicksburg, and he suffered much from the excitement and from exposure to cold. An attack of pneumonia was the consequence. He returned immediately home, and died in the bosom of his family on the 14th of April, in the forty-ninth year of his age.

At the time of Dr. Shumard's death, he was President of the St. Louis Academy of Science. He was also a corresponding member of the Geological Society of London, of the Geological Society of France, of the Imperial Geological Society of Vienna, of the Imperial Geological Society of Hermstadt, of the Academies of Science of Philadelphia, California, Cincinnati, New Orleans, and of many others. By all the Societies at home his death was noticed at the time, and resolutions were passed honorable to his memory. It was declared in one of those adopted in the Academy of Science of St. Louis, "that

the Academy has been deprived of an ornament of which it has no equal, and of a leader and fellow-laborer that it can scarcely hope to replace; that his name has been an honor to us for which no distinction that we have been able to confer upon him could be deemed an equivalent." By a member of the St Louis Medical Society it was justly remarked that few men of his age in our country, "had received so many and such honorable testimonials of their scientific acquirements, and yet so marked was his modesty that few, even among his most intimate friends, knew how highly he had been honored."

Few writers more industrious than Dr. Shumard have appeared among the geologists of our country. In the Transactions of one scientific body alone, the Academy of Science of St. Louis, he published, in eleven years, the following papers:

1. Description of New Fossil Crinoidea, from the Palæozoic Rocks of the Western and Southern portions of the United States.
2. Discovery of the Permian Formation in New Mexico.
3. Description of New Fossils from the Tertiary Formation of Oregon and Washington Territories, and the Cretaceous formation of Vancouver's Island, collected by Dr. Evans.
4. Descriptions of New Species of Blastoidea, from the Plæozoic Rocks of the Western States, with some Observations on the Structure of the Summit of the Genus Pentremites.
5. Table of Genera and Species of the Family of Blastoidea, found in the Western and Southern portions of the United States.
6. Notice of New Fossils from the Permian Strata of New Mexico and Texas, Collected by Dr. G. G. Shumard.
7. Notice of Fossils from the Permian Strata of Texas and New Mexico, obtained by the United States Expedition under Capt. John Pope for boring Artesian Wells, with Descriptions of New Species from those Strata and the Coal Measures of that Region.
8. Observations on the Geology of St. Genevieve: being an Extract from the Report made to the Missouri Geological Survey in 1859.
9. Observations upon the Cretaceous Strata of Texas.
10. Descriptions of New Cretaceous Fossils from Texas.
11. Notice of Meteoric Iron from Texas.
12. Descriptions of a few New Species of Gasteropoda from the Coal Measures, and a Brachiopod from the Potsdam Sandstone of Texas.
13. New Fossils from the Primordial Zone of Wisconsin and Missouri.
14. Descriptions of New Palæozoic Fossils.
15. Dicotyledonous Leaves in Cretaceous Strata of Texas.
16. Vertical Section of Silurian Strata.
17. Sketch of the Life and Scientific Labors of Dr. John Evans.
18. Notice of a (supposed) Meteorite.
19. On Oil Springs in Missouri.

20. A Chronological List of Works on the Palæozoic Echinodermata of North America.

Catalogue of North American Palæozoic Echinodermata.

Table of Genera and Species of Echinodermata in the Geological Formations of North America.

Before entering upon this series of publications, and in addition to the other memoirs already noticed, he had published in conjunction with Prof. D. D. Owen, in the *Journal of the Academy of Natural Science*, of Philadelphia, in 1850, a description of fifteen new Species of Crinoidea from the Subcarboniferous Limestone of Iowa, collected during the United States' Geological Survey of Iowa, Wisconsin and Minnesota, in the years 1848 and 1849.

In the same journal he published the following year, a description, with Prof. Owen, of Seven New Species of Crinoidea from the Subcarboniferous Limestone of Iowa and Illinois. Conjointly with the same author, he wrote a Report on the Number and Distribution of Fossil Species in the Palæozoic Rocks of Iowa, Wisconsin and Minnesota, which was read before the American Association for the Advancement of Science, at its Fifth annual meeting, and published in the Proceedings of 1851. In 1852 he contributed to the Report of the Exploration of the Red River in Louisiana, under the direction of Captains R. B. Marcy and Geo. B. McClellan. In the same year, conjointly with Prof. Owen, he published in the Report of the Geological Survey of Iowa, Wisconsin and Minnesota, Descriptions of One New Genus, and Twenty-two New Species of Crinoidea from the Subcarboniferous Limestone of Iowa. In 1855 he contributed to the Second Annual Report of the Geological Survey of Missouri, a Description of New Species of Organic Remains. The year succeeding there appeared in the Proceedings of the Academy of Natural Sciences of Philadelphia, a notice by him of a New Fossil Genus, belonging to the Family Blastoidea, from the Devonian Strata, near Louisville, Kentucky.

He had now acquired such fame as a practical geologist, that his services were frequently sought for by companies and private individuals owning mineral lands, and he made numerous surveys, of which the reports show his sound judgment as well as his varied scientific attainments. Among these is a report, which appeared in 1865, on the Mineral Lands of Missouri, owned by H. W. Woodruff, Esq.; one, published in 1867, on the Enloe Mining Property of Allen P. Richardson, Esq., in Crawford county, Mo.; a second, issued the same year, on the Mineral Lands belonging to R. H. Melton, Esq., in Benton and Hickory

counties, Mo.; and a third on the Old Mines Property of William Long, Esq., which was also published in 1867,

These last reports were prepared after he had resumed the practice of physic, and in the midst of laborious professional duties. He had learned so well how to utilize those intervals of leisure which occur almost daily in the practice of the busiest physicians, that he was able to write these elaborate papers without seriously missing the time consumed in their preparation. Many of his memoirs are long and involved a vast amount of labor and research. Each one was a substantial contribution to the science of his country. He was an acute as well as patient observer, and with his activity in the field, and his quick eye to detect any variety in the form or structure of objects around him, it may be doubted whether he ever passed a week while devoting himself actively to geological pursuits without discovering a new species among the extinct organisms imbedded in our rocks, or some fact in their anatomy of interest to palæontologists. His labors have attracted the attention of geologists in all countries. The high estimation in which they are held is attested by the constant references to them in all the late works that relate to the geology of North America. Of these almost all make mention of some of his numerous publications. By nearly every writer who has described any of the fossil families belonging to our ancient deposits, his name has been connected with a new species. It would be tedious to enumerate the shells, corals and crinoids that bear the name of Shumard, which thus will be rendered familiar to the future students of palæontology, and show to coming ages how high was the regard cherished for him by contemporary men of science.

I could hardly trust myself if in this sketch I had felt called upon to write a eulogy on Dr. Shumard; nor shall I here attempt any elaborate analysis of his character. Enough, perhaps, has been written to afford the reader, if a stranger to him, some just idea of his moral worth, as well as of the versatility of his talents, his energy, industry, and profound attainments. He was distinguished for those qualities of mind and temper that seem almost always to be found in the true Naturalist—simplicity of manners, modesty, gentleness, refinement of taste, enthusiasm, and an ardent love of nature. When to these are added high intellectual endowments, refined and exalted by mental and religious training, unselfishness, and perfect moral integrity, we have presented to us a character the most pleasing to be met with in all the walks of society. And such, I am sure, would be the testimony of all who knew

him, was the subject of this memoir. Among the many good and true men with whom it has been my privilege to be intimately associated in life, no name revives in my mind recollections more agreeable than his; hardly one recalls a disposition so artless, gentle, genial, amiable, or a character so faultless. It is doubtful whether he has left an enemy behind him in the world or ever made one in his life. Having been first diverted from medicine by his love of geology, and then been forced to resume the practice of physic as a means of making a living, he proved his ability to excel in both professions; for he had already become popular as a physician, and was gaining reputation as a teacher when overtaken by his untimely disease. To those scientific acquisitions which raised him to such distinction, he was most fortunate in adding that which Sir Humphrey Davy, in his last moments, declared to be, in his estimation, the most deservable of all human possessions—a firm religious faith. This, which shaped and regulated his early life and gave symmetry to his character in manhood, sustained him when sickness came to arrest him in his mid-career and cast a shadow over all his earthly prospects. He bore up cheerfully under his wasting disease, and labored on at his profession and upon his geological reports until too feeble to work any longer, glowing to the last with the love of science and the domestic affections.

Dr. Shumard was a member of the Sixteenth Street Presbyterian Church, in St. Louis, the gifted pastor of which, Dr. James H. Brooks, had been for many years his warm personal friend. He leaves a wife and two daughters, one nine and the other four years old. His remains rest in the Bellefontaine Cemetery.

DEATH AND BURIAL OF DR. WILLIAM C. WILLARD.

PROCEEDINGS OF THE DELAWARE COUNTY MEDICAL SOCIETY.

The Society held a special meeting pursuant to call of the President. Besides the regular members present, there were in attendance also, by general invitation to medical men, Dr. Samuel P. Anthony, a retired practitioner and the oldest physician in Delaware county, and Dr. J. A. Compton, a homœopathist.

The President called the meeting to order. He then arose, and read the following address:

GENTLEMEN OF THE SOCIETY: We are now assembled for the solemn purpose of considering the death of a fellow member, and in order that we may go hence in a body to attend his funeral. With our own hands we will bear his remains to their final resting place.

Vir probus medendi peritus—an honest man skilled in medicine! This is the definition which Bouillaud gave of a true physician, and this is the full measure of praise which *justice*, as well as custom, requires that we should accord to the memory of William C. Willard. For seven years I have been acquainted with that noble man, and if under oath I were required to write his epitaph, I would do it briefly in the words *Gulielmus Chapin Willard vir probus medendi peritus.* But here are members of the profession who have known our departed brother—not for seven, but for more than thirty years. Can they not confirm my testimony as to his godly honesty and superior medical skill? *Vir probus medendi peritus* is *their* response: and from all this society, and, I doubt not, from this whole community, as from one man, will be echoed the words, *an honest man skilled in medicine.*

William C Willard entered the junior class of Dartmouth College in 1827, at the age of seventeen years, in 1831, he received from that institution the degree of Bachelor of Arts. His name was thus early enrolled with some of the most honorable in the land. The great statesman, Daniel Webster, and the great surgeon, Reuben D. Mussey, were then two of the many distinguished alumni of the famous old college at Hanover.

But not long after the completion of his preliminary education, at the age of twenty-one years, he began the study of medicine. Mussey, then professor of anatomy and physiology in the Medical Schools of Dartmouth, was his first preceptor. Under the private and public tutorage of this great surgeon and good man young Willard continued two years, and during that time attended also several courses of lectures delivered by the professors in the "Medical House" at Hanover. Here, no doubt, he gave special attention to the sciences of which his private preceptor was the public teacher, and here laid the foundation of his excellent medical education.

The young doctor now left Hanover, and returned to Charleston, the village of his birth. Here he immediately became the pupil, and entered the office of Dr. Samuel Webber, a practitioner "remarkable," as I am informed, "for his superior skill in the diagnosis and prognosis of diseases." "*He is a great physician*," says Bigelow, "*who above other men understands diagnosis.*" In this we all concur; and I may therefore

venture to say that Dr. Willard's last preceptor was a great physician, even as his first was a great surgeon. With Webber the Doctor remained three years. He then came westward, and in 1836 located in the village of Muncietown, now the city of Muncie. Here he continued to sojourn till Saturday last, when death suddenly introduced him to a higher life.

Dr. William C. Willard never labored for a fortune, but with only a competency he seemed content. He practiced medicine, "not as a trade," to be pursued solely for the purpose of amassing wealth, but as a noble profession, to be followed more especially for the good it might confer on others—for the preservation of health and the cure of disease. Notwithstanding he was for many years engaged in extensive and laborious practice, he has nevertheless died a poor man. Great indeed must have been the elemosynary services which Dr. Willard rendered in this community! But now he has gone to the great and glorious reward of a true physician—the vast incorruptible treasures which he laid up for himself in Heaven.

The committee on resolutions, previously appointed by the President, consisting of Drs. Helm, Winton, Kemper and Andrews, was now called upon to report, and through the Secretary, presented the following:

WHEREAS, It has pleased Almight God to remove from among us Dr. William C. Willard, an old and honorable member of our profession; Therefore,

Resolved, That by the death of Dr. William C. Willard, the profession has lost a member whose skill and experience entitled him to our regard and respect, whose uniform kindness and courtesy commanded our affection, and whose honesty and integrity as a pyhsician gave him a desirably high rank in his profession.

Resolved, That in the death of Dr. Willard society has lost a useful citizen, and his family a kind and affectionate husband and father.

Resolved, That we deeply sympathize with the family and friends of the deceased in their distressing bereavement, that we tender them our sincere and unaffected condolence, and commend them to the Allwise Creator, who is ever ready to soothe the bereaved heart.

Resolved, That a copy of these resolutions be furnished the family of the deceased, The Muncie *Times*, *Western Journal of Medicine* and Cincinnati *Lancet and Observer*.

The report of the committe was unanimously adopted, and therefore, on motion, the Society adjourned, to reassemble at the late residence of Dr. Willard, and to bear his body to the grave.

HENRY C. WINANS, *President*.

W. J. ANDREWS, *Secretary*.

MUNCIE, NOVEMBR 9, 1969.

CORRESPONDENCE.

PHILADELPHIA, NOVEMBER 15, 1869.

The fall sessions of the preliminary courses of the Jefferson Medical College and of the University, have been completed, and the regular winter sessions have commenced.

The introductory lectures were delivered at each institution on the 12th ult., and as usual on these occasions, large audiences of graduates and under-graduates were assembled to hear the discourses delivered by the respective lecturers. These inaugural orations assume a good deal of importance, and are subjects of some concern to the officers of the institutions, by reason of the fact that the candidate for medical instruction frequently postpones a choice of schools until his arrival in the city, when he desires to inform himself, by an inspection of the museums, the anatomical amphitheatres, the lecture rooms, the hospitals, and by a glance at the *personnel* of the learned professors, of their respective advantages. After this careful examination, he awaits the delivery of the introductory address, which, not unfrequently, confirms the impressions already formed, and the important question is decided.

Prof. Joseph Pancoast, of the Jefferson Medical College, and Prof. R. E. Rogers, of the University, made the addresses of welcome this year, and the well-known reputation of each of these gentlemen, as graceful writers and polished speakers, attracted larger audiences than usual.

Notwithstanding the general re-opening of the Southern schools, and the inauguration of new ones in the West and South-west, the number of students in attendance has not declined, but, as we are informed, has increased, so that the classes are larger than they have been at any time since the war. In one (the Jefferson) the class numbers four hundred, and contains a large proportion of Southern and Western students. This would seem to indicate that our city still maintains its time-honored reputation as the center of medical instruction in our country, to which students are attracted from all parts, despite the active competition existing on all sides.

Dr. John H. Brinton, Lecturer on Operative Surgery in the summer school of the Jefferson Medical College, holds this year the Mütler Lectureship on Surgical Pathology at the College of Physicians, and is now delivering before the College a very interesting and instructive course of lectures on the subject of Gunshot Injuries. During the late war Dr. B. occupied the position of surgeon of volunteers, and was attached, during the greater portion of the time, to the staff of the General commanding the armies. His experience in the field was, therefore, ample, and enables him to speak with authority upon the subject of gunshot injuries and their effects on the soldier performing duty in the different parts of the country. At the close of the war he was assigned to duty as officer in charge of the army anatomical museum at Washington, where he enjoyed increased facilities for the examination of specimens illustrating the effects of gunshot lesions. The following synopsis of the course will furnish some idea of the way in which the subject is treated.:

Fire Arms and Projectiles—Theory of Fire—General Phenomena attendant upon Ball-Wounds—Death—Ratios of Casualties in Battle—Local Effects of Ball-Wounds—General Prognosis—Gunshot Injuries of Bones—Gunshot Injuries of Joints—Gunshot Injuries of Chest.

Under the head of Fire-Arms and Projectiles, he gave an interesting account of the invention and use of arms and projectiles, ancient and modern—the improvements made in their construction up to the present day, and the kinds employed during the late war. He proved, by reference to official documents and by his own experience, that the *explosive* bullet was but rarely used, and then not for the purpose, as frequently averred, of disabling troops, but rather with the design of exploding caissons and destroying ordnance stores: the fragments so frequently found in wounds, and designated as portions of the explosive ball by surgeons, were, in truth, parts belonging to the English conoidal bullets which were principally used by the Southern troops.

The circumstances modifying General Prognosis he illustrated by reference to campaigns—that of General Grant up the Cumberland and Tennessee rivers, afforded him a typical illustration of the combined influence of three causes modifying in a marked manner the general prognosis. Rendezvousing in the autumn at Cairo, the troops became saturated with malarial poison—at the seige of Fort Donaldson, deprived, by the exigencies of the service, of fresh meat and vegetables, scorbutus made its appearance. Transferred from Fort Donaldson up

the Tennessee river in crowded transports to Pittsburgh Landing, cachlesis was developed. Thus, the prognosis in cases of wounds received at this period, was extremely unfavorable, and was distinctly modified by the combined influence of the causes alluded to. Numerous drawings and diagrams, varieties of arms and projectiles, and specimens from the museum of the College, and the Doctor's private collection, assist him in presenting his subject in a clear and instructive manner.

An interesting case of surgical injury, in which transfusion of blood was successfully employed by Dr. Thomas G. Morton, one of the surgeons of the Pennsylvania Hospital, has been recently under treatment in the surgical wards of the hospital. The patient, a young man possessing a hemorrhagic diathesis, was wounded ten days previous to admission, by falling on the fragments of a pitcher which he had been carrying in his hands, one of the fragments being forced up between the tissues covering the left superior maxilla, having entered on the inner surface of the upper lip. The efforts made to control the hemorrhage, which resulted by means of styptics and pressure, having failed, and the patient becoming much exhausted by the large loss of blood, it was deemed advisable to remove him to the hospital. On admission, Dr. Morton endeavored to occlude the bleeding vessel by acu-pressure, using for that purpose a long hair-lip pin, which was introduced on the right side, and carried beneath the base of the nose, emerging some distance on the other side. This being ineffectual, both fascial arteries were acu-pressed as they pass over the border of the inferior maxilla. The hemorrhage still continued, notwithstanding the application of pressure to these arteries, and the left common carotid artery was ligated. The ligation of this artery was successful in controlling the hemorrhage, though the patient was by this time in such a state of extreme exhaustion that death was imminent, and Dr. M. decided to try the effect of transfusion of blood. Two medical students furnished the blood that was required, which, after being strained and placed in a vessel surrounded by water at a temperature of one hundred degrees, so as to prevent coagulation, was injected by means of a large hypodermic syringe (2 ounce) into the medeaii basilic veins of each arm. In this manner eleven ounces of blood were infused, the good effects of which were experienced in five minutes by a rallying of the pulse, and other indications of beginning re-action. No more hemorrhage occurred, and the patient rapidly recovered.

In this connection it will be interesting to note that transfusion

was first practiced in the early part of the seventeenth century, although its use in England and on the continent generally dates from the middle of this century. The first operations were on animals, and the first instance of its performance on man, if we except that described by Lebrarius, was in Paris, by Denys and Ennuerez, in 1666. In this, and in subsequent cases, the blood of animals was employed, but owing to the discovery of the difference in the character of the blood corpuscles of animals and of the human subject, the transfusion in later times were from one individual to another of the same speceies.

Dr. Blundell, the eminent accoucheur of England, has showed the value of this operation in obstetrical practice, by means of which many lives are saved in cases of exhaustion from hemorrhage. Prof. Landors, of Greiswald, has tabulated ninety-nine cases in which transfusion was performed on account of hemorrhage, with the following results: In eleven case there was, from the first, no hopes of success—in twenty the operation failed—in three the result was doubtful, and in sixty-five, or nearly three-fourths, it was successful. Such results should commend the operation to practitioners, and should induce its employment in all cases where death from hemorrhage is imminent. The operation is sufficiently simple, care being taken to avoid the introduction of air into the vein. A case has been recently on trial in one of our courts, in which an attempt was made to establish a charge of mal-practice against Dr. Addinell Hewson, one of the surgeons of the Pennsylvania Hospital, for the employment of the dry-clay as a surgical dressing. The patient was admitted into the surgical wards under the care of Dr. H., for severe injuries sustained by the explosion of a coal oil lamp thrown at him with evil intent by the prisoner on trial, a young man of nineteen. Dr. H. testified that the patient, on admission, was suffering from severe burns of the whole face, chest and upper extremeties; part of the burn was superficial, but the greater portion of it was a deep burn, such as is constantly seen in accidents resulting from coal oil explosions. Death occurred on the sixteenth day after admission, from tetanus. In a long cross-examination in regard to the effect of the earth treatment, Dr. H. stated that the object in this case was to exclude the air, but other than this he was unable to tell the effect—that the pressure of the dressing did not affect the tissues beneath—that the tendency of the earth-dressing in a case of this kind is to assist nature—the first four days the dry-earth was used, after that it was discontinued on the face, but kept on the arm, and then resumed on the seventh day on

the face, at the earnest wish of the patient. On the sixth day water-dressings, with glycerine and carbolic acid, were resorted to, and maggots began to appear in consequence of the flies, resulting from painting the shutters of the ward.

In opening the case for the defense, the counsel stated that it would be shown that the only effect of the earth was to exclude the air—in all other respects it was a negative dressing, and therefore did positive harm—that the disinfectant qualities of the dry earth were entirely lost when it becomes saturated with fluids—that the use of the earth in this case led to the presence of the maggots, and that in removing them by a stream of water, the system of the patient sustained a severe shock, and tetanus was produced. The principal witness for the defense, by whom the above points were to be established, was one of the resident physicians on duty in the surgical wards under Dr. Hewson, who testified that his experience as a medical practitioner (a graduate of a few years' standing) led him to believe that the clay did no good in any instance. After the testimony of the resident physician, and of other physicians, who testified that they did not know enough of the earth-treatment to express an opinion, the charge of mal-practice was abandoned, and it was agreed to leave the case wit the jury, with recommendation for a verdict of guilty of voluntary manslaughter. The jury returned a verdict in accordance with this recommendation, and the Judge, in passing the sentence, stated that he felt called upon to remark that nothing developed on the trial had in the least tended to show that death resulted from the medical treatment.

We have received from Prof. Rand, Dean of the Jefferson Medical College Faculty, a catalogue of graduates of the Jefferson Medical College, from its organization in 1826. Of the five thousand, six hundred fifty-one students graduated during this period, one thousand, six hundred and eighty-two were from Pennsylvania; Virginia, nine hundred and forty-two; Georgia, two hundred and eighty; Kentucky, two hundred and forty-five; North Carolina, two hundred and thirty-eight; Ohio, two hundred and five; New Jersey, one hundred and eighty-three; New York, one hundred and eghty-two; Tennessee, one hundred and seventy-two; Alabama, one hundred and seventy; Mississippi, one hundred and fifty-one; Maryland, one hundred and forty-nine; South Carolina, one hundred and thirty; Missouri, one hundred and six; Indiana, ninety-nine, and a varying number from the other

States. The East Indies, Hungary, Turkey, Switzerland, New Foundland, Costa Rica, St. Cruz, Wales, Sweden, Corsca, Mexico and Nicaragua are each represented by one, while England, Scotland, Ireland, France, Barbadoes, South America, Germany and Cuba contributed from two to eleven each. The list contains some of the most distinguished names in the profession, men who are eminent as teachers and practitioners. One of the oldest graduates of the college is Prof. Mears of the Indiana Medical College, who was a member of the class of 1827. Prof. Gross graduated in 1828.

On the 20th ult. a special meeting of the College of Physicians was held to hear Prof. Gross' memoir of the late Prof. Robley Dunglison. The subject was treated in the easy and graceful style so characteristic of the distinguished memoirist, and the memoir was a perfect portraiture of the character and achievments of his late illustrious colleague. As an evidence of the amount of literary work performed by Prof. Dunglison, and of the high estimation in which his writings were held, Prof. Gross stated that up to the period of his death, one hundred and sixty thousand volumes of his various books had been issued from the press. Notwithstanding the time and labor required for the accomplishment of the many self-imposed duties, he always had time to receive those who called upon him, and so well regulated were all his movements that he never appeared to be in a hurry. Distinguished for his *bonhomie* and generous hospitality, he enjoyed to the fullest extent the pleasures of social intercourse, and often terminated a hard day's work with a party of friends at the opera or theater.

The woman-question, in its medical aspect, has been very vigorously discussed in our public journals during the past ten days. The immediate occasion of its prominence at this time was the reception tendered to a number of "lady students of medicine" who, in accordance with a resolution of the Board of Managers of the Pennsylvania Hospital, granting them the freedom of the Hospital, attended the medical and surgical clinics on the 6th inst. It appears that this resolution of the Board was adopted without paying the medical staff the compliment of consulting it in reference to the expediency of introducing mixed classes at the clinics. During the progress of the clinics there was a good deal of hilarity prevailing, which a member of the Board, who was present, attempted, with a mistaken idea of his duty, to repress. At the termination of the clinics, and as the "lady students of medicine" were departing, some of the male students indulged

in what one of the papers characterized as unmanly conduct—"behaving in a boisterous and unfeeling manner"—"saluting them with taunts and jeers, mock applause and real hisses." Each day some of the public journals contained articles inveighing against the male students as a class for the bad behavior of a few. Feeling themselves harshly treated, and recognizing the fact that if mixed classes were permitted at the clinics, they would not derive the full benefit of the instruction for which they had paid, the students of the University and Jefferson College held meetings, and determined that they would remain away. Subsequently the matter was transferred to the Faculties of the respective colleges, who had a joint conference, the result of which was the preparation of a strong protest, to be signed by the Faculties of the University and Jefferson College, the members of the Hospital staffs, and by the profession at large, against the introduction of mixed classes at the clinics. This document, duly signed, will be presented to the boards of managers of the various hospitals on the the 22d inst., and no doubt will be effective in deciding the question.

Prof. Boëck, the distinguished Syphelographer of Norway, spent a few days in our city last month. He had the opportunity of making the acquaintance of our prominent medical men at a handsome reception tendered him by Prof. Gross. J. E. M.

MADISON, NOVEMBER 4, 1869.

EDITOR WESTERN JOURNAL OF MEDICINE—*Dear Sir:* At the present time, when so much energy is being displayed in developing the natural resources of our hoosier State, for the benefit of the mechanic arts, I feel disposed to communicate the results of an investigation of one of nature's gifts to our own divine art—the mineral waters of French Lick.

Since the earliest settlement of Indiana, in the seventeenth century, these waters have been known to possess rather remarkable chemical and medicinal qualities; but until lately their constitution has been only cursorily examined, and consequently their use in the treatment of disease has necessarily been of an empirical sort. The large number of invalids annually resorting thither apply them as a panacea for all ills. This, in some cases, has resulted in no good, and in some even detriment.

In August I visited French Lick, and subsequently made a careful quantitative analysis of the principal waters.

It is situated in a beautiful valley, tributary to that of Lost River, about the centre of Orange county, ten miles from Paoli and eighteen from Orleans, on the New Albany & Chicago Railroad.

The low hills bordering the western side of this valley are composed of ferruginous sandstone, and the upper limestones of the subcarboniferous strata of this district. From their base flow a large number of springs, more or less impregnated with mineral matter. Half a mile from the French Lick Hotel, on the farm of Mr. McCracken, is a delightful, pure chalybeate spring. Most of the other sources in the valley afford sulphur waters. Near the hotel are the remarkable sulphur springs which have made the valley so noted. There are more than a dozen of these, but all seem to be derived from three parent springs, which are situated within an area of half an acre, but which exhibit a considerable difference in constitution.

The most important of these—Pluto's Well—as I have taken the liberty to name it, is remarkable for the production of a large volume of *the strongest sulphur water in the world.* Its constitution is as follows:

In a wine-gallon—

FREE GASES.	CUBIC INCHES
Sulphuretted hydrogen	*25.05*
Carbonic acid	15.00
SALTS.	**GRAINS.**
Chloride of sodium	140.54
Chloride of calcium	5.35
Sulphate of lime	60.59
Sulphate of magnesia	18.12
Sulphate of soda	22.37
Carbonate of lime	6.92
Carbonate of magnesia	1.59
Carbonate of iron with alumina, a trace.	
Loss	.54
Total of salts	256.00

No springs on this continent, as yet analyzed, afford more than a fourth part of the quantity of sulphuretted hydrogen found in this source, and very few in any part of the world approach it in this particular. The famous Sulphur Springs of the "Old Dominion" contain only from two to six cubic inches in the gallon.

THE WHITE ARBOR SPRING

Presents the following constitution. In a wine-gallon—

FREE GASES.	CUBIC INCHES.
Sulphuretted hydrogen	17.000
Carbonic acid	10.116
SALTS.	**GRAINS.**
Sulphate of lime	141.000
Sulphate of soda	36.720
Sulphate of magnesia	29.330
Chloride of sodium	90.920
Chloride of potassium	5.010
Chloride of magnesium	8.040
Carbonate of lime	20.280
Carbonate of magnesia	4.500
Carbonate of soda	10.527
Carbonate of iron, with alumina	2.500
Silica	1.700
Loss	1.473
Total of salts	352.000

This spring contains more saline matter than the first, and a large amount of sulphuretted hydrogen.

The last of the three sources at the base of the hill is very strongly saline, but contains much less sulphuretted hydrogen—its solid ingredients consisting of chlorides, sulphates and carbonates of lime, magnesia, soda, &c., with a considerable quantity of iron, amount to four hundred and twenty grains to the gallon.

The smaller springs, derived from these, have about the same constitution.

All these waters have about the same medicinal effect. They are alterative and tonic when moderately used. In large quantities, they are powerful hydragogue eliminators, acting upon the bowels, kidneys and skin, without, however, producing the irritating effect which this class of agents usually induces when prepared in a pharmacy less perfect than that of Nature. They are especially adapted to the treatment of the diseases of the skin, dyspepsia, constipation, chronic inflammation of the various mucous surfaces, scrofula, rheumatism, all specific diseases, and, in fine, may be beneficially used in all chronic affections where an alterative and tonic effect is desired. Moreover, the relaxation and recreations afforded here are important adjuncts which the broken down denizens of the busy city will highly appreciate.

Yours, &c., JOSEPH G. ROGERS.

MISCELLANY.

PARIS: SENATOR NELATON AND THE MICROSCOPISTS.

A few days ago *Figaro*, one of the well known literary journals of this city, issued a sort of album-number (*numéro-album*), containing short notes from several scientific and literary celebrities, which had been specially contributed to the number. Amongst these are a few lines from M. Nélaton; and as they have been much commented upon, and have already drawn forth a protest from a distinguished Parisian surgeon, I am sure you will take some interest in perusing them. M. Nélaton was desirous, it would seem, to manifest his opinion in favor of the high value of clinical surgery in face of the growing pretensions of microscopical and chemical researches, and thus expressed his thought in the pages of *Le Figaro:*

"I am happy to see the rising generation refuse to follow those false appearances of exact and profound science borrowed almost exclusively from microscopical research, and attach itself to the study of surgery, based upon the great indications furnished by clinical observation. It is because they drew their inspirations from these principles that the great masters of the beginning of this century, and especially Dupuytren, the most glorious amongst them, have given to the French school that legitimate renown which it still enjoys throughout the whole world."

As might have been expected, these two short passages have created quite a sensation among that portion of surgical workers which they seemingly attacked, and have already met with a sharp retort of protestation from the pen of professor Verneuil, of the Paris Faculty. The blame thus laid upon microscopical investigators by so high an authority as Nélaton, and published in so widely circulated a journal, has stung M. Verneuil to the quick; in the name of the injured parties he vindicates the value and importance of the microscope. The article appeared last week in the columns of the *Gazette Hebdomadaire.* After having stated what great results the microscope has afforded in the hands of such men as Robin, Broca, Lebert, Davaine, Virchow, Kölliker, and others, and after having mentioned that it had now become the indispensable complement of anatomical research in the dead-room, throwing a brillant light on the origin, the evolution, and the transformation of those innumerable lesions which destroy man, M. Verneuil asks M. Nélaton whether he believes that *all* surgical science may be acqired in the wards of an hospital. If not, and if, on the coutrary, he (M. Nélaton) admits the assistance of the accessory sciences, if he make use of chemical agents and of physiacl instruments, if he practises vivisections, if he utilizes statistics, if he consults J. L. Petit, Scarpa, Langenbech, and Syme, why should he disdain the microscope? "For if it is good to prognosticate stone by the aid of a

sound, polypi with the laryngoscope, and amaurosis with the ophthalmoscope, paralysis by means of an electric machine, diabetes with potash, why reject the lens for recognizing leucocythæmia or spermatorrhœa?"

Further on M. Verneuil says that, far from agreeing with M. Nélaton on the present tendencies of the French surgical school, he takes quite a different view of the matter. "In approaching the difficulties of clinical study, the living generation arms itself at the outset with all the resources which are generally lent by the sister sciences; it holds out its hand to the ancients and the moderns, to the English, the Germans, and the Italians, in order to borrow facts and ideas; it divides its time between the laboratory and the dissecting room, the library and the hospital; in a word, it renounces no source of instruction, being neither so senseless nor so vain as to repudiate whatever may render science more complete, and practice more efficacious."

M. Verneuil has a curious remark with regard to the mention of Dupuytren's name in Nélaton's article:—"If the article is written but with the object of celebrating Dupuytren, it was really not worth the while. Enough has been said, I think, of that ambitious despot, who obtained fame, wealth, and honors, but has not deserved that true glory reserved, thanks be to God, to true *savants*." This opinion, coming from a French surgeon, will surprise not a few of my readers.

Such is a rapid sketch of M. Verneuil's article, which has been the medical *morceau* of the week. I need not say that it is interspersed with home thrusts at the Senator's address. A somewhat invidious view of Nélaton's contribution to the *Figaro* has been taken by some; and amongst other things it has been said that the mention of Dupuytren's name is a covert comparison conceived in view of the public. But surely the celebrated surgeon—I mean Nélaton—was fully justified in upholding an opinion which is rapidly gaining ground—to-wit, that the engrossing study of infinitely small details, though having, of course, its importance, has thrown clinical observation rather into the shade, and that "the great lines of clinical surgery" are not cultivated with that peculiar care which they deserve. For my own part, I believe the above remark is especially applicable to this place. The practical study of surgery is much neglected here. The want of this necessary culture is observed even among the rising surgeons in the Paris hospitals; and I could, if I wished, back up this assertion by the relation of certain facts which have occurred only during the past fortnight.—*Paris Correspondence of London Lancet, Oct. 2, 1869.*

The ladies may now be at rest. One British University will take them in and make female physicians of them. The Council of the University of Edinburg has refused to be less gallant than the University Court, even with the lead of the irrepressible Dr. Phin and Dr. Andrew Wood. Prof. Masson and Dr. Bennett led the pro-lady party of the Council; the former maintaining that "the sphere of women" had not yet been fully developed or defined; the latter arguing that if Edin-

burg did not admit lady students, they would have to go all the way to Paris. We shall not oppose this decision of the University, though in neither the speech of Professor Masson nor that of Professor Bennett do we see any very powerful arguments for women becoming physicians. The responsibility, however, now rests with themselves. The legal way is open, and it is for themselves now to consider whether Medicine is a womanly calling. There should be no misunderstanding about one or two points. First, that if ladies are to enter a sphere so difficult and to them somewhat delicate, there can be no plausible reason for excluding them from any other sphere. Professor Masson must reconcile himself to fair professors of Belles Lettres, that may prove serious competitors with the present male monopolists of Rhetoric; and Professor Bennett may find some day the Institutes of Medicine very freely re-arranged by the ladies whom he is so politely introducing to the study of medicine. If ladies may be physicians, then they may be anything. This may he all right; but if so, then woman must not be considered, as hitherto, the complement of man, but as his competitor. How this will relieve our social and economical difficulties or add to the pleasantness of the position of woman is not very clear to us. If women would show their complete equality with men, let them emigrate as freely as men are doing, and give grace and comfort to the life of their fellow-countrymen who have to go abroad, not because they like it, but because there is not room for them at home, and colonization is the destiny of Britons. Let them give themselves to the womanly science of making home-life easy and practicable and pleasant to men.

The action of the University of Edinburgh does not remove the difficulty. It only shifts it. All the objections to women entering the medical profession remain, and have now to be considered by ladies themselves. The process of medical education can not be a very nice one for young ladies under the most favorable auspices, and with classes apart, as, we understand, is to be the arrangement in Edinburgh. It is inconceivable that lady students should pass through a course of medical study in a large medical school without some harm to that delicacy of feeling which has hitherto been one of the most exquisite charms of the female character. And the duties of the actual practice of Medicine are still less congruous with womanly strength or feeling, or any other female quality. We presume that lady practitioners will have to be unmarried. No married gentleman worthy of his situation wonld like his wife to be a practitioner. And yet how unfit seems a young unmarried lady for the duties of medical practice.

Supposing all these objections to women entering the profession of medicine answered, there remains another—Will they be acceptable to the public as medical advisers? This seems very doubtful. It is said they are adapted for practice among women and children. We must say that we know of no demand among women generally for lady medical advisers. There are a few ladies just now who seem to think of nothing else than the magnification of their sex, and who propose

to revolutionize society in prosecution of this idea. But they do not represent the general feeling of women. And as far as our observation goes, it tends to show that lady practitioners will not be very acceptable as physicians even to their own sex. Something is to be said for allotting to them the department of midwifery; but even here, we believe, medical men would be preferred, and it is a laborious branch of practice that would be a hard means of livelihood for a delicate unmarried girl. She would doubtless simply come to a friendly arrangement about night-calls with the nearest medical bachelor, and a partnership would soon be arranged. Altogether, we would advise ladies to think twice before they enter the medical profession.—*London Lancet, Nov. 6, 1869.*

EDITORIAL AND MEDICAL NEWS.

THE Fourth Volume of the *Western Journal of Medicine* is completed with this issue.

The first number of the Fifth Volume will be in the hands of our readers in a few days. As will be seen by a notice which appears in this issue from the Publishers, some important changes have been made. In the first place, the *Journal* will be edited by Prof. David W. Yandell and the present Editor. Dr. Yandell's name is familiar to the American profession; the son of an eminent teacher—a teacher who is also one of the best writers Medicine ever had, and whose valuable contributions have enriched the pages of the *Journal* during a few months past—worthy son of such a sire, he has the intellect, the culture and the large experience which would be invaluable in the editorial conduct of any medical periodical in the world.

In the next place, all relating to the publication of the *Journal* passes into the hands of that eminent publishing house, John P. Morton & Co., of Louisville. What a load of anxiety and care is lifted from us by this arrangement, no one who has not been placed in similar circumstances can conceive.

Then the *Journal* will be devoted to *Therapeutics*, making it the representative of American Medicine in this regard, as the *Practitioner*, so ably conducted by Dr. Anstie, is of British Medicine. We believe it will meet the wants of our busy practitioners to a degree that no other journal in the United States does—that it can be made

a necessity to the great mass of intelligent and industrious physicians. The times, so rich in hurrying progress, demand such a journal.

Again: The *Journal* will be put on the cash basis. The January number will be sent to all old subscribers, but those who do not remit their subscriptions will receive no other numbers. We have lost hundreds of dollars by crediting; we are quite willing to take fifty per cent. for some three thousand dollars of accounts, if any one is anxious to make a speculation! Even were that per centage paid, we would still count our loss in four years at three thousand dollars.

These pecuniary losses make part of the dark side of the picture of our quadrennial labor. And darker still the purposed annoyances, the ingratitude, and downright meanness of a few medical men whose names we are half tempted to hold up for the contempt of honorable gentlemen in the profession.

But we pass these false friends of Medicine by, hoping to have grace to forgive them for intentional and causeless injuries, and knowing that Time, and Truth working therein, will ultimately silence the slanders of coarse ignorance and malevolent ingratitude.

But there is a brighter side. Two years and a half ago the *Journal* had but about three hundred subscribers; it now has more than a thousand. It ranks among its friends some of the best and some of the most celebrated names in the American profession; many of the contributors, especially in Indiana, Ohio and Kentucky, are among the ablest medical men; its contributions we frequently find republished in American and in foreign journals; it has become a permanency in the periodical medical literature of the country. Kind letters of encouragement from men whose good opinions we value highly, have cheered us in the midst of labors that have been by no means trifling; even warm personal friendships have grown out of our editorial position.

While we arrogate no great success, we have faithfully tried to do our duty; as truth and right seemed to us, so we spoke and acted, though more than once urged to live for policy, to enlist the favor of this indifferent one, or silence the tongue of that malevolent, by praising them for work they had not done but might do, for abilities they had not shown but might show, all of which kindly-meant advice seemed to us like the interrogations that follow: "Stranger, does your brother like butter-milk?" "I have got no brother." "But if you had a brother, would he like butter-milk?" Policy may do for those who have no convictions, who float along upon a current of

expediency, and whose opinions change oftener than the moon, so as to suit the views of every one with whom they may be thrown; but such a life is grovelling in the dirt with a muck-rake, careless of the golden crown which awaits manly, up-looking, up-striving endeavor. Temporary success may reward the arts of a policy-man, but there can be no true greatness, no real growth, without personal integrity and conscientious devotion to the *Right*, and such devotion, in the face of opposition, if it need be, not because of any incidental or possible reward, but because it is right. There is a higher court than a little, ephemeral, prejudiced coterie or clique to judge every man, and that is the judgment of the wisest and best, who do not live in the fogs of local prejudice and misrepresentation. There is a higher court than either, that will one day pass upon the lives of each one of us: for these broader, juster, and more enduring judgments let each one fit himself, working out his salvation unto these ends, and not for any perishing purposes and plans of the hour.

And now, with the kindest wishes for the happiness of our readers, happiness here and hereafter, and with heartiest thanks to our many friends for their encouragement and for their contributions, we bespeak their efforts in behalf of the *Journal* under its new auspices: we know that it will be eminently worthy any efforts they may make, either in writing or procuring subscribers.

They have a list of TEN THOUSAND physicians living in the West and South.

As an advertising medium it will be unequaled by any medical periodical in the United States.

☞ Letters, communications, etc., should be addressed to the publishers, JOHN P. MORTON & Co.,
Louisville, Ky.

WE ARE in receipt of the Washington *Chronicle*, December 10th, containing an able communication on the proposed murder of Dr. Paul Schoeppe by judicial authority on the 22d inst. Dr. S. is a German, a graduate of Heidleberg, and has been practicing his profession at Carlisle, Pa., where his father resided for many years, and had charge of the Lutheran congregation there. A Miss Steinnicke, of Baltimore, a maiden lady sixty-five years of age, visited Carlise in the summer of 1868, suffered from some indisposition, and was under Dr. S.'s professional care. A warm friendship sprang up between them, and upon her return to Baltimore, they corresponded; he was poor, she wealthy, and she advanced money to the Doctor to assist him. In the fall she visited Carlisle again, remaining till her death, which took place on the 25th of January last, she having been taken seriously ill on the day previous. She left her property to Dr. S. A *post-mortem* examination, made most carelessly, thirteen days after death, and the statement of the chemist, who received two hundred and fifty dollars for his investigation, that he thought he found "faint traces of prussic acid," were the chief ostensible causes of indictment and conviction. Says this contributor to the *Chronicle*, whom we recognize as an eminent member of the profession and a personal friend:

"The indictment against the Doctor charged him with willfully taking the life of Miss Steinnicke by the administration of poison; and, although not one iota of evidence, from beginning to end, went to sustain this allegation, yet the jury found him guilty of murder as indicted."

The medical press of the country is, we believe, unanimous in its denunciation of this verdict and the proposed execution.

Bearing upon this case we publish the following extracts, the first from the *Medical Gazette* of December 4th, and the second from the *New York Times:*

"THE CASE OF DR. SCHOEPPE.—The Governor of Pennsylvania, in the face of the unanimous protest of leading medical societies—in the face of the very testimony given at the trial—has signed the death warrant of Dr. Paul Schoeppe.

This exercise of the unrestrained prerogative of dispensing life or death may gratify his Excellency's sense of the supremacy of his official position; but we beg to assure him that, as far as any medico-legal evidence in the case is concerned, there is every probability that in directing the execution of Dr. Schoeppe, he is ordering the murder of an innocent man."

"INTERCESSION FOR DR. SCHOEPPE.—Dr. J. Roesing, North German Consul General in this city, states that he has received intelligence that Baron von Gerolt, the North German Minister at Washington, has seen Governor Geary at Harrisburg, Penna., relative to the Dr. Schoeppe case, and that the Governor has declared himself willing to revise the case from a memorandum which is being prepared at the office of the North German Embassy."

THE Indiana Medical College has seventy matriculants, sixty-eight of whom are males and two females: such success must be very encouraging to those who inaugurated and are conducting this enterprise. And now, without any unkind feelings towards this youthful institution, let us hope that its Faculty will never again issue a "Circular," announcing a *four* months' course, and their willingness to confer "*ad eundem* and honorary degrees": we seriously question the propriety of organizing new medical colleges that do not take advanced ground in the period of medical instruction, and in higher qualifications for medical degrees—three years in attendance upon lectures, each course being at least six months, annual examinations, those who finally examine for degrees entirely independent of the teachers—these are some of the steps a new school might take creditably to itself, and thereby earn the respect and gratitude of the people and of the profession of the entire country. Such an institution, by the way, we hoped to see established at Indianapolis, and the plan had been discussed by some medical gentlemen in the State, though probably nothing would have been definitely determined for some three or four years. We can not believe it wise, to return, to have merely a four months' course—it is retrograding, not advancing. And as to honorary and *ad eundem* degrees, more especially the former, these ought to be exceptional, and no public offer made of them, or medical college diplomas, now low enough, will still depreciate in value.

We have made these remarks, which can not be misunderstood by honest and intelligent gentlemen, in all kindness, and with the hope that they may accomplish some good. We recognize in some of the members of the Faculty of the Medical College of Indiana men of industry, ability, and honor, and we heartily wish their success.

AT A RECENT meeting, November 4th, of the Clarke County (O.) Medical Society, some valuable observations were made by Dr. Wray on the subject of *Legalizing Dissections*. Dr. Wray is a member of a committee upon this subject appointed by the Ohio State Medical Society; and we are glad to see that he is so early and ably moving in the matter: we trust he will meet the hearty co-operation of every member of the profession in the State.

While Pennsylvania and New York have liberal enactments upon this matter, it is a shame that in Ohio, with some eight or ten medical schools, bodies for dissection must be obtained by stealth and violation of strict and unjust laws.

Indiana, and Kentucky too, should be moving to the same end: let these States, let all our States, have upon their statute books laws legalizing dissections.

(This note was received just as the last form was being made up: we have room only for its publication, and will answer it in the next:)

MR. EDITOR: In your November number you quote from Dr. Tilt a sentence of Cicero's, as follows:

"*Nescire quod antequam natus esses factum sit, id semper esse puer.*"

The same quotation is used, very appropriately, by Osiander as a motto for his "*Geschichte der Ent findungs kunst*," but in a little different form:

"*Nescire, quid, antequam natus sis, acciderit, id est semper esse puerum.*"

Can you turn to the original and inform us which is the correct reading?

THE *Times* obituary of the 21st inst. records the death, at North Tawton, of Catherine Budd, in the ninety-first year of her age. It is impossible to let this brief statement pass without notice, or without one word of respectful sympathy with her distinguished family. The deceased lady was the mother of nine sons, of whom the two youngest are members of the bar, and the other seven are physicians, all of more than ordinary repute. Among these seven, Dr. Budd, late of King's College, and Dr. Budd, of Bristol, will at once occur to the minds of our readers. We trust that they may inherit their mother's longevity, and may thus be spared for many years to do good work in the interest of mankind.—*Lancet, Oct. 23.*

PAY UP.—We beg our subscribers, who are indebted to us, to pay as promptly as possible. Remittances may be made to Robert Clarke & Co., Cincinnati, or to the Editor at Indianapolis. Again, we say, PAY UP.

"WHAT BECOMES OF MEDICAL STUDENTS?"—This is the heading of a brief and brilliant article that forms a part of the fifth volume of the St. Bartholomew's Hospital Reports, recently published. Mr. Paget, the author of this article, has, with much labor and considerable perspicuity, given the reader an analysis of the careers of one thousand medical students, all of whom have been known to and observed by him, or by his colleagues, Mr. Callender and Mr. Thomas Smith, during a period of fifteen years. He has placed them in eight divisions, and tells us that twenty-three have achieved distinguished success, sixty-six considerable success, five hundred and seven fair success, and one hundred and twenty-four very limited success; that fifty-six failed entirely, ninety-six left the profession, eighty-seven within twelve years of commencing practice, and forty-one died during pupilage. Distinguished success is accorded to those who have gained important public appointments in hospitals or elsewhere, have maintained leading practices in very large towns, or have been teachers in great schools. Considerable success is ascribed to those who hold high positions in the public service or good leading practices; and fair success to those whose lot has comprised "that measure of well-doing which consists in having a fair practice (enough to live with), maintaining a good professional and personal reputation, or in holding ordinary appointments in the public services or in the colonies, and gaining promotion in due course of time." It will be seen that this last class constitutes rather more than half of the total number, and hence it is to this class in prospective that our observations on these statistics should be specially and particularly addressed. There can be no doubt that the lives of all professional men in this country, as in all other walks of life, are made up of constant and continual struggles, and that the so-called battle of life has to be fought with more than ordinary energy and perseverence by medical men. But these figures appear most happily at the beginning of the winter's work, and show our neophytes that a fair and reasonable measure of success may be and is attained by those who enter the profession, and labor therein honestly, perseveringly, and well. Mr. Paget's paper is commendable, chiefly because it encourages all to work; because it shows that honest work results in fair success; and because it proves, as far as figures possibly can, that if a proper and persevering course of study be pursued, failure is very much the exception, rather than the rule. And, as Mr. Paget very pertinently remarks, "nothing appears more certain than that the personal character, the very nature, the will of each student had far greater force in determining his career than any helps or hindrances whatever. * * * The time and the place, the work to be done and its responsibilities, will change; but the man will be the same, except in so far as he may change himself." —*London Lancet, Nov. 6, 1869.*

ANNUAL ANNOUNCEMENT

OF THE

Cincinnati College

OF

Medicine & Surgery

FOR THE

Session of 1869-70.

CINCINNATI:

H. WATKIN & CO. PRINTERS, 230 WALNUT STREET.

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MARTIN TOLBERT, *Sec'y.*
S. S. DAVIS, ESQ.
HON. MILTON SAYLER,
D. D. BRAMBLE, M. D.
L. J. WORKUM, ESQ.
ISAAC LOMAN, ESQ.

FACULTY.

B. S. LAWSON, M. D. — 353 West Seventh St.
Professor of Principles and Practice of Medicine.

D. S. YOUNG, M. D. — 248 West Seventh St.
Professor of Surgery and Clinical Surgery.

DANIEL VAUGHAN, A. M., M. D. — College Building.
Professor of Chemistry and Toxicology.

R. C. S. REED, M. D. — Glendale.
Professor of Materia Medica and Therapeutics.

W. T. TALIAFERRO, M. D. — N. W. Cor. Sixth and Walnut Sts.
Professor of Ophthalmic and Aural Surgery.

J. H. TATE, M. D. — S. W. Cor. Third and Broadway.
Professor of Obstetrics, and Diseases of Women and Children.

D. D. BRAMBLE, M. D. — 169 Broadway.
Professor of Descriptive and Surgical Anatomy.

J. H. BUCKNER, M. D. — N. W. Cor. Sixth and Walnut Sts.
Professor of Physiology.

A. J. MILES, M. D. — S. W. Cor. Main and Liberty Sts.
Professor of Medical Jurisprudence and General Pathology.

J. A. THACKER, M. D. — N. W. Cor. Plum and Longworth Sts.
Professor of Psychology and Diseases of the Mind.

J. W. UNDERHILL, M. D. — 497 John St.
Demonstrator of Anatomy.

B. S. LAWSON, M. D., DEAN.

J. A. HACKER, M. D., SEC'Y.

Annual Announcement.

Twenty-Seventh Session, Fall and Winter of 1869-70,

Commencing October 5, 1869, and to continue until the last of February, 1870.

It is with feelings of great satisfaction that the Trustees of the Cincinnati College of Medicine and Surgery make the Announcement of the Twenty-Seventh Course of Lectures in that Institution. The College has come to the close of another year, with a rapidly-increasing number of pupils and graduates; its means of illustration and demonstration will be largely increased by new additions during the present season; its great practical chairs are now all filled by men of large experience, and who possess, in an eminent degree, the happy faculty of teaching others; anatomical material may be had here in great abundance; the immense clinical advantages of the largest general hospital in our country, are open to all medical students on the most liberal terms; in a word, everything conspires to indicate that Cincinnati, on account of its large population, easy access and central position, is destined to become a great centre of medical science and teaching, and that the Cincinnati College—whose Faculty are so fully imbued with the noble aims of their high profession—will soon take a leading position among the medical schools of our country.

It will be seen that one of the peculiarities of this school is the lowness of its fees. While we advocate a reputable preliminary education, the complete curriculum of studies, the full term of pupilage, two full courses of lectures, and are anxious to further any effort to give depth and extension to medical education; on the other hand, we are disposed to open wide the portals of science; to withdraw, as far as practicable, all pecuniary obstacles;

and to encourage all young men, however humble, to enter the arena of professional life, who feel the promptings of a noble ambition stirring within them. In following this course, we think we are advancing in accordance with the generous spirit of our age and country, which is everywhere opening free libraries and lecture rooms, and building school houses for the million. The lives of such men as Drake and Eberle, of Hunter and Velpeau, are positive proof that poverty is often associated with the highest ability. Their brilliant career has given a forward impulse to science, and served to dignify and ennoble the profession with which they were connected. A medical college established upon such a liberal basis in a large city, where clinical advantages can be secured, will do much to arrest the tendency to open medical schools in small cities and towns, where this essential part of medical education must of necessity be neglected. Our school, we are persuaded, is rapidly introducing into the profession a new, energetic, and life-giving element—one which will do quite as much to advance the cause of science, and quite as much to maintain the dignity of the profession, as will be found to come out of those institutions where the size of the head is to be measured by the length of the purse; but which afford a happy faculty of accommodation, by dividing their pupils into the full-pay class, the note makers, and the beneficiaries.

THE CINCINNATI HOSPITAL.

This Institution, which so elegantly adorns the northern part of our city, and which has been erected by the expenditure of a million of dollars, is now open for all classes of patients—an honor to our city, and acknowledged to be at once the most elegant, extensive, and best appointed general Hospital in our country. Here are found fever wards, ophthalmic wards, obstetrical wards, venereal wards, and surgical wards; in fact, here may be seen almost every disease that flesh is heir to, its nature studied, and the results of treatment witnessed. Among the numerous surgical operations performed there during the last season, we may mention amputations of the arm, leg, circumcision, excision of tumors, hæmeroids, ligature of main arteries, lithotomy, vesico-vaginal fistula, hare-lip, hydrocele, lacerated perineum, paracentesis abdominis and thoracis, removal of bullets and dead bone, a great variety of operations on the eye, etc. etc. In a word, the

student may here enjoy, as at Vienna, the advantage of seeing all manner of disease in a general hospital, and does not, as in New York and Philadelphia, have to spend a large portion of his time in running over the city from one hospital to another.

At the close of the winter term six house physicians are appointed for this Institution, and all graduates have an opportunity of competing for these positions.

CLINICAL LECTURES.

Clinical Lectures are delivered daily during the course of the session by the medical staff.

PRACTICAL ANATOMY.

The most liberal provisions are made for the prosecution of this very important branch.

Anatomical material is supplied in abundance, and at low rates.

The dissecting room is commodious, well lighted and well ventilated, and provided with everything requisite for comfort and convenience. It will be opened early in the session, and will be under the direction of J. W. UNDERHILL, M. D., a highly competent instructor.

THE COLLEGE BUILDING.

The college building is situated on the north-west corner of Longworth street and Central Avenue. The lecture rooms are well lighted, freely ventilated, comfortable and convenient.

REQUIREMENTS FOR GRADUATION.

The candidate must be twenty-one years of age, and must present proper testimonials of a good moral character, and satisfactory evidence that he has studied medicine for three years with a physician and surgeon duly authorized by law to practice his profession. He must have attended two full courses of lectures—the *last* of which must have been in this college. He must pass a satisfactory examination, and submit to the Faculty of the College an acceptable thesis on some subject connected with medicine of his own composition.

Four years' practice will be considered as equivalent to attendance on one Course of Lectures, a certificate of which must be presented at the time of matriculating, or handed in with the thesis.

TEXT BOOKS.

Principles and Practice	Watson, Flint, Billing's Principles.
Surgery	Erichsen, Druitt.
Obstetrics	Bedford, Miller.
Diseases of Women	Hodge, Bedford, Thomas.
Diseases of Children	West, Condie.
Materia Medica	Stille, U. S. Dispensatory.
Physiology	Carpenter, Dalton, Marshall.
Insanity	Winslow, Ray, Maudsley.
Anatomy	Gray, Wilson.
Forensic Medicine	Taylor, Beck.
Ophthalmology	Lawrence, Jones, Wells.

FEES.

The Faculty of this College maintain, and they believe they will be sustained by a right thinking community, that the true method to elevate the Profession is to do away, as far as possible, with pecuniary obstacles in entering it, and to place at a high standard the attainments necessary for graduation. Actuated by such considerations, the Faculty have placed the fees at the lowest rates consistent with the interests of the school.

Professors' Tickets	$25 00
Matriculation	5 00
Demonstrator's Ticket	5 00
Hospital Ticket	5 00
Graduation Fee	25 00

BOARDING.

Good boarding and room can probably be had in Cincinnati at less rates than in any other large city in the United States. Students by calling at the College immediately on their arrival, will be aided in procuring suitable places of boarding.

SPRING COURSE.

This Course of Lectures will begin March 8th, 1870, and continue until the last week in June following. It will be a complete course by the Faculty, and will be followed by the usual examinations, and conferring degrees.

For further particulars address,

B. S. LAWSON, M. D., DEAN,
No. 353 West Seventh St., Cincinnati.

GRADUATES

OF THE

CINCINNATI COLLEGE

OF

Medicine and Surgery,

In 1869.

NAME.	THESES.	RESIDENCE.
AMICK, M. L.	Forces of the Venous Circulation,	Scipio, Ind.
ANDERSON, J. B.	Nicotine and its Effects.	New Haven, Ind.
ALLEN, JOHN H.	Antimony,	Cynthiana, Ind.
BROWNE, E. B. M.	Blood,	Cincinnati, O.
BEARD, HENRY C.	Dysentery,	Pike, Co. O.
BELL, JAMES R.	Pertussis,	Zanesville, O.
BRAMBLE, LEE ROY	Ch. Infantum.	Cincinnati, O.
CADDY, W. E.	Pneumonia,	Belmore, O.
CRAIG, S. W.	Erysipelas,	Cincinnati, O.
DENMAN, H. B.	Phthisis,	Piqua, O.
FERGUSON, HUGH	Labor,	Maxville, O.
GEORGE, W. M.	Abortion,	Fairview, O.
GILTENAN, JAMES J.	Convulsions.	Cincinnati, O.
HOBBS, WILSON		Ohio.
KESLER, WM. H.	Dislocations.	West Milton, O.
KEIFER, EDWIN G.	Chorea,	Fairfield, O.
LYND, CHAS, A.	Med. History,	Cincinnati, O.
MATSON, JNO. T.	Diphtheria,	Rising Sun, Ind.
MCDONALD, JOS. E.	Scarlatina,	Ashland Co. O.
MARTIN, F. P.	Dysentery,	Matamoris, O.
MOZEE, B. B.	Diagnosis,	Cordova, Ky.
MERCER, M. C.	Puerp. Fever.	Fairfield, O.
MCCULLOUGH, H. F.	Opium,	Lavonia, Ind.
MCINTOSH, A. J.	Mam. Abscess,	Armstrong, Ill.
MCFEELY, T.	Rheumatism,	Newport, Ky.
MCKINNON, J. A.	Management of Infant	Oak Harbor, O.
POTTER, B. B.	Hæmoptysis.	Roundhead, O.
PROTZMAN, S.	Burns,	Yellow Springs, O.
PUTT, FRANKLIN L.	Rem. Fever,	Berlin, O.
ROYER, S. M.	Erysipelas,	Williamsburg, Pa.
ROBINS, J. Q. A.	Typhoid Fever.	Abington, Ind.
RIFE, JNO. J.	Convulsions,	Boston, Ind.
RUPE, RICHARD B.	Croup,	Pleasant Hill, Ky.
STYGER, EUGENE DE	Cholera Infantum.	Milton, Ky.
SMITH, T. J.	Int. Fever,	Wakatomica, O.
SCOTT, J. T.	Pertussis,	Rutland, Ky.
SEATON, A. M.	Dysentery,	Midway, O.
STUBBEMAN, F.	Tracheitis,	Cincinnati, O.
STUTZMAN, J. M.	Tracheitis,	Yellow Springs, O.
SMITH, Wm. K.	Placenta Prævia,	Deersville, O.
STRICKLAND, JAS. S.	Medulla Oblongata.	Hardensburg, Ind.
THOMAS, F. M.	Bronchitis,	Scott, O.
WOOD, W. F.	Pneumonia,	N. Bremen, O.
WELLS, CHAS. T.	Measles,	Washington, Ind.
WELCH, JOHN M.	Ergot,	Deersville, O.
YELTON, W. H.	Conduct of Accoucheur,	Bradford, Ky.

The Great Cincinnati Hospital.

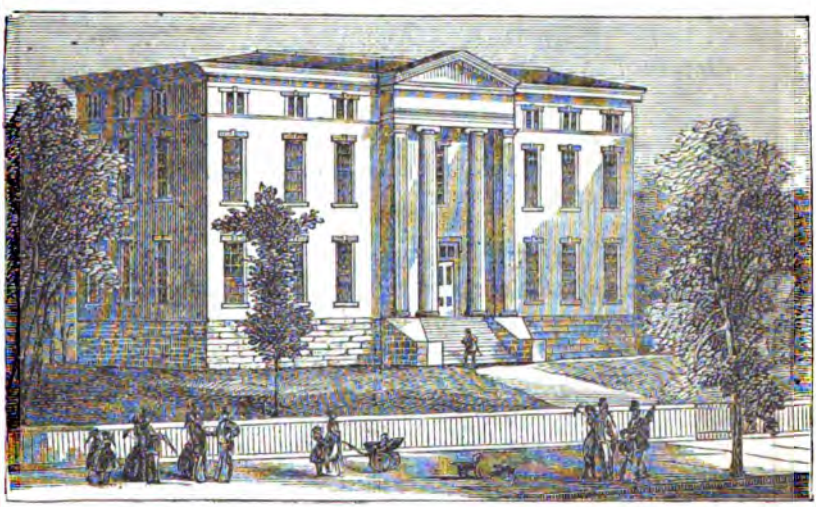
Thirty-Third Annual Announcement

OF THE

Medical Department

OF THE

University of Louisville.



SESSION OF 1869-70.

LOUISVILLE:

DAVIDSON, TERRELL & CO., PRINTERS, FOURTH STREET.

1869.

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D. SPALDING, Esq., CAPT. W. C. HITE,
J. W. BARR, Esq.,

Medical Faculty.

G. W. BAYLESS, M. D.,
Professor of the Principles and Practice of Surgery.

J. M. BODINE, M. D.,
Professor of Anatomy and Dean of the Faculty.

LUNSFORD P. YANDELL, Jr., M. D.,
Professor of Materia Medica and Clinical Medicine.

E. R. PALMER, M. D.,
Professor of Physiology and Histology.

T. S. BELL, M. D.,
Professor of the Science and Practice of Medicine and Public Hygiene.

JOHN E. CROWE, M. D.,
Professor of Obstetrics and Medical Jurisprudence.

JAMES W. HOLLAND, M. D.,
Professor of Medical Chemistry and Toxicology.

D. W. YANDELL, M. D.,
Professor of Clinical Surgery.

THEOPHILUS PARVIN, M. D.,
Professor of the Medical and Surgical Diseases of Women.

R. O. COWLING, M. D.,
Demonstrator of Anatomy and Assistant to Professor of the Principles and Practice of Surgery.

W. WALLING, M. D., R. H. SINGLETON, M. D.,
Assistant Demonstrators of Anatomy.

JAMES McCARTHY, M. D.,
Prosector to the Professor of Anatomy.

CAREY B. BLACKBURN, M. D.,
Assistant to Professor Clinical Medicine.

WILLIAM RATHWELL, *Janitor.*

CIRCULAR

FOR 1869-70.

Circular for 1869-70.

The Medical Department of the University of Louisville will enter upon its Thirty-third Annual Session the first Monday in October, 1869.

A preliminary course of lectures will commence on the second Monday in September, and continue until the opening of the regular Term.

The aim of this series of lectures is the consideration of some important subjects, that cannot be fully taught in the regular Term.

The regular Session will open with a public introductory lecture on Monday evening, the 4th of October, and continue five months.

College Edifice.

The Lecture Rooms, Museum, Cabinet, Laboratory, Library, and Dissecting Rooms are furnished with everything necessary for convenience and instruction. In apparatus, models, drawings, and preparations and specimens for illustration by the various Chairs, the Institution possesses every requisite for thorough medical teaching; and, in view of its perfect equipment, and the ability of its Faculty, the Board feel safe in assuring its friends that it never before presented stronger claims to the confidence and support of the medical profession.

Museum.

In the departments of Anatomy—human, comparative, and pathological—the collection of specimens, models and preparations, is extensive and varied. The osseous, ligamentous, vascular, nervous, and muscular systems of man are exhibited in numerous preparations that are skillfully made, besides which there are numerous models in wood, plaster and wax, useful in demonstrating to the class. A striking and beautiful part of the collection consists in a series of models, by Auzoux, representing the nervous system, and the respiratory, digestive, and circulatory apparatus of the several families of the animal kingdom. From the Museum of Thibet, in Paris, a splendid series of models has been selected, illustrative of disease in the various parts of the body. The models are executed with remarkable skill, and have been of eminent advantage heretofore in the lectures on Physiology, Pathological Anatomy, Obstetrics, Medicine and Surgery.

Library.

The Library belonging to the Department contains nearly four thousand volumes, carefully selected. Many of the standard works of the profession may be found in it; and, in addition to these, it embraces the old medical classics, in Latin and Greek; many rare and costly monographs, in quarto and folio; a large number of volumes in the sciences allied to medicine, many of them elegantly illustrated; numerous expensive plates for illustration of the lectures on healthy and morbid Anatomy, Physiology, Surgery, Materia Medica and Obstetrics; and a full series of a large number of medical journals, American, English and French.

Materia Medica.

The Cabinet of *Materia Medica* contains specimens of all the articles treated of in a course of lectures on *Materia Medica*, arranged in a systematic manner. These have been found to impart much additional interest to the course on this subject.

Chemical Apparatus.

Upon no department of the Institution have means been more liberally expended than in its Chemical Laboratory; and in this Department it is believed it will bear favorable comparison with

any medical school in the country. The apparatus is not only of the most modern aud approved style of construction, but on a scale adapted to a large class, enabling the experimenter to exhibit every appearance to the most remote of his auditors, and to render his course eminently brilliant as well as instructive,

Practical Anatomy.

The facilities afforded by the University for the study of Anatomy are unsurpassed. The Dissecting Rooms are arranged so as to afford abundant accommodations for the Classes, and the supply of subjects is ample. The Demonstrator of Anatomy, aided by competent assistants, devotes the evening to the instruction of the students engaged in dissections, and the interest felt in this branch of Medical education is evinced by the assiduous attendance of a very large proportion of the Class upon the labors of the dissecting Rooms. We can safely assure students and physicians who desire to study this fundamental branch, or renew their acquaintance with it, that for comfort, convenience, cleanliness, ventilation, and amplitude of space, the University offers inducements to the Anatomical investigator which are not excelled in America. Every effort will be made to attract students to an appreciation of the importance of a knowledge of Practical Anatomy, and render their pursuit of it a pleasant duty.

Clinical Medicine and Surgery.

It is the determination alike of the Faculty and Trustees to insure to students that kind of information which will be most useful to them in active professional life, and which, consequently, will render patients most safe under their charge, Hence, no effort will be spared to make the University essentially a *practical* and *demonstrative* School.

The University Dispensary, which has been in successful operation for several years, affords great facilities to students. The building is upon the University grounds, and is open to patients and students throughout the year. By means of this important addition to the Clinical advantages afforded by the University, students will have opportunities of attending cases and witnessing disease in every phase.

Lectures on Clinical Medicine and Surgery will be delivered at the College and the City Hospital during the entire session.

The increasing growth of Louisville has for some years demanded more ample Hospital accommodations, and the municipal authorities, fully awake to the urgency of this want, are at present directing their attention to an extensive enlargement of the City Hospital, which is in rapid progress.

Nine spacious wards, possessed of all the modern improvements, will be added to the present edifice, which is itself to undergo complete renovation. This enlargement will inure greatly to the benefit of Medical students, by largely increasing the resources for Clinical instruction.

In addition to this increase of the Hospital itself, there is also in process of construction, in the eastern extension of the building, a new and spacious amphitheatre for clinical instruction, and every effort will be made to render it a model of comfort and convenience, It will be thoroughly lighted and ventilated by large windows in its walls, and by the dome, and will be arranged to seat about five hundred students.

In the admirable and excellent arrangement of this new amphitheatre, Medical students will discover the disposition of the city authorities to give all the aid in their power toward facilitating Medical instruction in Louisville.

The Faculty.

In addition to the Faculty of last winter, it will he seen that the Trustees have elected Prof. D. W. YANDELL to the Chair of Clinical Surgery, and Prof. THEOPHILUS PARVIN to that of Medical and Surgical Diseases of Women.

Prof. YANDELL, whose ability and success as a teacher are widely known, brings to his Chair a ripe experience in Surgery which will necessarily add greatly to the attractiveness of that Department. Prof. PARVIN has been for some years the occupant of the Chair of Medical and Surgical Diseases of Women in the Medical College of Ohio, where he has won an enviable reputation for skill as an operator and practitioner, and graceful earnestness as a teacher.

The Chair of Medical Chemistry and Toxicology has been filled by the election of JAMES W. HOLLAND, M. D., a gifted and eloquent devotee of Medical Science, whose assiduity as a student, and ability as a lecturer are well known to the Medical classes that have enjoyed his teaching.

Endowment.

The City of Louisville, in 1837, donated a square of ground containing four acres, and appropriated money enough to erect on it an edifice, and purchase Library, Chemical Apparatus, Anatomical and Pathological Cabinets suited to the requirements of a first-class Medical College. The edifice first erected was destroyed in 1856 by fire, but there was sufficient insurance on it to enable the Faculty to rebuild it upon a larger and improved plan, so that it is now one of the best Medical College edifices in the United States. The Cabinets, Library and Apparatus were also considerably damaged by the fire, but the Faculty borrowed on its own responsibility a sum of money sufficient to replace the lost articles with new, and, in many instances, improved specimens.

A large portion of the original donation of ground, which has heretofore yielded but a small amount pecuniarily, is now in a condition to promise considerable increase in the resources of the Medical Department of the University. There is reason to believe that an endowment fund will be created, by which the means for medical instruction in the University will be ultimately made free to all who may wish to enjoy its extensive advantages for thorough equipment in all departments of Medical education.

Fees.

The Fee for admission to the entire Course of Lectures has been fixed by the Board of Trustees at FIFTY DOLLARS, payable as are all the fees, invariably in advance.

The Matriculation Ticket gives the student the use of the extensive Library of the Institution during the Winter, and is FIVE DOLLARS.

The Graduation Fee is THIRTY DOLLARS. The Fee for admission to the Dissecting Rooms, and for instruction by the Demonstrator of Anatomy, is TEN DOLLARS.

Requisites for Graduation.

1. The candidate for the degree of Doctor of Medicine must have attained the age of twenty-one years and have sustained a good moral character.

2. He must have attended two complete courses of lectures, the last of which shall have been in this Institution.

3. He must have taken the Ticket of the Demonstrator one

session, or have been engaged in dissections under a competent Teacher; and must have attended one course of Clinical instruction in the Louisville Marine Hospital, or some other Institution approved by the Faculty.

4. Students who have attended a full Course of Lectures in a respectable Medical School, and Physicians who have been engaged for four years, or more, in reputable practice after a regular course of study under a Preceptor, are admitted to examination in this School after attendance upon one complete course.

5. Candidates, at the time of applying to the Dean for admission, are required to exhibit their Tickets as proof of their compliance with the above rules, and to produce a Thesis on some medical subject, composed by themselves. In the event of withdrawal or rejection, the Thesis and Graduation Fee will be returned to the candidate.

6. The voting on the case of each candidate is by private ballot, and if there be three negative votes he will be rejected.

Organization.

The rapidly increasing population and commerce of the city, its geographical and climatic position, together with advantages in an economical point of view, render Louisville one of the most important and attractive points in the Union for medical teaching.

The Trustees do not claim especial advantage over any other School, but they do claim an equal position with any, in reputation, endowment, facilities for the acquisition of knowledge, zeal in the cause of medical education, determination to afford bedside instruction to students, and amplitude of facilities for the pursuit of medical science. And here the Board are happy to acknowledge the liberality of the Medical Faculty, in providing extensive means by dispensaries, and otherwise, for the relief of the poor; while they, at the same time, thus afford to students great facilities for the acquisition of clinical knowledge—a knowledge not to be obtained except in cities which have a large floating, and dependent population.

ISAAC CALDWELL,
President Board of Trustees.

Prizes.

A gold medal is offered by the Faculty to the candidate who shall write the best Thesis.

A gold medal is offered by Prof. D. W. YANDELL, to the member of the class who shall furnish the best book of recorded cases and remarks of the Professor of Clinical Surgery. This medal may be competed for by the whole class. The prize volume of cases shall belong to and be deposited in the Library.

Messrs. J. B. WILDER & Co., wholesale druggists of this city, liberally offer a case of instruments, worth one hundred dollars, to the member of the class who shall prepare the best dried anatomical specimen, all the preparations to become the property of the University, and to be labeled with the names of the makers.

The awards will be made by the Faculty. The prizes will be announced and presented by the President at the Annual Commencement.

Text Books.

The following works are recommended by the Medical Faculty to students as useful companions to the different courses of Lectures:

ON SURGERY.—Gross, Erichsen, Druitt and Paget's Surgical Pathology.

ON CHEMISTRY—Fownes, Brand and Taylor.

ON ANATOMY—Gray, Wilson, Cruveilhier, Sharpey, Quain, Leidy, and Holden's Manual of Anatomy.

ON MATERIA MEDICA—Wood, Waring, U. S. Dispensatory.

ON CLINICAL MEDICINE—Bennett's Introduction to Clinical Medicine, Laycock on Medical Observation.

ON PHYSIOLOGY AND HISTOLOGY—Dalton, Marshall, Todd and Bowman, and Kolliker.

ON THE SCIENCE AND PRACTICE OF MEDICINE,—Aitkin, Reynolds, and Flint.

ON OBSTETRICS—Cazeaux, Churchill, Miller, and Hodge.

Catalogue of the Class,

SESSION 1868-69.

NAME.	STATE.	PRECEPTOR.
Anderson, John T.,	Kentucky,	University of Louisville.
Allen, D. B.,	"	Dr. O. C. Stout.
Alexander, M. A.,	"	Dr. James Henly.
Alexander, T. L. Jr.,	"	Dr. Charles R. Greenleaf.
Andrews, A. G,	Tennessee,	Dr. C. G. Andrews.
Bishop, Henry Bascom,	Kentucky,	Dr. James C. Bascom.
Baker, John V.,	Indiana,	Dr. W. L. Green.
Belt, W. H.,	Kentucky,	Dr. Thos. C. Herndon.
Baldwin, James A.,	Missouri,	Dr. William Baldwin.
Beynroth, Edw'd H.,	Kentucky,	Dr. L. P. Weatherby.
Boyle, William H.,	New York,	U. S. G. Hospital.
Brown, G. B.,	Missouri,	Dr. John E. Roberts.
Brown, C. W.,	Kentucky,	Dr. W. R. Davis.
Bohannon, L. T.,	"	Dr. W. H. Botts.
Brewer, William R.,	Indiana,	Dr. W. E. Thompson.
Blandford, Thos. W.,	Kentucky,	Dr. Ben. B. Blincoe.
Bouton, W. P.,	Tennessee,	Dr. R. L. Bouton.
Boyd, A. S. H.,	Kentucky,	Dr. C. L. Harris.
Bell, W. L.,	Tennessee,	Dr. Jno. W. Houze.
Bushong, James S.,	Arkansas,	Dr. L. C. White.
Bowling, W. W.,	Kentucky,	Dr. Wm. Adair.
Bond, J. L.,	Tennessee,	Dr. John Landis.
Blackburn, E. M.,	Arkansas,	Dr. L. C. White,
Byrne, Thos. J.,	Kentucky,	Dr. Ben. B. Blincoe.
Boroughs, Bryan,	Alabama,	Dr. W. M. Boroughs.
Brisvalder, Joseph,	Kentucky,	University of Louisville.
Beavers, Benton B.,	Arkansas,	Dr. J. W. Adams.
Bixler, Jno. B.,	Louisiana,	Dr. J. M. Nuchols.
Berry, Thos. F.,	Kentucky,	Dr. J. Alexander.
Blalock, W. A. C.,	Georgia,	Dr. W. H. Blalock.
Crist, H. Clay,	Kentucky,	Practitioner.
Crist, Ben. L.,	"	Dr. H. Clay Crist.
Carpenter, Stephen F.,	Missouri,	Dr. B. H. Cox.

Name.	State.	Preceptor.
Curran, R. E.,	Indiana,	Dr. R. Curran.
Calkins, Henry T.,	Kentucky,	Dr. Chas. R. Greenleaf.
Cox, Goodson, R.,	Alabama,	Louisville Dispensary.
Castillo, J. W.,	Kentucky,	Dr. J. A. Jones.
Compton, Henry H.,	"	Dr. J. W. Moorman.
Cushenberry, J. H.,	"	Dr. W. R. Bryan.
Crosthwait, Geo. W.,	Tennessee,	Dr. G. D. Crosthwait.
Covington, W. J.,	Arkansas,	Dr. J. W. Covington.
Custer, E. D.,	Indiana,	Dr. F. E. Franklin.
Chandler, F. M.,	Kentucky,	Dr. G. P. Cosby.
Cochran, Henry,	Pennsylvania,	Dr. Alex. M. Pollock.
Chastain, W. D.,	Kentucky,	Dr. J. R. Bailey.
Clark, Jacob,	Indiana,	Dr. Jno. S. Mitchell,
Cox, M. P.,	Kentucky,	Dr. George P. Cosby.
Cannon, J. P.,	Alabama,	Dr. J. B. Houston.
Dupuy, Wm. E.,	Kentucky,	Drs. L. & C. Rogers.
DuBose, James G.,	Texas,	Dr. A. H. DuBose.
Danner, L. G.,	Mississippi,	Dr. S. M. Hubbard.
Davis, Frank,	Kentucky,	" L. A. Blankenbaker.
Davis, John E.,	"	" H. C. Davis.
Dorman, M. L.,	"	" D. M. Bagby.
Dunn, Dolphus,	"	" R. B. Moorehead.
Dement, J. L.,	Tennessee,	" G. Beeler.
Dobson, W. P.,	North Carolina,	" M. Y. Folger,
Dollens, Tirey C.,	Indiana,	" Jas. G. McPheeters.
Dome, D. C.,	Kentucky,	" H. M. Curry.
Davis, Thos. B.,	Indiana,	" J. A. Octerlony.
De Foe, Aug's, M. D.,	Illinois,	Practitioner.
Davis, G. W.,	Louisiana,	Dr. J. J. Scott.
Edelen, J. Eliot,	Kentucky,	" J. B. Edelen.
Ewing, George T.,	"	" T. W. Ewing.
Egli, Theodore,	"	Louisville Dispensary.
Erwin, J. K. P.,	Alabama,	Dr. D. M. A. Dansby.
Embry, J. B.,	Mississippi,	" J. Manasco.
Earle, Ben. P.,	Kentucky,	" P. J. Bailey.
Elcan, A. L.,	Tennessee,	" A. D. Clement.
Embry, J. M.,	Mississippi,	" T. S. Buchanan.
Fesler, C. C.,	Indiana,	" J. J. Johnson.
Fonville, J. B.,	Alabama,	" T. B. Burgamy.
Frazier, T. C.,	Texas,	" S. P. Shi.
Feild, Julius T.,	"	" C. M. Peak.
Featherston, John S.,	Mississippi,	Drs. Minor & Hill.
Foster, John C.,	"	Dr. E. Foster.
Ferguson, Joseph N.,	Kentucky,	Practitioner.
Freeling, J. W.,	Tennessee,	Dr. J. A. Hudson.
Fisher, John M.,	Indiana,	" J. H. Harter.
Gilbert, J. W.,	Alabama,	" C. A. Crow.
Gilbert, S. L.,	Kentucky,	U. S. G. Hospital.

NAME.	STATE.	PRECEPTOR.
Godwin, F. B.,	Tennessee,	Drs. Heron & Baxter.
Gordon, J. G.,	Kentucky,	Louisville Dispensary.
Griffitt, R. C.,	Indiana,	Dr. J. J. Johnson.
Griffitt, A. S.,	"	" J. L. Grinnell.
Guntermann. Peter,	Kentucky,	University Dispensary.
Graham, B. R.,	Indiana,	Dr. Chas. Bowman.
Garnett, W. Edwin,	Kentucky,	" E. R. Williams.
Griggs. Clarence E.,	"	" J. W. Ray,
Gingles, John T.,	"	" T. M. Graves.
Gray, James H.,	Arkansas,	" O. Alexander.
Harris, J. E.,	Kentucky,	University, Dispensary.
Herndon, W. W.,	"	Dr. Thos. C. Herndon.
Hawkins, Elvis B.,	Tennessee,	" Wm. M. Wright.
Hayes, John W.,	"	" J. G. Womack.
Hume, Edgar E.,	Kentucky,	U. S. G. Hospital.
Harrison, Wm. W.,	Alabama,	Dr. J. T. Harrison,
Hatcher, J. A.,	Kentucky,	" T. Wilson.
Holifield, J. R.,	"	" W. A. Boyd.
Huff, W. A.,	"	" A. A. Urban.
Hundley, M. A.,	"	" W. A. Hundley.
Harney, Benjamin,	"	" G. H. LeGrand.
Hanna, J. B., Jr.,	Tennessee,	" T. M. Woodson.
Herrington, J. H.,	Kentucky,	" H. D. Thompson.
Hudson, J. M.,	Tennessee,	" A. H. Berry.
Hill, Sam'l H.,	Alabama,	" S. F. Hill.
Heard, W. H.,	Arkansas,	Prof. Dessausure Ford.
Hancock, George S.,	Indiana,	Dr. A. C. Still.
Inabnit, John A.,	Mississippi,	" John Inabnit.
Jones, James T.,	Tennessee,	" J. G. Womack.
Johnston, R. P. C.,	Missouri,	" Wm. Baldwin.
Johnston, W. B.,	Alabama,	" B. F. Cross.
Johnson. E. L.,	Indiana,	" Ashby.
Jordan, W. A.,	Kentucky,	" M. V. Tomlinson.
Jackson, C. E.,	Tennessee,	" G. M. Whithorne.
Jones, James W.,	Kentucky,	" George H. Hall.
James, A. D.,	"	" R. B. Morehead.
King, Enoch W.,	Indiana,	U. S. G. Hospital.
Kornegay, R. D.	Tennessee,	Dr. John D. Freeman.
Krim, J. M.,	Kentucky,	University Dispensary.
Kirkpatrick, J. O.,	Tennessee,	Dr. A. C. White.
Kerr, J. B.,	Kentucky,	University of Louisville.
Kelley, James P.,	Mississippi,	Dr. Lane.
Lessley, William W.,	"	University of Louisville.
Lindsay, H. P.,	Kentucky,	Dr. S. Marshall.
Loving, A. B.,	Tennessee,	" J. J. Ware.
Leavell, B. F.,	Mississippi,	" J. D. McWhorter.
Landrun, W. L.,	Kentucky,	" J. D. Landrun.
Lewis, Nathaniel B.,	"	" J. T. Lewis.

Name.	State.	Preceptor.
Liles, J. D.,	Alabama,	" J. H. Davis.
Layton, Will. M.,	Kentucky,	Drs. Skillman & Whitney.
Liles, M. D.,	Alabama,	Dr. J. H. Davis.
Maull, William C.,	Kentucky,	Louisville Dispensary.
McCarthy, James,	"	Prof. John E. Crowe.
Mudd, William A.,	"	Dr. J. B. Edelen.
McDonough, John J.,	"	Drs. Cleaver & McElroy.
Mayes, Marcus,	"	Dr. Finley.
McKnight, Chas. W.,	Tennessee,	" N. A. McCoy.
Mattingly, Wm. E.,	Kentucky,	Drs. Cleaver & McElroy.
McKee, John L.,	"	Dr. O. H. Witherspoon.
Meador, J. W.,	"	" T. M. Warfield.
McKay, Jas. B.,	"	Drs. Gore & Lewis.
McAliley, L. L.,	Tennessee,	Dr. Robert M. West.
Maclin, James N.,	"	" W. L. Terry.
McCleary, James,	Ohio,	U. S. G. Hospital.
McMurtry, Sam'l,	Kentucky,	DrsMontgomery&Walker.
McGovern, James,	Mississippi,	Dr. J. R. Boyd.
McFadden, J. D.,M.D.	Kentucky,	Practitioner.
McCord, John H.,	Alabama,	Dr. D. B. McCord.
McMillan, John E.,	Georgia,	Drs. Tate & Griggs.
McAlpin, J. A.,	Louisiana,	Dr. E. A. Shippey.
Nell, James K.,	Kentucky,	" H. Q. Hughes.
Newton, L. P.,	"	" G. W. Campbell.
Oldham, V. B.,	Tennessee.	" T. J. Frazier.
Osborn, V.,	Kentucky,	" G. W. Campbell.
Procter, David L.,	"	Prof. E. R. Palmer.
Payton. C. G.,	"	Dr. T. Wilson.
Plummer, M.,	"	" R. H. Yantes.
Pinner, T. J.,	Tennessee,	" W. B. Pinner.
Perry, W. T.,	"	" O. V. Brown.
Paine, Andrew J.,	"	" A. Paine.
Paine, John R.,	"	" A. Paine,
Poer, B. G.,	Georgia,	Dr. C. T. Patello.
Richardson, J. L.,	Kentucky,	Practitioner,
Roberts, W. Lane,	"	Dr. Greenberry Roberts.
Roberts, W. O.,	"	Prof. D. W. Yandell.
Rosser, H. N.,	Alabama,	Dr. J. T. West.
Radamaker, Chas J.,	Kentucky,	University Dispensary.
Reed, P. G.,	"	Dr. E. Jones.
Rinehart, Mich'l,	"	Drs. Cleaver & McElroy.
Reid, Ewin O.,	"	Dr. H. Reid.
Rodman, W. E.,	"	" J. H. Rodman.
Rodman, H. D.,	"	University of Notre Dame.
Ramsay, E. S.,	Illinois,	Drs. Wiley & Clinton.
Richards, Wm. P.,	Kentucky,	Dr. L. M. Loveless.
Richards, Thomas,	"	" S. T. Moorehead.
Rabalais, Leonard,	Louisiana,	" T. B. Dulaney.

Name.	State.	Preceptor.
Russell, Jesse,	Kentucky,	" P. J. Bailey.
Robinson, W. T.,	"	" J. R. Anderson.
Robinson, Thos. J.,	Tennessee,	" J. R. Anderson.
Sewell, A. J.,	Georgia,	Dr. H. D. Aderhold.
Staples, S. H., M. D.,	Kentucky,	Practitioner.
Skelton, G. A.,	Tennessee,	University Dispensary.
Smith, Alex. H.,	Alabama,	Dr. J. M. Hayes.
Schell, Rodney B.,	California,	" F. A. Schell.
Slaughter, T. S.,	Kentucky,	" A. A. Slaughter.
Sloan, A. C.,	Alabama,	" T. P. Burgamy.
Salter, C. W.,	Georgia,	" W. H. Pugesley.
Scott, B. E.,	Tennessee,	" Thos. Edwards.
Shropshire, Thos. A.,	Kentucky,	" T. P. Morton.
Selby, J. T.,	"	Drs. J. H & G. W. Rodman.
Sauter, Charles,	"	Dr. F. C. Leber.
Spalding, Wm. E.,	"	" T. J. Wright.
Spight, S. R., Jr.,	Mississippi,	Drs. Murray & Alexander.
Smith, David T.,	Kentucky,	Dr. R. B. Pusey.
Simmons, Geo. S.,	Alabama,	" Thornton Cox.
Sebastian, Charles M.,	Tennessee,	" J. P. Sebastian.
Stewart, Daniel M.,	"	" J. F. McDougal.
Souder, A. C.,	Indiana,	" W. D. Gage.
Taylor, Wm. W.,	Kentucky,	Prof. D. W. Yandell.
Tebbs, A. Sidney, Jr.,	Missouri,	Dr. Wm. Baldwin.
Thomas, J. B.,	Kentucky,	" T. W. Ewing.
Trent, J. F.,	"	" S. H. Staples.
Van Pelt, Geo. W.,	Indiana,	" L. J. Woolen.
White, William P.,	Kentucky,	Louisville Dispensary.
Williams, John T.,	"	University Dispensary.
Wells, Frank W.,	"	Louisville Dispensary.
Woods, A. D.,	Tennessee,	Drs. Heron & Baxter.
Wood, John T.,	Missouri,	Dr. A. P. Spence.
Wyeth, John A.,	Alabama,	" J. M. Jackson.
Wathen, William H.,	Kentucky,	Drs. Cleaver & McElroy.
Wulkop, G. A.,	Indiana,	Dr. A. Wulkop.
Weissinger, W. S.,	Mississippi,	" J. L. Boyd.
Warren, J. P.,	Kentucky,	" W. H. Hopper.
Walters, J. D.,	Georgia,	" W. M. Dykes.
Williams, T. Lee,	Tennessee,	" J. A. Bowers.
Walker, J. F.,	Mississippi.	Drs. Walker & Evans.
Wilhoit, R. W.,	Kentucky,	Dr. J. L. Phythian.
Williams, J. M.,	"	Drs. Stokes & Humphreys.
Wilson, Elisha G.,	Indiana,	Dr. E. G. Moore.
Wilson, Andrew M.,	Tennessee,	" A. J. Weldon.
Wells, N. B., M. D.,	Kentucky,	Practitioner.
Young, L. P.	Alabama,	Dr. J. W. Stewart.

Total, 223:

At a public Commencement, held the 2d day of March, 1869, the degree of Doctor of Medicine was conferred upon the following gentlemen:

Name.	State.	Name.	State.
Baldwin, James A.,	Missouri.	King, Enoch W.,	Indiana.
Beynroth, Edw. H.,	Kentucky.	Layton, William M.,	Kentucky.
Bishop, H. Bascom,	"	Lewis, Nath'l B.,	"
Blackburn, Edw. M.,	Arkansas.	Maull, Wm. C.,	"
Blalock, W. A. C.,	Georgia.	Maclin, James N.,	Tennessee.
Blandford, Thos. W.,	Kentucky.	Mattingly, W. E.,	Kentucky.
Boroughs, Bryan.	Alabama.	Meador, J. W.,	"
Brewer, William R.,	Indiana.	McCarthy, James,	"
Brisvalder, Joseph,	Kentucky.	McDonough, Jno. J.,	"
Calkins, Henry T.,	"	McGovern, James,	Mississippi.
Castillo, James W.,	"	McAliley, L. L.,	Tennessee.
Cannon, J. P.,	Alabama.	McMillen, John E.,	Georgia.
Crist, Henry Clay,	Kentucky.	McMurtry, Samuel,	Kentucky.
Davis, George W.,	Louisiana.	McKnight, Chas. W.,	Tennessee.
Davis, Thomas B.,	Indiana.	Paine, John R.,	"
Davis, John E.,	Kentucky.	Paine, Andrew J.,	"
DuBose, James G.,	Texas.	Procter, David L.,	Kentucky.
Dunn, Dolphus,	Kentucky.	Rabalais, Leonard,	Louisiana.
Dupuy, William E.,	"	Radamaker, C. J.,	Kentucky.
Elcan, A. L.,	Tennessee.	Reed, P. G.,	"
Ferguson, Joseph N.,	Kentucky.	Robinson, Thos. J.,	Tennessee.
Feild, Julian T.,	Texas.	Schell, Rodney B.,	California.
Featherston, Jno. S.,	Mississippi.	Selby, James T.,	Kentucky.
Foster, John C.	"	Shropshire, Thos. A.,	"
Garnett, W. Edwin,	Kentucky.	Stewart, Daniel M.,	Tennessee.
Graham, B. R.,	Indiana.	Tebbs, A. Sid'y, Jr,	Missouri.
Guntermann, Peter,	Kentucky.	Walters, J. D.,	Georgia.
Gordon, J. G.,	"	Warren, John P.,	Kentucky.
Gilbert, Samuel L.,	"	Wells, Frank W.,	"
Harned, Benjamin,	"	Wilhoit, R. W.,	"
Hancock, George S.,	Indiana,	Wilson, Andrew, M.,	Tennessee.
Heard, William H.,	Arkansas.	Williams, Thos. Lee,	"
Herrington, J. H.,	Kentucky.	White, William P.,	Kentucky.
Hume, Edgar E.,	"	Wyeth, John A.,	Alabama.
Hudson, J. M.,	Tennessee.	Young, L. P.,	"

Total, 70.

At the same time the Honorary Degree of M. D. was conferred upon Dr. James L. Richardson, of Bethel, Kentucky.

Richard O. Cowling, M. D., of Kentucky, a graduate of the Jefferson Medical College, Philadelphia, and Augustus De Foe, M. D., of Illinois, a graduate of the Evansville Medical School, were admitted *ad eundem* in this institution.

Good boarding can be procured in the vicinity of the College at from $4 50 to $5 50 per week.

Students on their arrival in the city, by proceeding directly to the University on the corner of Eighth and Chestnut streets. will find the Janitor in constant attendance, and prepared to conduct them to suitable boarding houses.

Gentlemen desiring fuller information will address

J. M. BODINE, M. D.,
Dean of the Faculty, No. 300 First street.